SEGMENT 1: RICHARDSON STREET, BRIDGEWAY TO SECOND STREET

Staff-Recommended Concept

The following improvements would address existing deficiencies in the sidewalk and curb ramps.

- **Sidewalks:** Reconstruct sidewalks on the north side of Richardson Street to eliminate or reduce driveway cross-slopes in excess of two percent (1:48). Repair sidewalk gaps, chips, and cracks.
- **Curb ramps:** Install new curb ramps at the northeast, northwest and southwest corners of the Richardson Street / Second Street intersection. Correct curb ramp deficiencies such as slopes in excess of 8.33% (1:12), flare slopes in excess of 10% (1:10), and level landing slopes in excess of 2% (1:48).

Furthermore, the Richardson Street / Second Street intersection would benefit from measures to slow traffic, prevent U-turns, and allow for safe pedestrian crossings. The Staff-Recommended Concept would install a marked crosswalk with the following components.

- **Marked crosswalk:** Install high-visibility crosswalk markings.
- **Pedestrian / bicycle refuge islands:** Channelize vehicles on Richardson Street and Second Street, and provide a refuge for crossing pedestrians, by constructing a six-foot wide refuge island with raised curbs.
- **Pedestrian / bicycle crossing warning signs with RRFB:** Provide pedestrian / bicyclist crossing warning signage and pedestrian / bicyclist-activated flashing beacons facing northbound Second Street and westbound Richardson Street to slow approaching traffic.
- **Bulb-out and curb ramps:** Install a bulb out at the southwest corner. Install curb ramps at the southwest and southeast corners within the new crosswalk.

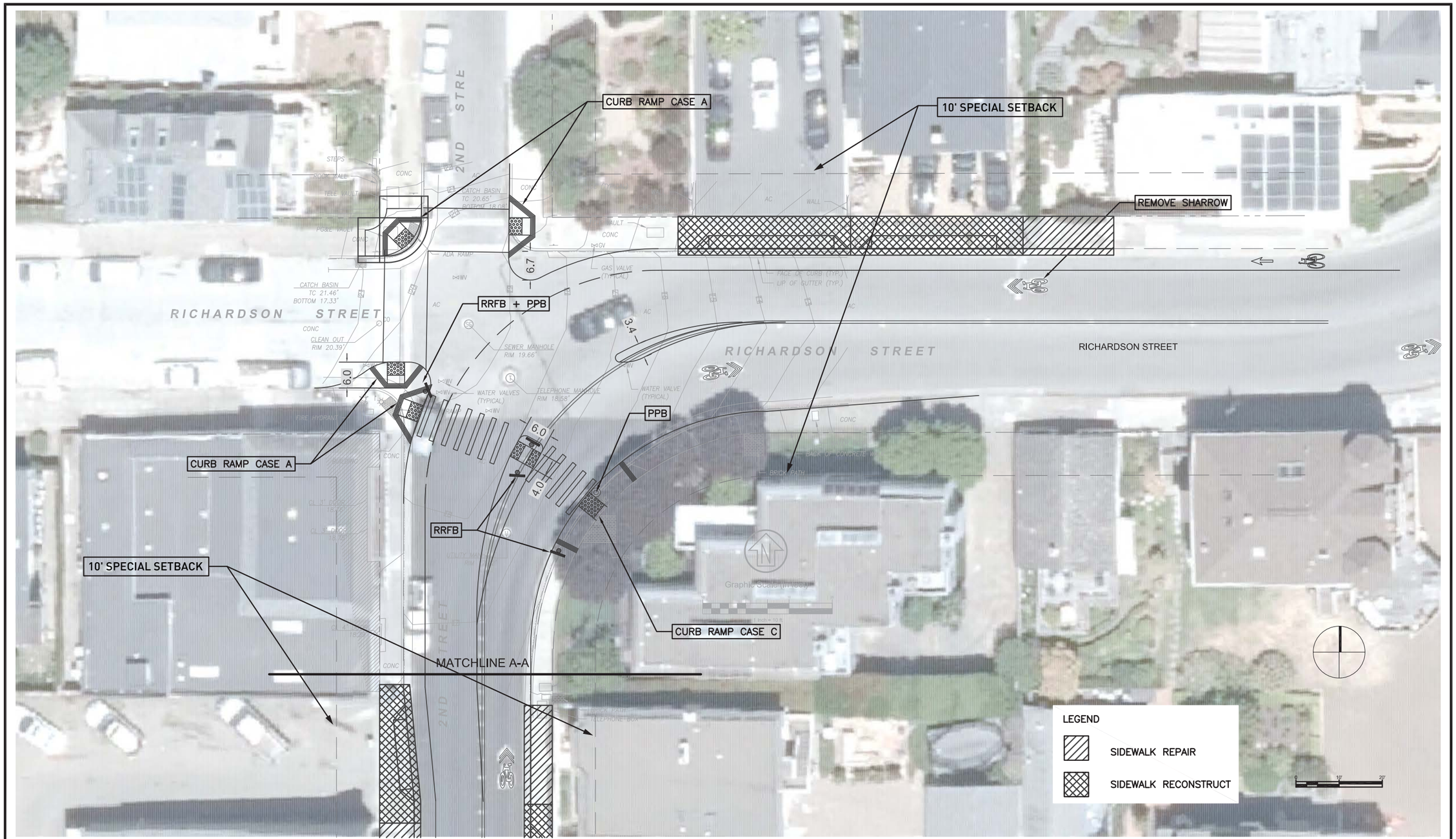
The estimated cost for the Staff-Recommended Concept is $144,000.

CONCEPT NOT RECOMMENDED – RICHARDSON / SECOND STREET ROUNDABOUT

A single lane roundabout able to accommodate a 40-foot bus (90-100-foot inscribed diameter) was found to exceed the available right-of-way at the intersection and would have negatively impacted existing buildings.

CONCEPT NOT RECOMMENDED – RICHARDSON / SECOND STREET ALL-WAY STOP AND TRAFFIC SIGNAL

The traffic volumes from minor street approaches do not satisfy California Manual on Uniform Traffic Control Devices (CA MUTCD) warrants for all-way stop control or signal control.



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REGISTERED PROFESSIONAL ENGINEER
DAVID J. PARISI
No. 44893
Exp. 03/16
CIVIL
STATE OF CALIFORNIA

CITY OF SAUSALITO | TRANSPORTATION AUTHORITY OF MARIN
SOUTH GATEWAY COMPLETE STREET PROJECT
SECOND STREET / RICHARDSON STREET / BRIDGEWAY, STAFF-RECOMMENDED CONCEPT

REVISIONS		
NO.	DESCRIPTION	
5		
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DATE: 11/23/15 | SCALE: 1" = 10'
PTC PROJECT NO.: 14035
CLIENT: CITY OF SAUSALITO
SHEET NO.: 1 OF 4

SEGMENT 2: SECOND STREET, RICHARDSON STREET TO SOUTH STREET

Staff-Recommended Concept

The following improvements would address existing deficiencies in the sidewalk and curb ramps, remove sidewalk obstructions, and improve the existing marked crosswalks.

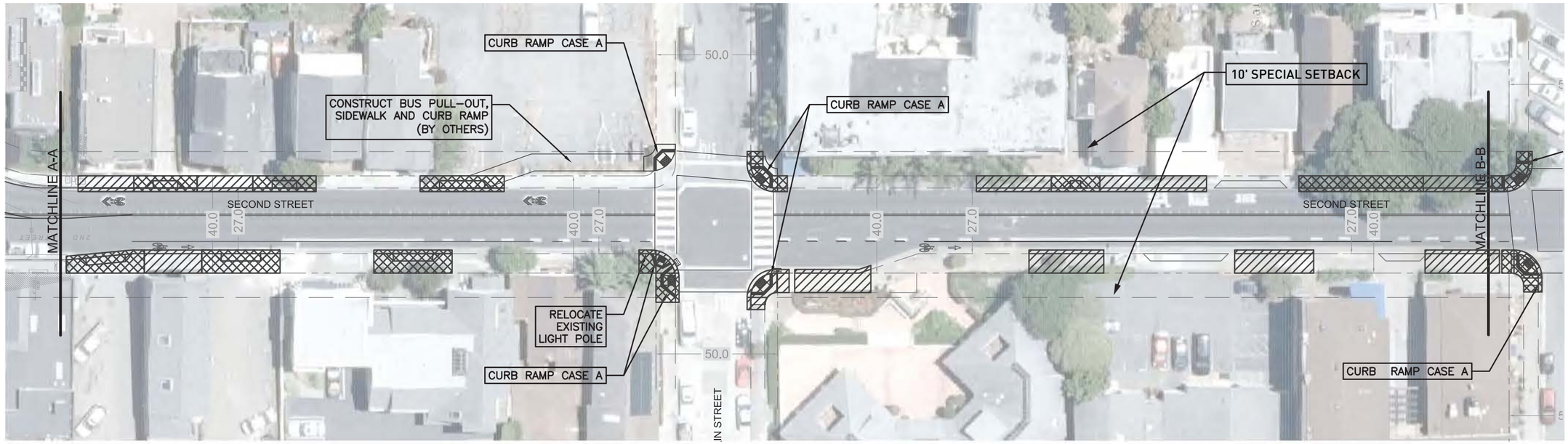
- **Sidewalks:** Reconstruct sidewalks on both sides of Second Street to eliminate driveway cross-slopes in excess of two percent (1:48). Repair sidewalk gaps, chips, and cracks.
- **Curb ramps:** Correct curb ramp deficiencies where curb ramps exist, and install curb ramps where none exist, at the following locations.
  - Northwest, southeast, and southwest corners of Second Street / Main Street.
  - All four corners of Second Street / Valley Street.
  - Northwest and northeast corners of Second Street / Sausalito Boulevard.
  - Northwest corner of Second Street / South Street.
- **Pedestrian / bicycle crossing warning signs:** Provide pedestrian / bicyclist crossing warning signage or supplement existing signage in the northbound and southbound directions of Second Street at its intersections with Main Street and Valley Street. Consider providing flashing beacons if warranted by pedestrian and bicyclist crossing volumes.
- **Sidewalk obstruction:** Relocate existing street light pole at the northwest corner of Second Street / Sausalito Boulevard such that it does not impede the pedestrian path of travel.
- **Bus pull-out (by others):** Construct a northbound bus pull-out at the northeast corner of the Second Street / Main Street intersection, as part of the frontage improvements by an adjacent development. Construct a curb ramp as part of this improvement.

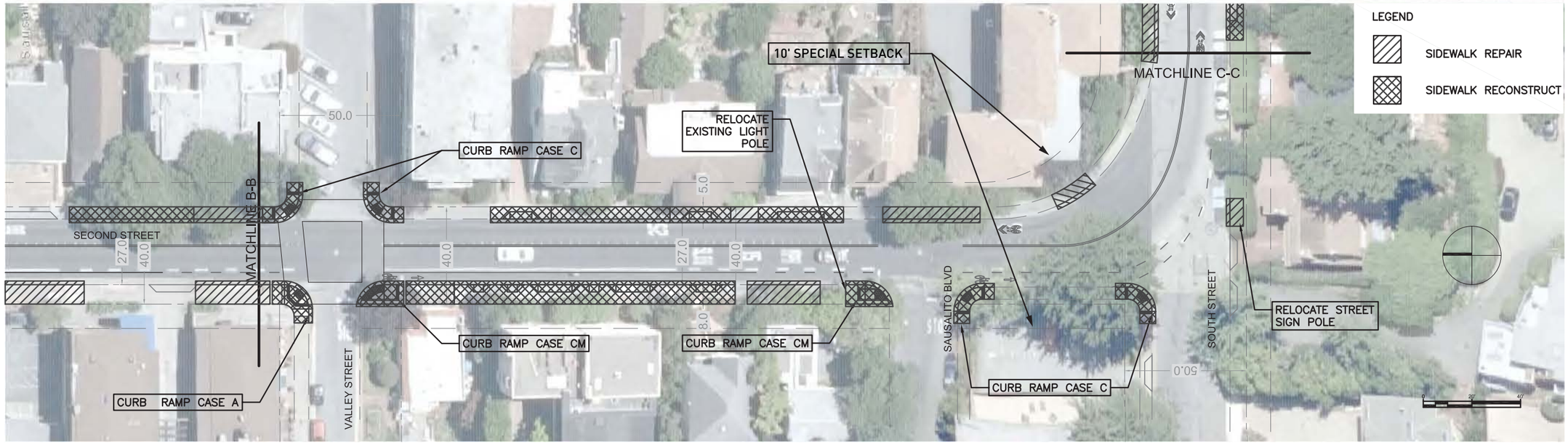
Second Street has as right-of-way width of 40 feet, which is typically arranged as two 11-foot lanes and a five-foot bike lane (27 feet curb-to-curb width), a five-foot sidewalk on the east side, and an eight-foot sidewalk on the west side (40-foot Right of Way). Given the right-of-way constraints and built-out nature of the Second Street corridor, this study does not propose any additional concepts that would alter the existing cross-section.

The estimated cost for the Staff-Recommended Concept is $519,000.

CONCEPT NOT RECOMMENDED – NORTHBOUND ONLY BIKE LANE

Changing the arrangement of the existing bike lane from southbound (uphill) to northbound (downhill) was considered based on the larger share of northbound bicycle traffic. However, this concept was deemed inferior based on the analysis presented in the previous section, which found that a five-foot lane in the northbound direction would be insufficient to handle the volume of northbound bicycle traffic. Eliminating the southbound bike lane would create additional problems for uphill traffic, which would be unable to pass slower uphill bicycle traffic.





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CITY OF SAUSALITO | TRANSPORTATION AUTHORITY OF MARIN
SOUTH GATEWAY COMPLETE STREET PROJECT
SECOND STREET, STAFF-RECOMMENDED CONCEPT

REVISIONS	
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11/23/15	1" = 20'
PTC PROJECT NO.	
14035	
CLIENT	
CITY OF SAUSALITO	
SHEET NO.	
2 OF 4	

SEGMENT 3: SOUTH STREET, SECOND STREET TO ALEXANDER AVENUE

Staff-Recommended Concept

Most of the sidewalks along South Street are four to five feet wide, with no setback from the edge of roadway or parking lane. The residential driveways on the south side of South Street create in cross-slope conditions without an alternative level path behind the ramp apron. Existing street light poles and a fire hydrant obstruct the sidewalk on the south side of the street. The north side of South Street generally conforms to accessibility standards, but the nearest marked crossing across South Street is 600 feet away from mid-block South Street at Valley Street. South Street is a gap in the southbound bike lane that extends between Second Street and the striped shoulder on Alexander Avenue.

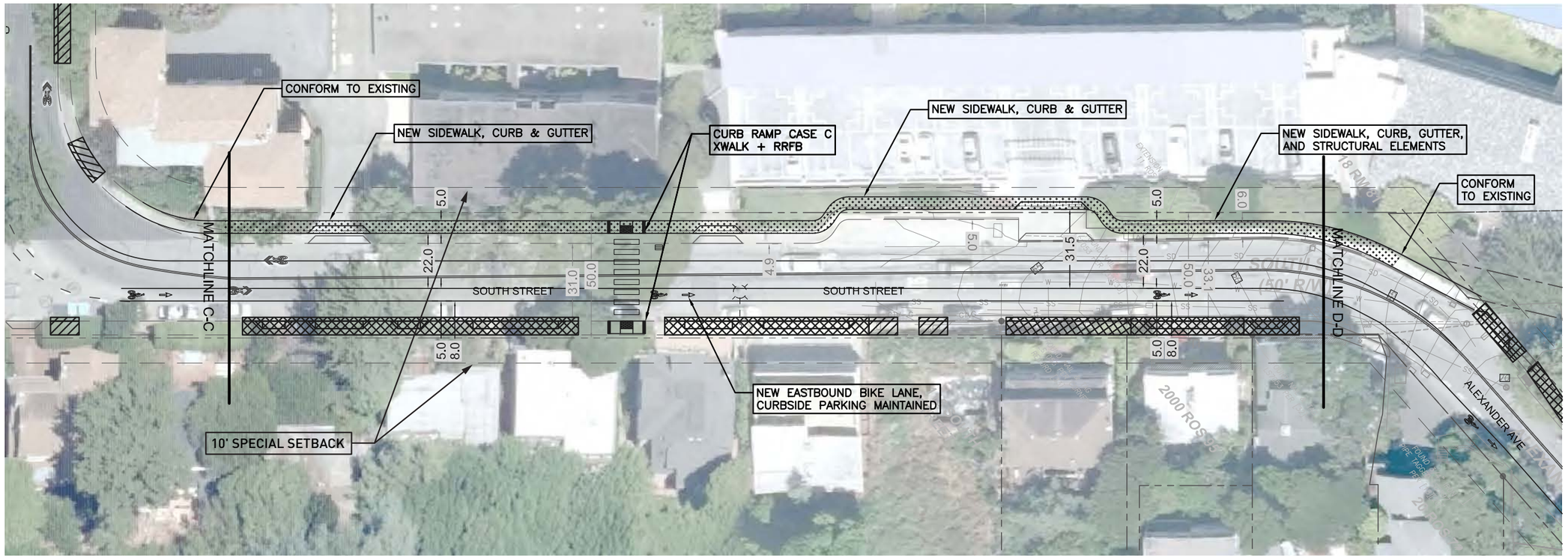
The Staff-Recommended Concept would resolve these issues with the following improvements:

- **Sidewalks:** Reconstruct sidewalks on the south side of South Street to eliminate or reduce driveway cross-slopes.
- **Roadway widening:** Widen South Street by six feet to the north. Reconstruct the existing sidewalk, curb, and gutter on the north side of South Street as part of this roadway widening. Complete the existing southbound bike lane between Second Street and Alexander Avenue.
- **Midblock crosswalk:** Provide a midblock South Street crosswalk to allow pedestrians on the south side of South Street to reach the north side walkway that continues onto Alexander Avenue. The location shown on the conceptual plan has clear sight lines from both directions of South Street and does not conflict with residential driveways.
  - The high-visibility crosswalk would be supplemented with a pedestrian-activated flashing beacon.
  - The midblock crosswalk has the added benefit of signaling to northbound motorists and bicyclists on the South Gateway corridor that there is cross-traffic ahead.

The estimated cost for Staff-Recommended Concept is $445,000.

CONCEPT NOT RECOMMENDED – PARKING REMOVAL FOR EASTBOUND BIKE LANE

An alternate measure to widening South Street to provide a southbound bike lane would be to remove the residential parking allowed on the on the south side of South Street. This concept was not pursued because the curbside parking is highly utilized (80–85 percent daytime occupancy, as presented in the previous section) and there are few alternative parking or loading spaces along the corridor.



LEGEND

- SIDEWALK REPAIR
- SIDEWALK RECONSTRUCT
- NEW SIDEWALK, CURB AND GUTTER

0 20' 40'

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CITY OF SAUSALITO | TRANSPORTATION AUTHORITY OF MARIN
SOUTH GATEWAY COMPLETE STREET PROJECT
SOUTH STREET, STAFF-RECOMMENDED CONCEPT

REVISIONS		
NO.	DESCRIPTION	
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DATE	SCALE
11/23/15	1" = 20'
PTC PROJECT NO.	
14035	
CLIENT	
CITY OF SAUSALITO	
SHEET NO.	
3 OF 4	

SEGMENT 4: ALEXANDER AVENUE, SOUTH STREET TO CITY LIMITS

Staff-Recommended Concept

There are multiple deficiencies related to multimodal access on Alexander Avenue. At the north end of Alexander Avenue, the five-foot wide laminate board path south of South Street narrows to a two-foot wide sidewalk behind a slightly raised curb (~two-to-three inches). The path of travel further narrows to a one-foot section abutting a wall. The record of survey finds that the wall and portions of the residential unit (64 Alexander Avenue) are within the public right-of-way.

Farther to the south, the east side of Alexander Avenue is fronted by residential driveways behind a slightly raised curb. These driveways generally fail to meet accessibility standards for pedestrian walkways due to driveway cross-slopes, narrow width, and occasional obstructions (e.g., broken pavement and broken utility box covers). The two residences on the west side of Alexander Avenue, south of Edwards Avenue, are accessed from the southbound Alexander Avenue shoulder. Bicyclists currently use this four-foot striped shoulder as a de facto southbound bike lane.

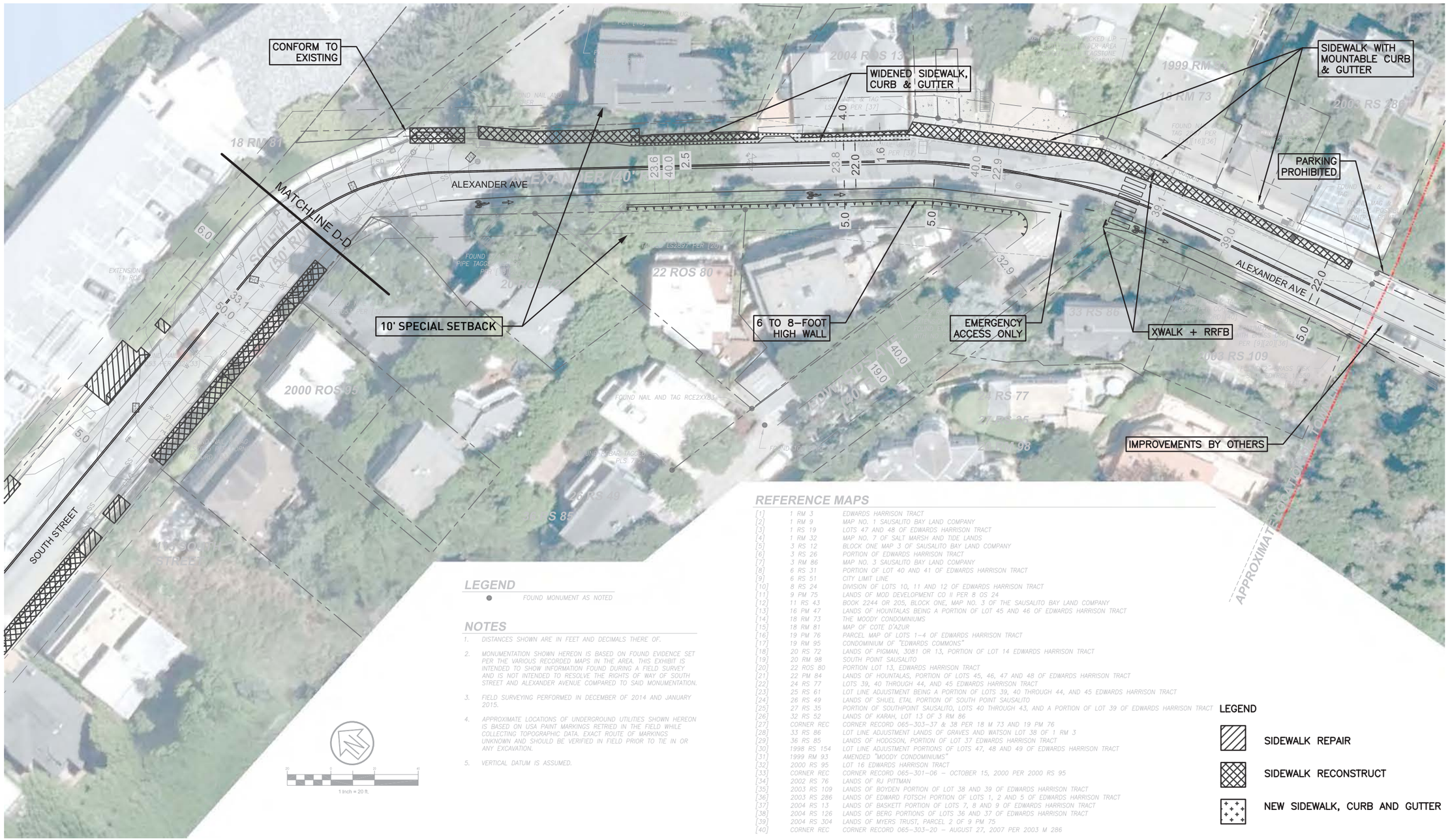
For motorists, traffic approaching Alexander Avenue from Edwards Avenue has extremely limited sight distance due to the horizontal curves and vertical crest at the intersection. Edwards Avenue is already limited to one-way eastbound access.

The Staff-Recommended Concept would resolve these issues with the following improvements:

- **Retaining Wall:** Construct a retaining wall on the south side of Alexander Avenue. Widen Alexander four to five feet to the south. Shift the vehicular lanes and shoulder to the south. Retain the shoulder for southbound bicycle traffic.
- **Sidewalks:** Widen the pedestrian path on Alexander Avenue from the City Limits to South Street. Reconstruct the sidewalk to five feet wide by widening to the south. Avoid impacting the properties at 28 and 64 Alexander Avenue. Eliminate or reduce driveway cross-slopes at driveways south of 64 Alexander Avenue.
- **Convert Edwards Avenue to Emergency Access Only:** Prohibit general vehicular access at the Alexander Avenue / Edwards Avenue with a raised barrier and signage.
- **Marked crosswalk:** Provide a high-visibility crosswalk with a pedestrian-activated flashing beacon at the Alexander Avenue / Edwards Avenue intersection. Provide a supplemental advance warning beacon for southbound (uphill) vehicular traffic.

CONCEPT NOT RECOMMENDED – PEDESTRIAN PATH WIDENING TO THE NORTH

An alternate measure to widening Alexander Avenue to the south with a retaining wall would be to widen the pedestrian path to the north; this concept would impact the properties at 28 and 64 Alexander Avenue, would have significant effects on the properties, and incur substantial acquisition costs.



LEGEND

FOUND MONUMENT AS NOTED

NOTES

1. DISTANCES SHOWN ARE IN FEET AND DECIMALS THERE OF.
2. MONUMENTATION SHOWN HEREON IS BASED ON FOUND EVIDENCE SET PER THE VARIOUS RECORDED MAPS IN THE AREA. THIS EXHIBIT IS INTENDED TO SHOW INFORMATION FOUND DURING A FIELD SURVEY AND IS NOT INTENDED TO RESOLVE THE RIGHTS OF WAY OF SOUTH STREET AND ALEXANDER AVENUE COMPARED TO SAID MONUMENTATION.
3. FIELD SURVEYING PERFORMED IN DECEMBER OF 2014 AND JANUARY 2015.
4. APPROXIMATE LOCATIONS OF UNDERGROUND UTILITIES SHOWN HEREON IS BASED ON USA PAINT MARKINGS RETRIED IN THE FIELD WHILE COLLECTING TOPOGRAPHIC DATA. EXACT ROUTE OF MARKINGS UNKNOWN AND SHOULD BE VERIFIED IN FIELD PRIOR TO TIE IN OR ANY EXCAVATION.
5. VERTICAL DATUM IS ASSUMED.

REFERENCE MAPS

[1]	1 RM 3	EDWARDS HARRISON TRACT
[2]	1 RM 9	MAP NO. 1 SAUSALITO BAY LAND COMPANY
[3]	1 RS 19	LOTS 47 AND 48 OF EDWARDS HARRISON TRACT
[4]	1 RM 32	MAP NO. 7 OF SALT MARSH AND TIDE LANDS
[5]	3 RS 12	BLOCK ONE MAP 3 OF SAUSALITO BAY LAND COMPANY
[6]	3 RS 26	PORTION OF EDWARDS HARRISON TRACT
[7]	3 RM 86	MAP NO. 3 SAUSALITO BAY LAND COMPANY
[8]	6 RS 31	PORTION OF LOT 40 AND 41 OF EDWARDS HARRISON TRACT
[9]	6 RS 51	CITY LIMIT LINE
[10]	8 RS 24	DIVISION OF LOTS 10, 11 AND 12 OF EDWARDS HARRISON TRACT
[11]	9 PM 75	LANDS OF MOD DEVELOPMENT CO II PER 8 OS 24
[12]	11 RS 43	BOOK 2244 OR 205, BLOCK ONE, MAP NO. 3 OF THE SAUSALITO BAY LAND COMPANY
[13]	16 PM 47	LANDS OF HOUNTALAS BEING A PORTION OF LOT 45 AND 46 OF EDWARDS HARRISON TRACT
[14]	18 RM 73	THE MOODY CONDOMINIUMS
[15]	18 RM 81	MAP OF COTE D'AZUR
[16]	19 PM 76	PARCEL MAP OF LOTS 1-4 OF EDWARDS HARRISON TRACT
[17]	19 RM 95	CONDOMINIUM OF "EDWARDS COMMONS"
[18]	20 RS 72	LANDS OF PIGMAN, 3081 OR 13, PORTION OF LOT 14 EDWARDS HARRISON TRACT
[19]	20 RM 98	SOUTH POINT SAUSALITO
[20]	22 ROS 80	PORTION LOT 13, EDWARDS HARRISON TRACT
[21]	22 PM 84	LANDS OF HOUNTALAS, PORTION OF LOTS 45, 46, 47 AND 48 OF EDWARDS HARRISON TRACT
[22]	24 RS 77	LOTS 39, 40 THROUGH 44, AND 45 EDWARDS HARRISON TRACT
[23]	25 RS 61	LOT LINE ADJUSTMENT BEING A PORTION OF LOTS 39, 40 THROUGH 43, AND 45 EDWARDS HARRISON TRACT
[24]	26 RS 49	LANDS OF SHUEL ETAL PORTION OF SOUTH POINT SAUSALITO
[25]	27 RS 35	PORTION OF SOUTHPOINT SAUSALITO, LOTS 40 THROUGH 43, AND A PORTION OF LOT 39 OF EDWARDS HARRISON TRACT
[26]	32 RS 52	LANDS OF KARAH, LOT 13 OF 3 RM 86
[27]	CORNER REC	CORNER RECORD 065-303-37 & 38 PER 18 M 73 AND 19 PM 76
[28]	33 RS 86	LOT LINE ADJUSTMENT LANDS OF GRAVES AND WATSON LOT 38 OF 1 RM 3
[29]	36 RS 85	LANDS OF HODGSON, PORTION OF LOT 37 EDWARDS HARRISON TRACT
[30]	1998 RS 154	LOT LINE ADJUSTMENT PORTIONS OF LOTS 47, 48 AND 49 OF EDWARDS HARRISON TRACT
[31]	1999 RM 93	AMENDED "MOODY CONDOMINIUMS"
[32]	2000 RS 95	LOT 16 EDWARDS HARRISON TRACT
[33]	CORNER REC	CORNER RECORD 065-301-06 - OCTOBER 15, 2000 PER 2000 RS 95
[34]	2002 RS 76	LANDS OF RJ PITTMAN
[35]	2003 RS 109	LANDS OF BOYDEN PORTION OF LOT 38 AND 39 OF EDWARDS HARRISON TRACT
[36]	2003 RS 286	LANDS OF EDWARD FOTSCH PORTION OF LOTS 1, 2 AND 5 OF EDWARDS HARRISON TRACT
[37]	2004 RS 13	LANDS OF BASKETT PORTION OF LOTS 7, 8 AND 9 OF EDWARDS HARRISON TRACT
[38]	2004 RS 126	LANDS OF BERG PORTIONS OF LOTS 36 AND 37 OF EDWARDS HARRISON TRACT
[39]	2004 RS 304	LANDS OF MYERS TRUST, PARCEL 2 OF 9 PM 75
[40]	CORNER REC	CORNER RECORD 065-303-20 - AUGUST 27, 2007 PER 2003 M 286

LEGEND

SIDEWALK REPAIR

SIDEWALK RECONSTRUCT

NEW SIDEWALK, CURB AND GUTTER

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CITY OF SAUSALITO | TRANSPORTATION AUTHORITY OF MARIN
SOUTH GATEWAY COMPLETE STREET PROJECT
ALEXANDER AVENUE, STAFF-RECOMMENDED CONCEPT

REVISIONS

NO.	DESCRIPTION
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DATE: 11/23/15 | SCALE: 1" = 20'
PTC PROJECT NO.: 14035
CLIENT: CITY OF SAUSALITO
SHEET NO.: 4 OF 4

SAUSALITO PBAC REVIEW

The Sausalito Pedestrian and Bicycle Advisory Committee (PBAC) provided key input during the development of this report.

Existing Conditions Analysis, February 17, 2015.

This presentation summarized the physical data collection that occurred in the months prior, including the accessibility assessment, bicyclist demographics based on peak hour samples, collision records through 2014, and preliminary hotspot analysis.

The PBAC directed further study on detailed bicyclist and pedestrian counts, and considerations for a northbound bike lane on Second Street.

Design Alternatives, July 20, 2015.

This presentation summarized the results of detailed multimodal counts collected in March and April 2015 and the improvement concepts presented in this chapter.

The PBAC directed further study on seasonal peak bicycle traffic in addition to the average annual (spring) counts previous collected. PBAC members expressed support for the Staff Recommended Concepts as presented previously in this report.

Nearly 1,800 pedestrians, bicyclists, and motorists pass through the South Gateway corridor during the peak hour on summer weekend days.

Planning-Level Cost Estimates

The table to the right presents planning-level cost estimates for the Staff-Recommended Concepts, which total to an estimated $1.76 million. The detailed cost estimates are provided on the following pages. Note that the costs do not include "soft costs", such as those pertaining to:

- Environmental Clearance
- Bonding
- Connection Fees
- Plan Checking Fees
- Agency Fees
- Permits

LOCATION / IMPROVEMENT	SUBTOTAL
Richardson Street, Bridgeway to Second Street	
Staff-Recommended Concept – Sidewalk Rehab, Crosswalk, Bulb-Out and RRFB	$144,000
Second Street, Richardson to South Street	
Staff-Recommended Concept – Sidewalk and Curb Ramp Rehab	$519,000
South Street, Second Street to Alexander Avenue	
Staff-Recommended Concept – Bike Lane Widening, Sidewalk Rehab, Crosswalk, and RRFB	$445,000
Alexander Avenue, South Street to City Limits	
Staff-Recommended Concept – Sidewalk Widening via Retaining Wall	$651,000
TOTAL: Staff-Recommended Concept	**$1,759,000**

Project Cost Estimates

Richardson Street, Bridgeway to Second Street
Staff-Recommended Concept: Crosswalk, Bulb-Out, and RRFB

Prepared by: Parisi Transportation Consulting, November 16, 2015

	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	Mobilization	LS	1	Subtotal	$5,300
				5%	
2	Traffic Control	LS	1	Subtotal	$10,600
				10%	
3	Demolition, Removal and Salvage			Subtotal	$2,800
	Sawcut Pavement	SF	800	$3.50	$2,800
4	Concrete Work and Paving				$72,500
	Sidewalk	SF	800	$25	$20,000
	Curb and Gutter	LF	100	$25	$2,500
	Curb Ramp	EA	2	$7,500	$15,000
	Bulb Out Curb Ramp	EA	2	$15,000	$30,000
	Traffic Splitter Island and Pedestrian Refuge	LS	2	$2,500	$5,000
5	Signs and Pavement Markings				$29,900
	Rectangular Rapid Flashing Beacon Type A (Single Sided)	EA	2	$8,000	$16,000
	Rectangular Rapid Flashing Beacon Type B (Double Sided)	EA	1	$12,000	$12,000
	Crosswalk Striping (Thermoplastic)	SF	300	$5	$1,500
	4" Thermoplastic Striping	LF	400	$1	$400
	TOTAL CONSTRUCTION				**$91,200**
	DESIGN (PS&E)			18%	$16,500
	CONSTRUCTION ADMINISTRATION			15%	$13,700
	CONSTRUCTION CONTINGENCY			25%	$22,800
	TOTAL PROJECT				**$144,200**

Second Street, Richardson to South Street
Staff-Recommended Concept: Sidewalk and Curb Ramp Rehab

Prepared by: Parisi Transportation Consulting, November 16, 2015

	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	Mobilization	LS	1	Subtotal	$14,300
				5%	
2	Traffic Control	LS	1	Subtotal	$28,600
				10%	
3	Demolition, Removal and Salvage			Subtotal	$36,500
	Sawcut Pavement	SF	6000	$3.50	$21,000
	Relocate Existing Street Light	EA	2	$7,500	$15,000
	Relocate Existing Street Sign Pole	EA	1	$500	$500
4	Concrete Work and Paving				$248,750
	Sidewalk	SF	6000	$25	$150,000
	Curb and Gutter	LF	950	$25	$23,750
	Curb Ramp	EA	10	$7,500	$75,000
	TOTAL CONSTRUCTION				$328,150
	DESIGN (PS&E)			18%	$59,100
	CONSTRUCTION ADMINISTRATION			15%	$49,300
	CONSTRUCTION CONTINGENCY			25%	$82,100
	TOTAL PROJECT				**$518,650**

Costs do not include:
- Bonding
- Connection Fees
- Plan Checking Fees
- Agency Fees
- Permits

LEGEND:
LS – Lump Sum
EA – Each
LF – Linear Feet
AL – Allowance
SF – Square Feet

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South Street, Second Street to Alexander Avenue
Staff-Recommended Concept: Crosswalk, Road Widening for Bike Lane + RRFB

Prepared by: Parisi Transportation Consulting, November 16, 2015

	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	Mobilization	LS	1	Subtotal	$11,700
				5%	
2	Traffic Control	LS	1	Subtotal	$23,400
				10%	
3	Demolition, Removal and Salvage			Subtotal	$32,250
	Sawcut Pavement	SF	3500	$3.50	$12,250
	Relocate Existing Street Light	EA	2	$7,500	$15,000
	Relocate Existing Fire Hydrant	EA	1	$5,000	$5,000
4	Earthwork				$12,250
	Clearing and Grubbing	SF	2000	$0.50	$1,000
	Excavation and Grading	CY	225	$50	$11,250
5	Concrete Work and Paving				$176,250
	Sidewalk	SF	3500	$25	$87,500
	Curb and Gutter	LF	700	$25	$17,500
	Curb Ramp	EA	2	$7,500	$15,000
	Install AC Pavement	SF	2250	$25	$56,250
6	Signs and Pavement Markings				$25,500
	Rectangular Rapid Flashing Beacon Type B (Double Sided)	EA	2	$12,000	$24,000
	Crosswalk Striping (Thermoplastic)	SF	300	$5	$1,500
	4" Thermoplastic Striping	LF		$1	$-
8	Right of Way Acquisition				
	TOTAL CONSTRUCTION				**$281,350**
	DESIGN (PS&E)			18%	$50,700
	CONSTRUCTION ADMINISTRATION			15%	$42,300
	CONSTRUCTION CONTINGENCY			25%	$70,400
	TOTAL PROJECT				**$444,750**

Alexander Avenue, South Street to City Limits
Staff-Recommended Concept: Sidewalk Widening via Retaining Wall

Prepared by: CSW-ST2*, adjustments by Parisi Transportation Consulting, November 16, 2015

	CONTRACT ITEMS	UNIT	QUANTITY	PRICE	AMOUNT
1	Earthwork (Inclusive of Mobilization & Traffic Control)*	LS	1	Subtotal	$86,200
2	Streetwork (In Place)*	LS	1	Subtotal	$236,900
3	Other Facilities (Retaining Wall & Utilities)*	LS	1	Subtotal	$63,350
4	Supplemental Project - Signs and Pavement Markings				$25,500
	Rectangular Rapid Flashing Beacon Type B (Double Sided)	EA	2	$12,000	$24,000
	Crosswalk Striping (Thermoplastic)	SF	300	$5	$1,500
	TOTAL CONSTRUCTION				$411,950
	DESIGN (PS&E)			18%	$74,200
	CONSTRUCTION ADMINISTRATION			15%	$61,800
	CONSTRUCTION CONTINGENCY			25%	$103,000
	TOTAL PROJECT				**$650,950**

*See attached: CSW-ST2 Opinion of Probable Construction Costs.

Costs do not include:
- Bonding
- Connection Fees
- Plan Checking Fees
- Agency Fees
- Permits

LEGEND:
LS – Lump Sum
EA – Each
LF – Linear Feet
AL – Allowance
SF – Square Feet

Parisi TRANSPORTATION CONSULTING

Alexander Avenue, South Street to City Limits
CSW-ST2 Opinion of Probable Construction Costs

Date: 09/08/2015
File: 4.1183.00

SOUTH GATEWAY COMPLETE STREETS
ALEXANDER AVENUE, SAUSALITO,CALIFORNIA
OPINION OF PROBABLE CONSTRUCTION COSTS
FOR CITY LIMITS AND SECOND LINE

(Costs do not include: Bonding, Connection Fees, Plan Checking Fees, Agency Fees, or Permits)

	QUANTITY		DESCRIPTION	UNIT PRICE	TOTAL
A. EARTHWORK					
1.	1	L.S.	Mobilization (Allowance)	$25,000.00	$25,000
2.	1	L.S.	Traffic Control	$20,000.00	$20,000
3.	1	L.S.	Demolition/Clear & Grub (Allowance)	$10,000.00	$10,000
4.	570	C.Y.	Excavation	$50.00	$28,500
5.	180	C.Y.	Export and Disposal - Clean Material	$15.00	$2,700
				Subtotal - Earthwork:	$86,200
B. STREETWORK (IN PLACE)					
1.	3,080	S.F.	Asphalt Concrete	$7.50	$23,100
2.	3,080	S.F.	Aggregate Base	$4.20	$12,936
3.	6,220	S.F.	Fine Street Grading (Incl. Handling Utility Trench Spoils)	$1.50	$9,330
4.	440	L.F.	Sawcut Pavement	$3.50	$1,540
5.	410	L.F.	18" Curb & Gutter (Incl. Cushion)	$34.00	$13,940
6.	1,960	S.F.	Conform Pavement	$25.00	$49,000
7.	3,200	S.F.	4" Sidewalk (Incl. Thickened Driveways)	$25.00	$80,000
8.	225	S.F.	Special Pier Supported Sidewalk (Incl. Walkway Below)	$170.00	$38,250
9.	440	L.F.	Striping (Thermoplastic) Four (4) Lines	$20.00	$8,800
				Subtotal - Streetwork:	$236,896
C. OTHER FACILITIES					
1.	98	C.Y.	Retaining Wall (Soil Nail), Concrete	$575.00	$56,350
2.	14	EA.	Raise Utility Boxes to Grade	$500.00	$7,000
				Subtotal - Other Facilities:	$63,350

SUMMARY

A.	EARTHWORK		$86,200
B.	STREETWORK (IN PLACE)		$236,896
C.	OTHER FACILITIES		$63,350
	SUBTOTAL CONSTRUCTION COST		$386,446
	+ SOFT COSTS		
	DESIGN	18%	$69,560
	CONSTRUCTION ADMINISTRATION	15%	$57,967
	+ CONSTRUCTION CONTINGENCY	25%	$96,612
	TOTAL CONSTRUCTION COSTS		$610,585

NOTES:

1. This estimate does not include work north of the curve along Alexander Avenue and other costs not listed above.
2. This estimate does not include specific items which may be required by public agencies during the approval process.
3. This estimate should be used as a guide only and was prepared to an accuracy commensurate with the intent of the client. Actual cost can only be determined by a contract based on final approved plans or actual construction of facilities.
4. The estimate above is based on the plan entitled Alexander Avenue, Additional Improvement Concept 2, South Gateway Complete Street Project, prepared by Parisi Transportation Consulting, dated 5/21/15, as requested by Parisi Transportation Consulting.

Next Steps

The City of Sausalito should provide final direction on the set of improvements to move forward into coordination, environmental clearance, detailed design, and funding.

Coordination

The improvements the City decides to move forward with should be coordinated with improvements on Alexander Avenue by the National Park Service (NPS) and the Golden Gate National Recreation Area (GGNRA), per the Alexander Avenue Planning Study (2012). The NPS and GGNRA would rehabilitate approximately 0.9 miles of existing shoulders to maximize space to accommodate bicyclists, pedestrians and vehicles. The rehabilitation would also include signage and wayfinding, removing and replacing deteriorated pavement, curb and gutters, striping, guardrail, fencing, bus shelters and lighting improvements.

Environmental Clearance

The California Environmental Quality Act (CEQA) governs whether a project is required to undergo environmental review. Some improvements, such as repairs to existing facilities, may be categorically exempt. Other more intensive improvements that may cause a substantial change to the physical environment or scenic resource could require more detailed environmental studies. Note that coordinating improvements with the NPS and GGNRA may trigger a joint National Environmental Policy Act (NEPA) / CEQA review.

Funding

The Transportation Authority of Marin, the County of Marin, Golden Gate Transit, and the City of Sausalito should seek outside funding for improvements the City decides to pursue. Potential outside funding sources include, but are not limited to, Caltrans Active Transportation Program funds, the MTC-administered Regional Measure 2 funds, and TAM-administered Measure A transportation sales tax funds and Measure B annual vehicle registration fee funds.

Saturday peak hour multimodal traffic, northbound South Street