



**COUNTY OF EL DORADO
TRANSPORTATION DEPARTMENT**

Mosquito Road Bridge

At the South Fork of the American River

PUBLIC WORKSHOP #2



In Association With:



November 15, 2014



AGENDA

- ➔ **Welcome / Introduction / Schedule**
 - ➔ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- ➔ **Work To Date / Nature of Project**
 - ➔ Jon Balzer, County
- ➔ **Project Process**
 - ➔ Jon Balzer, County

WHERE WE ARE

- ➔ **Overview of Alternatives**
 - ➔ Howard Michael, Quincy
- ➔ **Screening Criteria / Screening Process**
 - ➔ Howard Michael, Quincy
- ➔ **Aesthetics Design Process / Factors**
 - ➔ Steve Noll, Design Workshop

WHERE WE'RE GOING

- ➔ **Next Steps**
 - ➔ Jon Balzer, County
- ➔ **Open House Period**





AGENDA

↳ Welcome / Introduction / Schedule

- ↳ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

↳ Work To Date / Nature of Project

- ↳ Jon Balzer, County

↳ Project Process

- ↳ Jon Balzer, County

WHERE WE ARE

↳ Overview of Alternatives

- ↳ Howard Michael, Quincy

↳ Screening Criteria / Screening Process

- ↳ Howard Michael, Quincy

↳ Aesthetics Design Process / Factors

- ↳ Steve Noll, Design Workshop

WHERE WE'RE GOING

↳ Next Steps

- ↳ Jon Balzer, County

↳ Open House Period



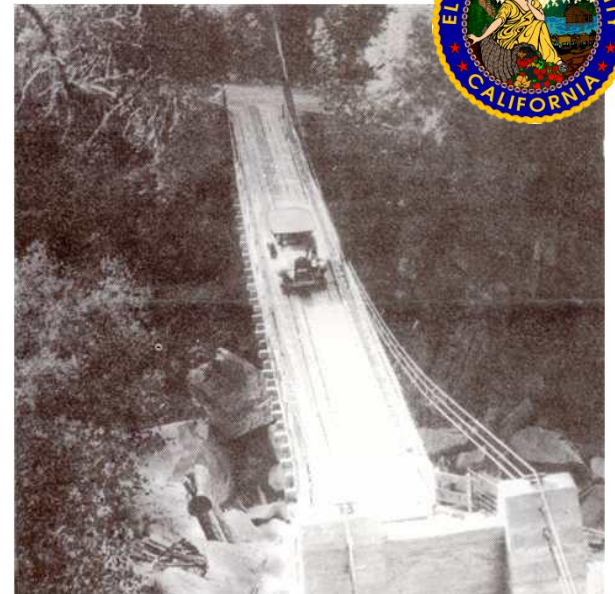


Welcome

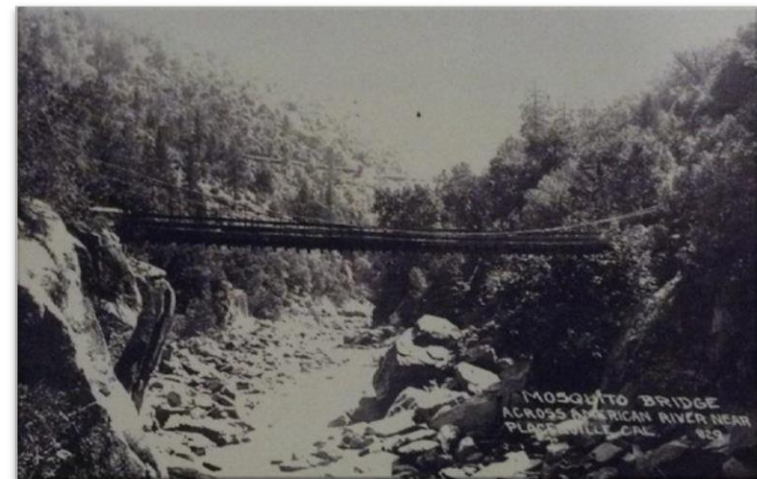
- Handouts
- Goals for Public Workshop No. 2
- Brief Q&A after each speaker
- Workstations for one-on-one Q&A
- Comment cards

Introductions

- County staff
- Quincy Engineering
- Design Workshop
- Aim Consulting



Mt. Democrat 4/2/98 article by Peg Presba



"Swinging Bridge" – History Museum



Overall Schedule

WHERE WE'VE BEEN

-  Project Development
-  Key Bridge Facts





AGENDA

- ↳ **Welcome / Introduction / Schedule**
 - ↳ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- ↳ **Work To Date / Nature of Project**
 - ↳ Jon Balzer, County
- ↳ **Project Process**
 - ↳ Jon Balzer, County

WHERE WE ARE

- ↳ **Overview of Alternatives**
 - ↳ Howard Michael, Quincy
- ↳ **Screening Criteria / Screening Process**
 - ↳ Howard Michael, Quincy
- ↳ **Aesthetics Design Process / Factors**
 - ↳ Steve Noll, Design Workshop

WHERE WE'RE GOING

- ↳ **Next Steps**
 - ↳ Jon Balzer, County
- ↳ **Open House Period**





Work to Date

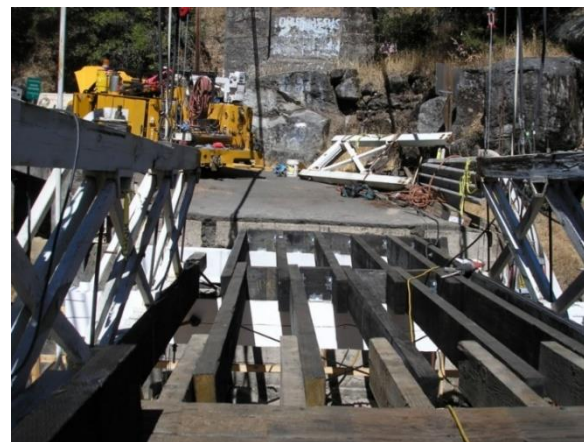
- 1993 Study
- Programmed in Highway Bridge Prog.
- Public Workshop No. 1 – Jan 26, 2013
 - Public comments addressed
 - Established criterion
- Control & LIDAR Surveys
- Concept Alternatives





Nature of Project

- ↳ Heavily maintained bridge
- ↳ Extensive bridge repairs
 - ↳ 1990
 - ↳ 2010
 - ↳ Long-term road closures
- ↳ Fate of existing bridge
 - ↳ Separate Project
- ↳ Bridge replacement
- ↳ Not a roadway project





SWANSBORO, COUNTY
AIRPORT

Nature of Project

→ Spot Improvement

Approx. 2.3 mile segment

Max. 1.3 mile segment
reduced to 0.3 mile

Possible 0.3 mile new segment

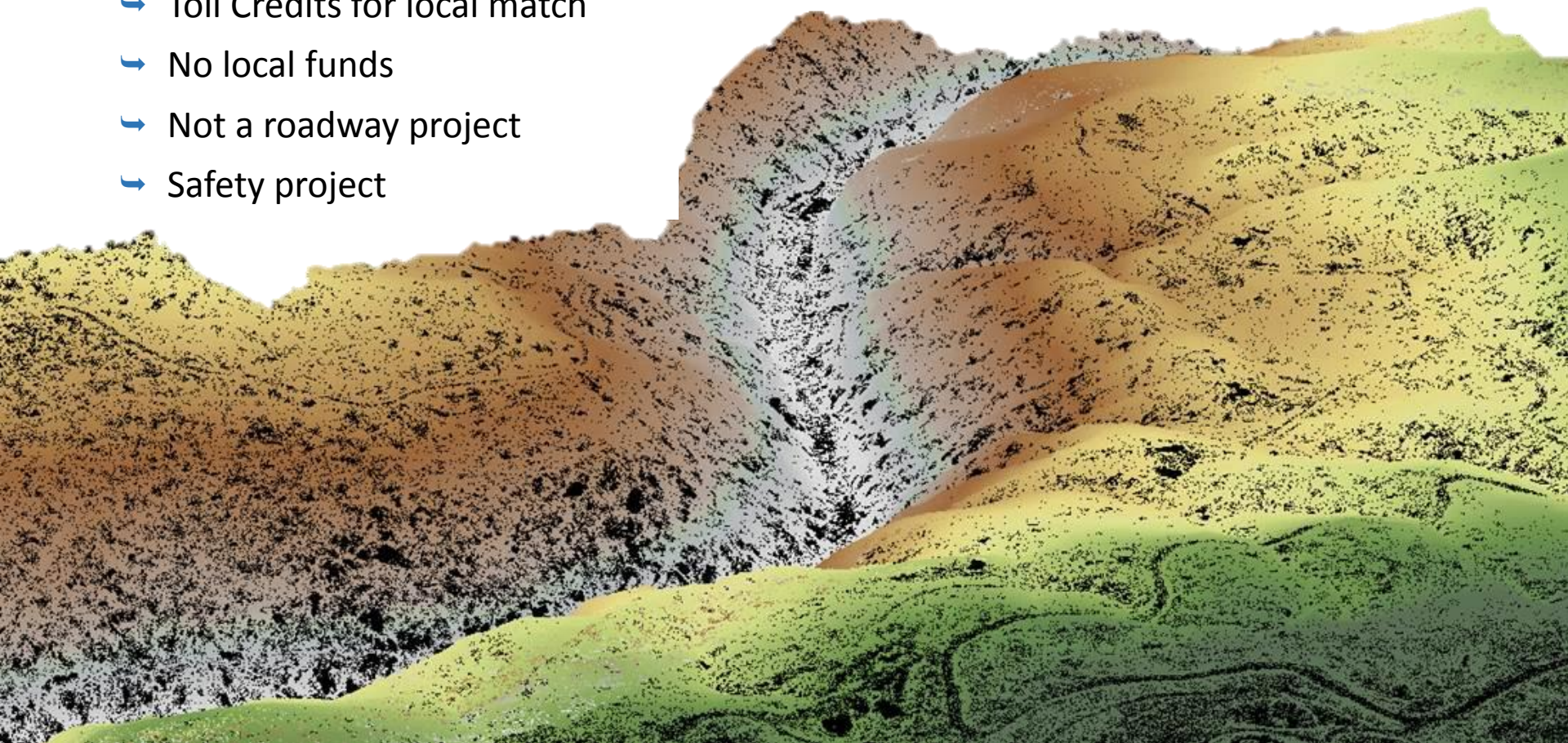
Approx. 6 mile segment





Nature of Project

- Federal funding
- Highway Bridge Program (HBP)
- Toll Credits for local match
- No local funds
- Not a roadway project
- Safety project





AGENDA

- ↳ **Welcome / Introduction / Schedule**
 - ↳ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- ↳ **Work To Date / Nature of Project**
 - ↳ Jon Balzer, County
- ↳ **Project Process**
 - ↳ Jon Balzer, County

WHERE WE ARE

- ↳ **Overview of Alternatives**
 - ↳ Howard Michael, Quincy
- ↳ **Screening Criteria / Screening Process**
 - ↳ Howard Michael, Quincy
- ↳ **Aesthetics Design Process / Factors**
 - ↳ Steve Noll, Design Workshop

WHERE WE'RE GOING

- ↳ **Next Steps**
 - ↳ Jon Balzer, County
- ↳ **Open House Period**





Project Process

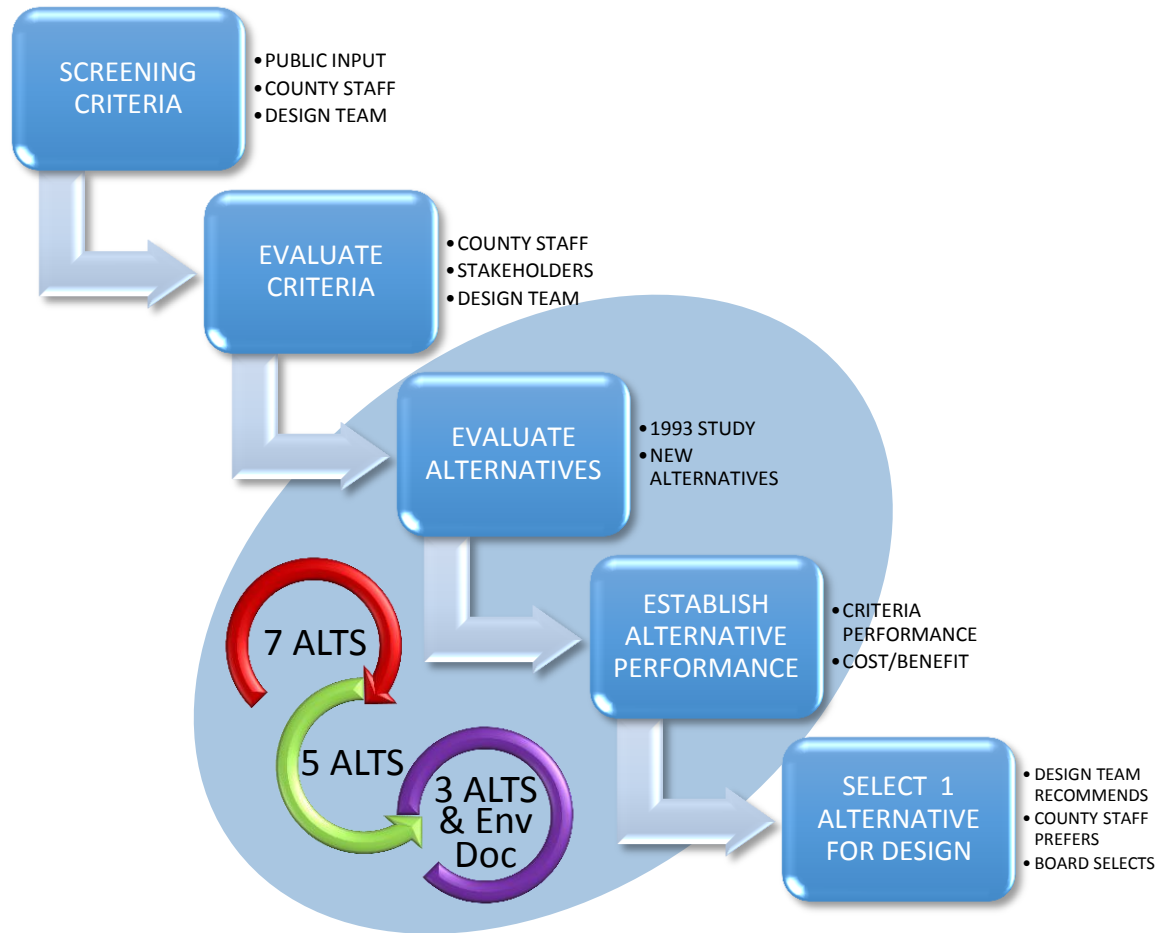
- ↳ Public input
 - ↳ Website, comment cards, emails
 - ↳ One-on-one with County staff
- ↳ Identify Concept Alternatives
 - ↳ With public involvement
- ↳ Study 7 Alts → 5 Alts → 3 Alts → 1 Alt
 - ↳ With public involvement
- ↳ Selection of final alternative
 - ↳ Quincy recommends alternative
 - ↳ County staff recommends preferred alternative to BOS
 - ↳ Board of Supervisors selects final alternative
- ↳ Caltrans acceptance required with HBP funds



Public Workshop No. 1



Project Process

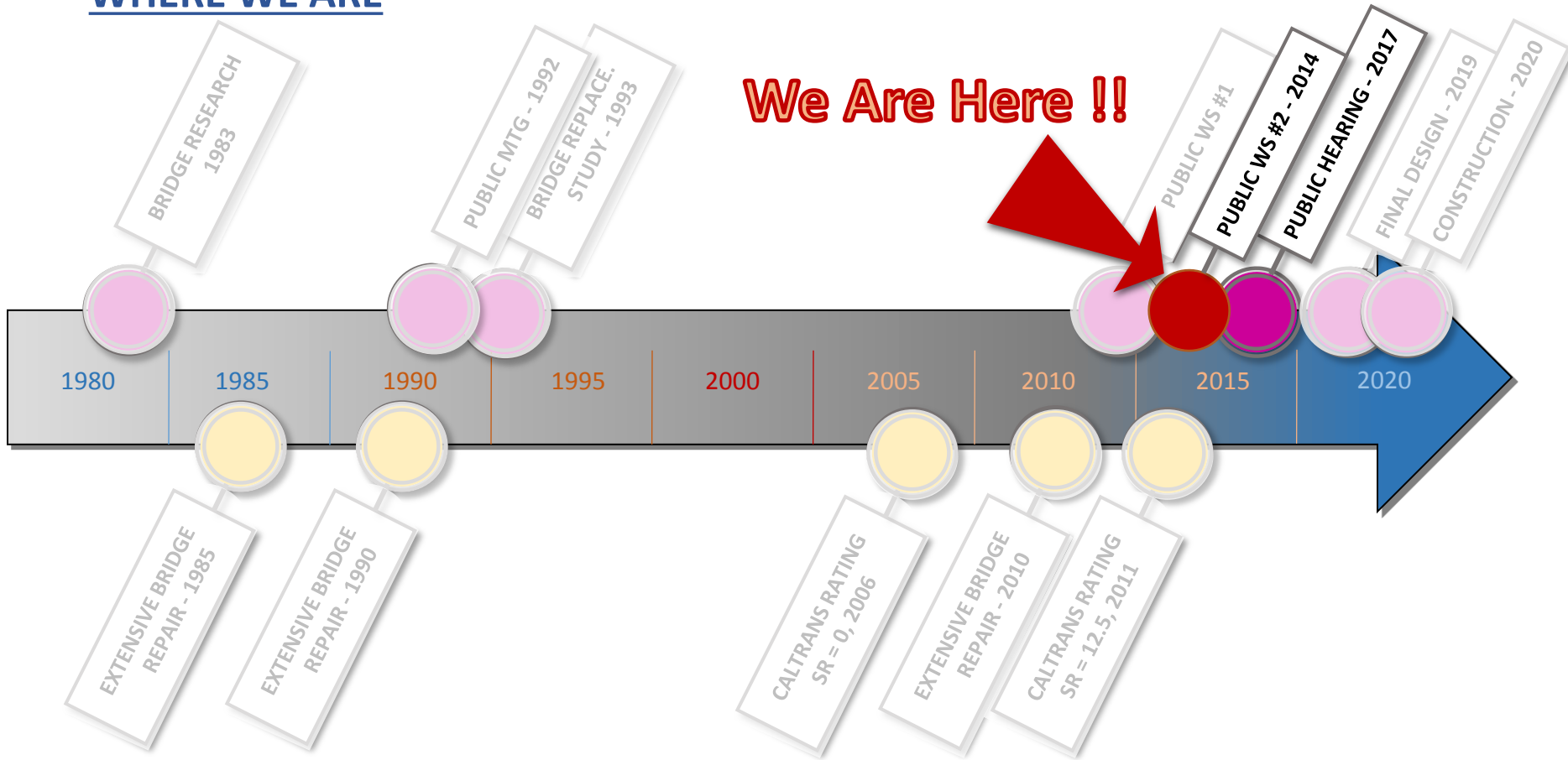




Overall Schedule

WHERE WE ARE

-  Project Development
-  Key Bridge Facts



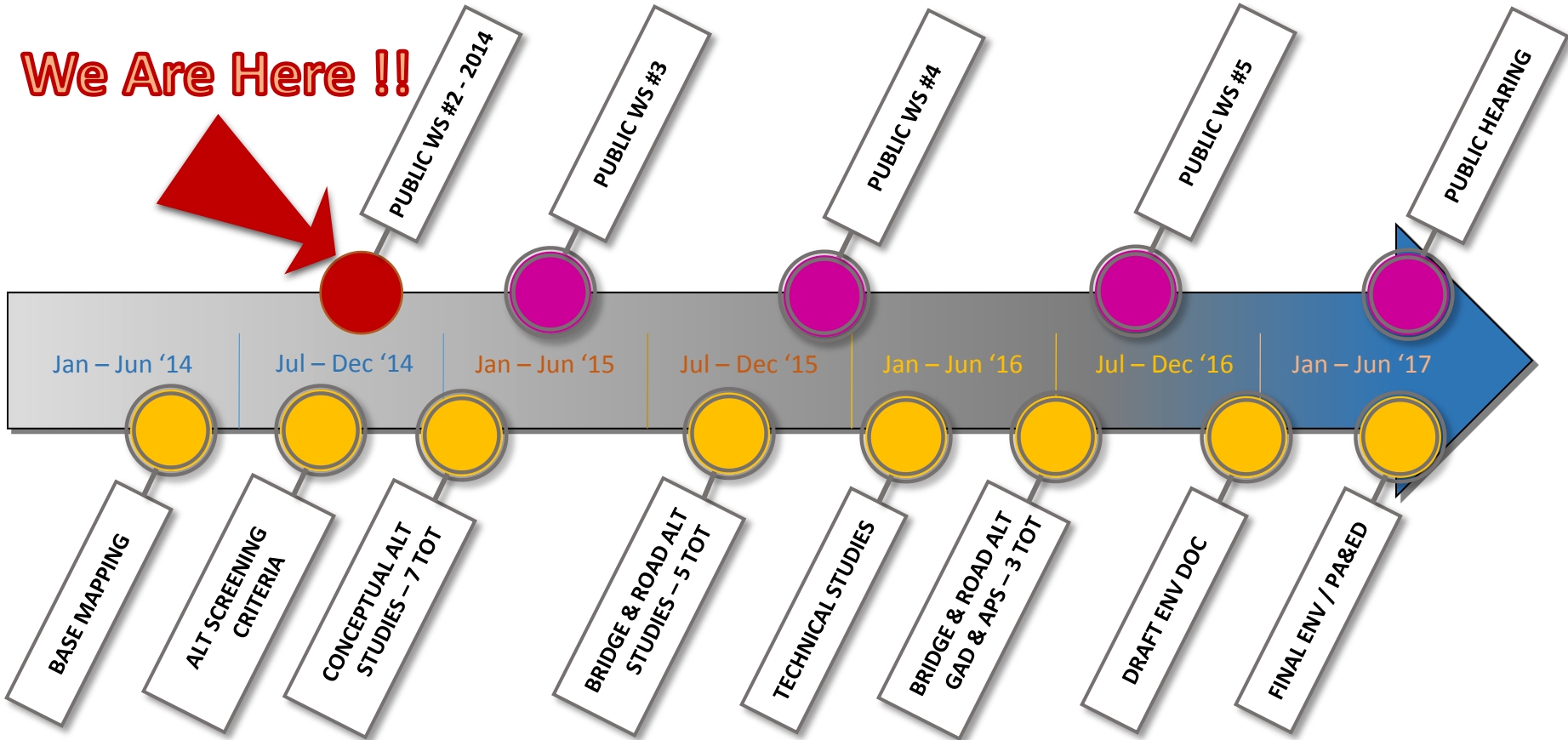


PA&ED Schedule

WHERE WE ARE

- Public Outreach
- PA & ED

We Are Here !!





Questions & Answers





AGENDA

- **Welcome / Introduction / Schedule**
 - Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- **Work To Date / Nature of Project**
 - Jon Balzer, County
- **Project Process**
 - Jon Balzer, County

WHERE WE ARE

- **Overview of Alternatives**
 - Howard Michael, Quincy
- **Screening Criteria / Screening Process**
 - Howard Michael, Quincy
- **Aesthetics Design Process / Factors**
 - Steve Noll, Design Workshop

WHERE WE'RE GOING

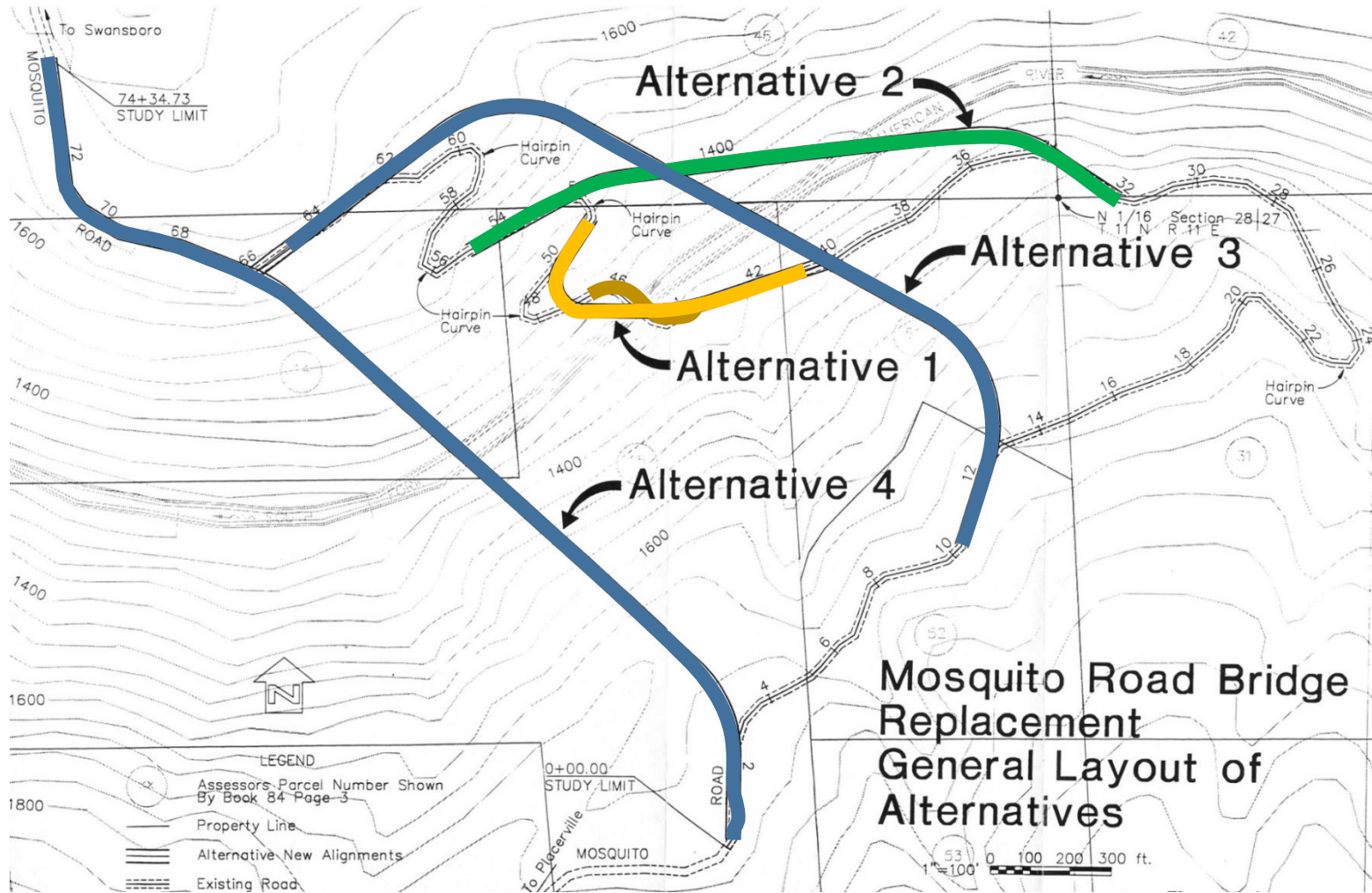
- **Next Steps**
 - Jon Balzer, County
- **Open House Period**





Overview of Alternatives

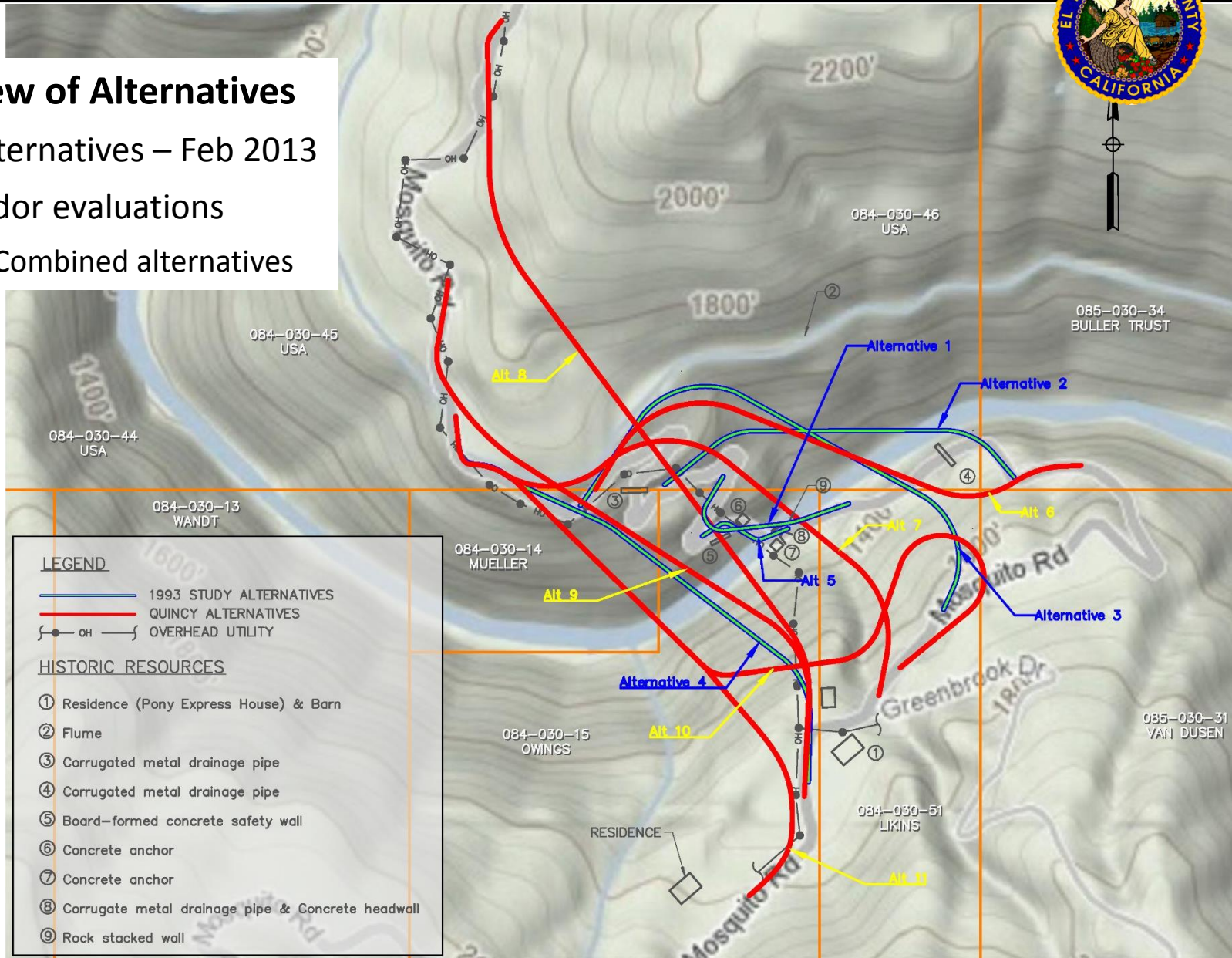
→ 1993 Study Alternatives





Overview of Alternatives

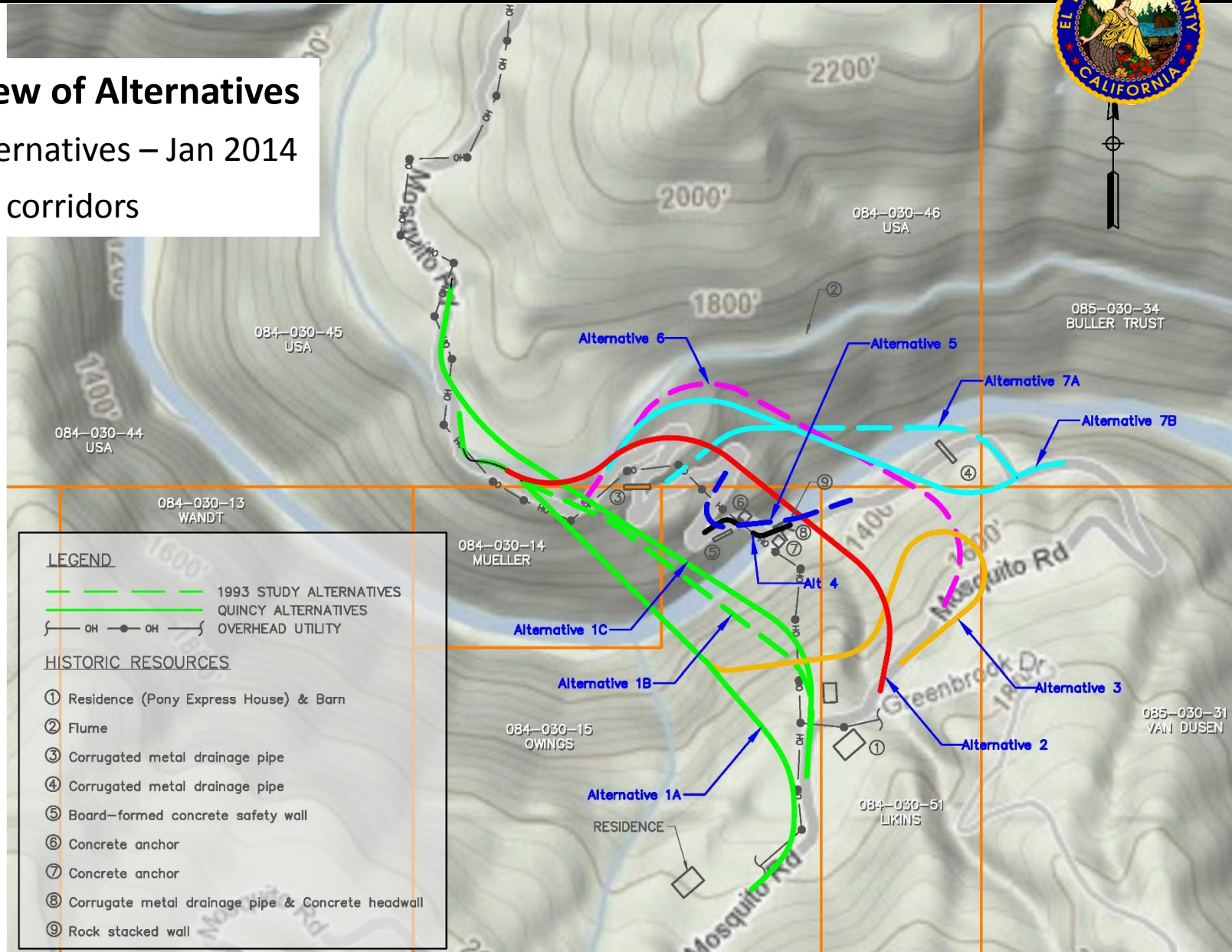
- ➔ 11 Alternatives – Feb 2013
- ➔ Corridor evaluations
 - ➔ Combined alternatives





Overview of Alternatives

- ➔ 7 Alternatives – Jan 2014
- ➔ With corridors

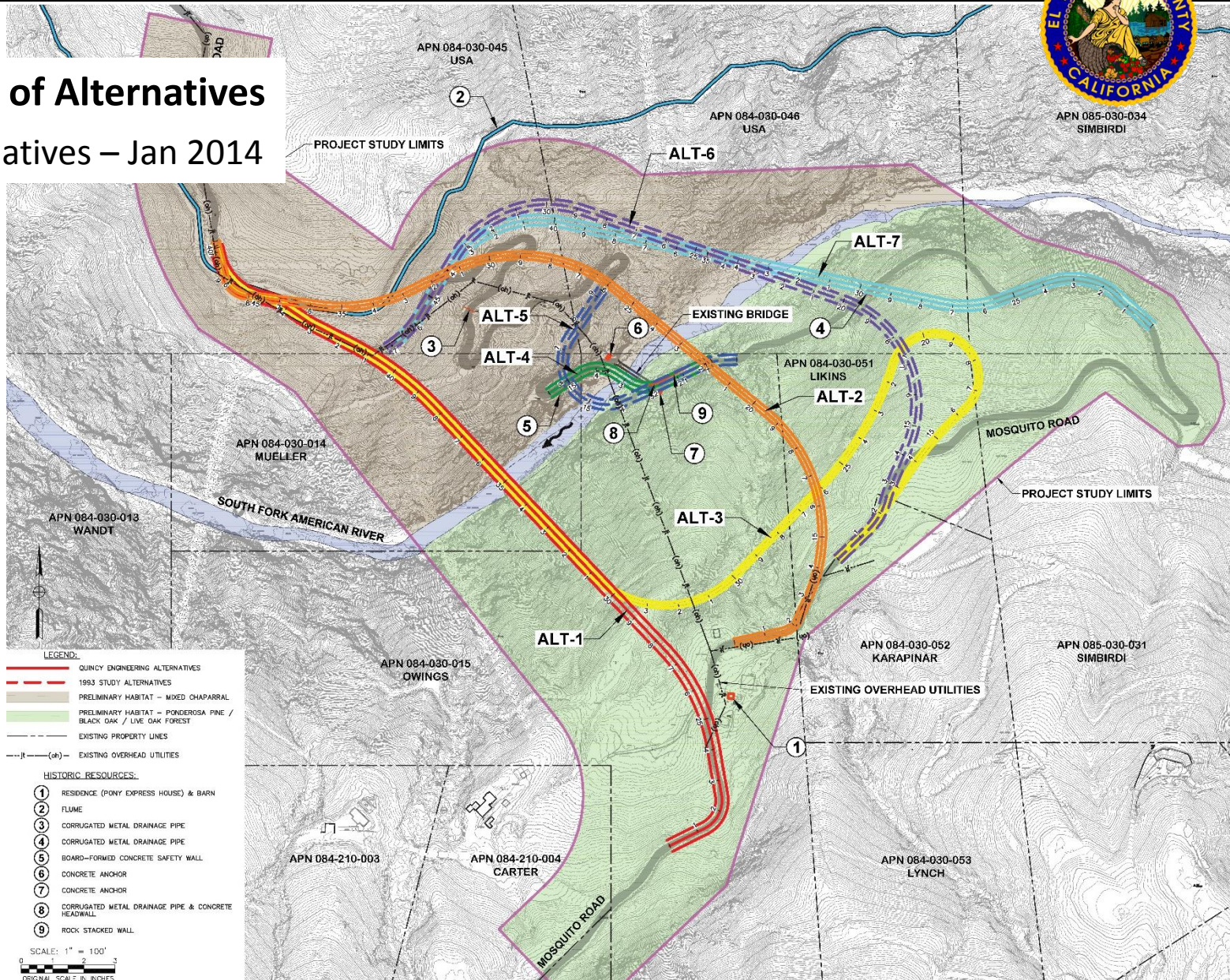




APN 085-030-034
SIMBIRDI

Overview of Alternatives

→ 7 Alternatives – Jan 2014





Rejected Alternatives

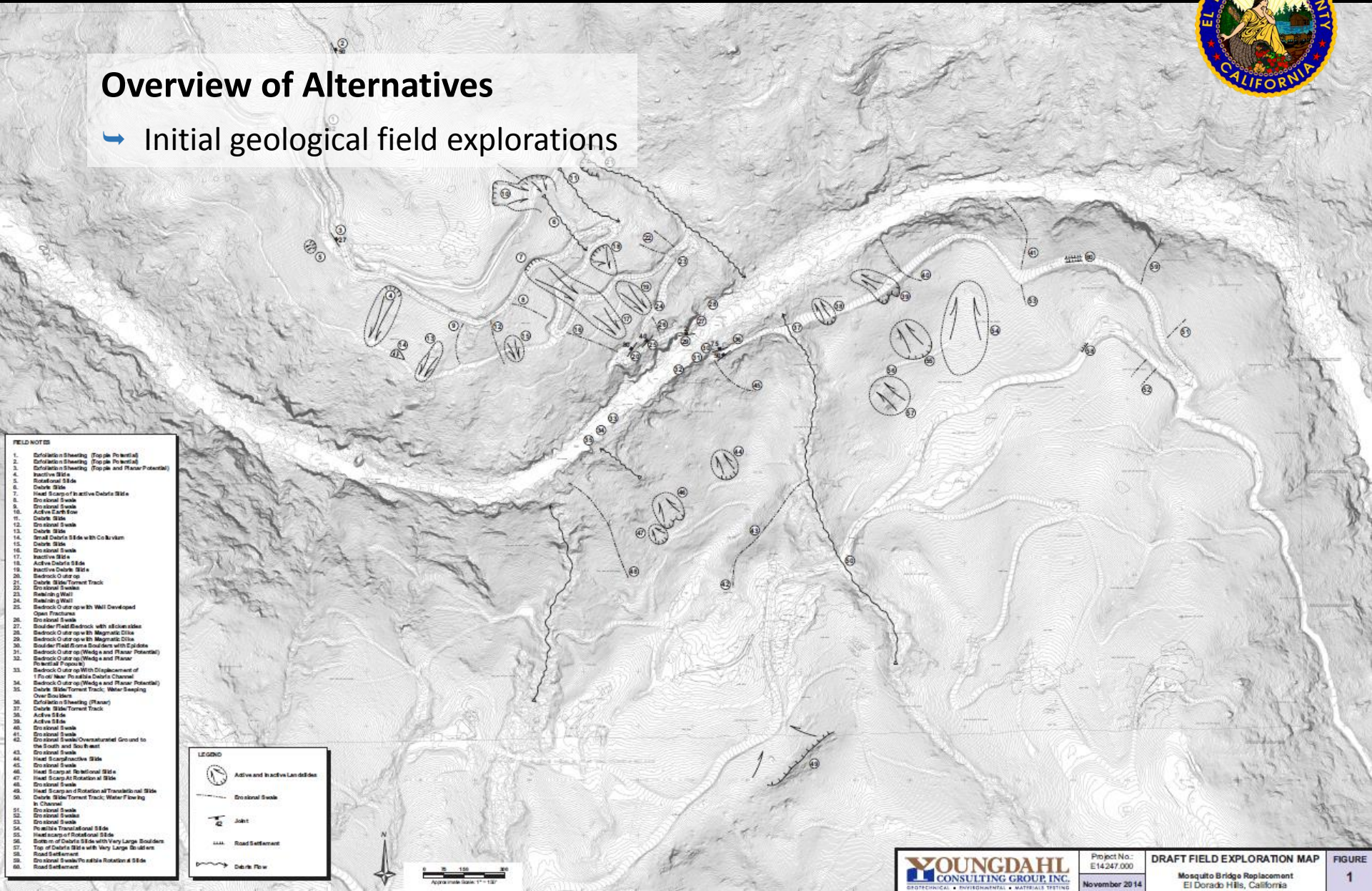
- Not applicable to current roadway standards
- Bridge types not conducive to steep & deep canyons
- Very similar to other alternatives (corridors)





Overview of Alternatives

➔ Initial geological field explorations



FIELD NOTES

1. Earthfill on Sheeting (Topple Potential)
2. Earthfill on Sheeting (Topple Potential)
3. Earthfill on Sheeting (Topple and Ransen Potential)
4. Inactive Slide
5. Rotational Slide
6. Debris Slide
7. Head Scarp of Inactive Debris Slide
8. Erosional Swale
9. Erosional Swale
10. Active Earth Flow
11. Debris Slide
12. Erosional Swale
13. Debris Slide
14. Small Debris Slide with Colluvium
15. Debris Slide
16. Erosional Swale
17. Inactive Slide
18. Active Debris Slide
19. Inactive Debris Slide
20. Bedrock Outcrop
21. Debris Slide/Torment Track
22. Erosional Swale
23. Retaining Wall
24. Retaining Wall
25. Bedrock Outcrop with Wall Developed
26. Open Fractures
27. Erosional Swale
28. Boulder Field/Bedrock with alluvial fill
29. Bedrock Outcrop with Magnetic Dike
30. Bedrock Outcrop with Magnetic Dike
31. Boulder Field/Some Boulder with Epibole
32. Bedrock Outcrop (Wedge and Planar Potential)
33. Bedrock Outcrop (Wedge and Planar Potential)
34. Bedrock Outcrop with Displacement of 1 Foot Near Possible Debris Channel
35. Bedrock Outcrop (Wedge and Planar Potential)
36. Debris Slide/Torment Track, Water Seeping Over Boulder
37. Earthfill on Sheeting (Flare)
38. Debris Slide/Torment Track
39. Active Slide
40. Erosional Swale
41. Erosional Swale
42. Erosional Swale/Oversaturated Ground to the South and Southwest
43. Erosional Swale
44. Head Scarp/Active Slide
45. Erosional Swale
46. Head Scarp at Rotational Slide
47. Head Scarp at Rotational Slide
48. Erosional Swale
49. Head Scarp and Rotation at Translational Slide
50. Debris Slide/Torment Track, Water Flowing in Channel
51. Erosional Swale
52. Erosional Swale
53. Erosional Swale
54. Possible Translational Slide
55. Head Scarp of Rotational Slide
56. Scarp on Debris Slide with Very Large Boulders
57. Top of Debris Slide with Very Large Boulders
58. Road Settlement
59. Erosional Swale/Possible Rotation at Slide
60. Road Settlement

LEGEND

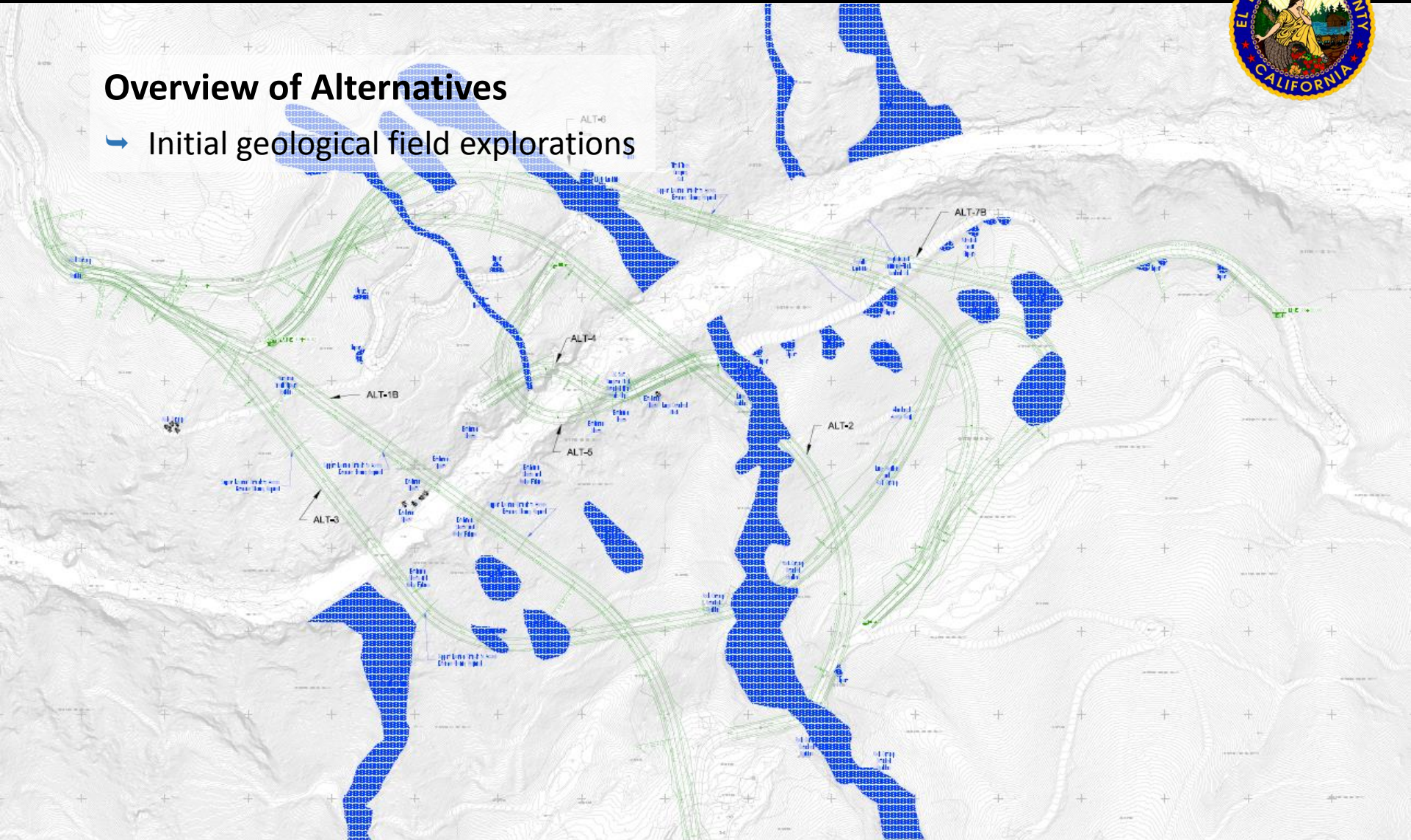
- Active and Inactive Landslides
- Erosional Swale
- Joint
- Road Settlement
- Debris Flow





Overview of Alternatives

➔ Initial geological field explorations



LEGEND

-  Preliminary Alignment Alternative
-  Landslide/Slump/Slipout Debris flow Soil Creep

Joint



Tuber Engineering, Inc.
Quincy Engineering, Inc.
Mosquito Bridge Replacement
El Dorado County, California
Exploration Plan
10/13/2014





AGENDA

- ↳ **Welcome / Introduction / Schedule**
 - ↳ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- ↳ **Work To Date / Nature of Project**
 - ↳ Jon Balzer, County
- ↳ **Project Process**
 - ↳ Jon Balzer, County

WHERE WE ARE

- ↳ **Overview of Alternatives**
 - ↳ Howard Michael, Quincy
- ↳ **Screening Criteria / Screening Process**
 - ↳ Howard Michael, Quincy
- ↳ **Aesthetics Design Process / Factors**
 - ↳ Steve Noll, Design Workshop

WHERE WE'RE GOING

- ↳ **Next Steps**
 - ↳ Jon Balzer, County
- ↳ **Open House Period**

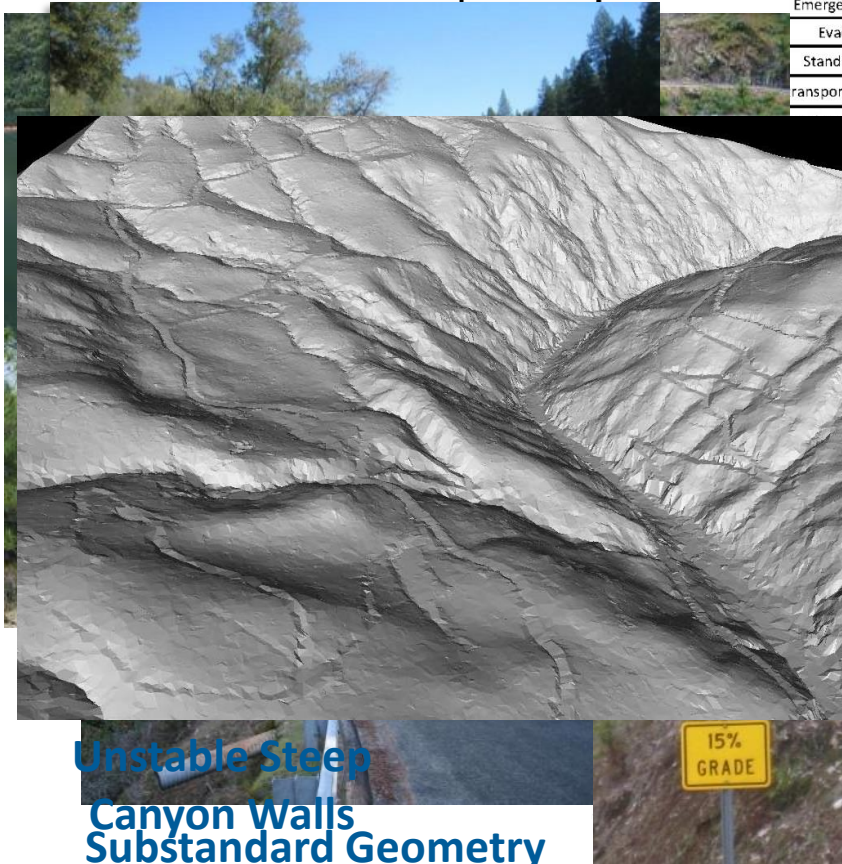




Screening Criteria

- ➔ Criterion
- ➔ Criteria Categories
- ➔ Criterion Descriptions

EVALUATION CRITERION by CATEGORY	
CATEGORY / CRITERION	CRITERION DESCRIPTION
VIABILITY OF ALTERNATIVES	
Fundable	Fundable project
General Plan	Consistent with General Plan
Purpose and Need	Satisfies Purpose and Need
Geology	Avoid geological sensitive areas such as critical slide zones
SAFETY and OPERATIONS	
Accidents	Improve safety for motorized transportation crossing the river (bridge and approaches).
Emergency response	Improve opportunities for emergency response access and time.
Evacuation route	Improves emergency route in case of evacuation
Standard geometry	Improves narrow approach roads with switchbacks/hairpin turns/steep grade
transportation modes	Maximize safety for non-motorized transportation (bridge and approaches)
	and river access
	ak
	ong-term maintenance
	ur during construction
	our around construction especially with single lane traffic control
	ing bridge open during construction
	placement into existing rural setting
	design into existing rural setting
	abitat (turtle, eagle, river corridor wildlife)
	as such as slide zones
	d from the bridge (focus on location and not bridge type)
	d of the bridge (focus on location and not bridge type)
	cultural/historic resources
	and owners
	ivate properties
	ate property owners
Mineral rights	Avoids properties with underlying mineral rights
OST	
Cost/Benefit	Minimize cost of project to ensure full funding through the HBP program . Maximize project cost benefit



**Unstable Steep Canyon Walls
Substandard Geometry**



Screening Process

- ➔ Weight Criterion
- ➔ Weight Category

EVALUATION CRITERION by CATEGORY				CRITERION PERFORMANCE WEIGHTING												
SAFETY and OPERATIONS				Criterion	B	C	D	E	F	G	H	Total	%			
	Accidents	A	B	C	D	A	A	G	A		3.5	13%				
	Emergency response	B		C	B	B	B	G	B		3.5	13%				
	Evacuation route	C			C	C	C	G	C		3.5	13%				
	Standard geometry	D				D	D	G	D		3.5	13%				
	Alt transportation modes	E					E	G	E		3.5	13%				
	Recreation & river access	F						G	H		3.5	13%				
	Bridge washout	G							G		3.5	13%				
	Long-term maintenance	H									3.5	13%				
Totals											28	100%				
CONSTRUCTION TRAFFIC HANDLING				Criterion	B	C	D						Total	%		
	Off-site detour	A	A	C	D						1.5	25%				
	On-site detour	B		C	C						1.5	25%				
	Maintain traffic	C			D						1.5	25%				
	Access	D										1.5	25%			
Totals											6	100%				
COMMUNITY CHARACTER				Criterion	B										Total	%
	Emergency response	B	A	A										1.5	50%	
	Evacuation route	C										1.5	50%			
	Standard geometry	D										3	100%			
	Alt transportation modes	E		D	E						2	20%				
	Recreation & river access	F		D	E						2	20%				
	Bridge washout	G			B						2	20%				
	Long-term maintenance	H			E						2	20%				
Totals											10	100%				
CONSTRUCTION TRAFFIC HANDLING				Criterion	B	C	D						Total	%		
	Off-site detour	A	A	C	D						1.5	25%				
	On-site detour	B		C	C						1.5	25%				
	Maintain traffic	C			D						1.5	25%				
	Access	D										1.5	25%			
Totals											6	100%				
COMMUNITY CHARACTER				Criterion	B										Total	%
	Bridge Placement	A	A						v	vi		2.5	17%			
	Bridge Design	B						i	i		2.5	17%				
								ii	ii		2.5	17%				
								iii	vi		2.5	17%				
								v	iv		2.5	17%				
									v		2.5	17%				
Totals											15	100%				
ENVIRONMENTAL/GEOTECHNICAL RESOURCES				Criterion	B	C							Total	%		
	Wildlife	A	B									2.5	17%			
Totals											15	100%				



Screening Process

- ➔ Evaluating Alternatives
 - ➔ Criterion per Category
 - ➔ Categories

CRITERIA	CRITERION WEIGHT	CATEGORY WEIGHT	ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 7	
			CRITERION RAW SCORE	CRITERION FACTORED SCORE	CRITERION RAW SCORE	CRITERION FACTORED SCORE	CRITERION RAW SCORE	CRITERION FACTORED SCORE
SAFETY AND OPERATIONS		17%						
Accidents	13%		25	3.13	25	3.13	25	3.13
Emergency response	13%		25	3.13	25	3.13	25	3.13
Evacuation route	13%		25	3.13	25	3.13	25	3.13
Standard geometry	13%		25	3.13	25	3.13	25	3.13
Alt transportation modes	13%		25	3.13	25	3.13	25	3.13
Recreation & river access	13%		25	3.13	25	3.13	25	3.13
Bridge washout	13%		25	3.13	25	3.13	25	3.13
Long-term maintenance	13%		25	3.13	25	3.13	25	3.13
Total Safety, Access and Operations Criterion / Category Score				25.00		25.00		25.00
CONSTRUCTION TRAFFIC HANDLING		17%						
Off-site detour	25%		25	6.25	25	6.25	25	6.25
On-site detour	25%		25	6.25	25	6.25	25	6.25
Maintain traffic	25%		25	6.25	25	6.25	25	6.25
Access	25%		25	6.25	25	6.25	25	6.25
Total Construction Impacts Criterion / Category Score				25.00		25.00		25.00
COMMUNITY CHARACTER		17%						
Bridge Placement	50%		25	12.50	25	12.50	25	12.50
Bridge Design	50%		25	12.50	25	12.50	25	12.50
Total Community Character Criterion / Category Score				25.00		25.00		25.00
ENVIRONMENTAL/GEOTECHNICAL RESOURCES		17%						
Wildlife	20%		25	5.00	25	5.00	25	5.00
Geology	20%		25	5.00	25	5.00	25	5.00
Viewshed from bridge	20%		25	5.00	25	5.00	25	5.00
Viewshed of bridge	20%		25	5.00	25	5.00	25	5.00
Cultural resources	20%		25	5.00	25	5.00	25	5.00
Total Environ/Geotechnical Resources Criterion / Category Score				25.00		25.00		25.00
RIGHT-OF-WAY		17%						
Land owners	25%		25	6.25	25	6.25	25	6.25
Land acquisition	25%		25	6.25	25	6.25	25	6.25
# of acquisitions	25%		25	6.25	25	6.25	25	6.25
Mineral rights	25%		25	6.25	25	6.25	25	6.25
Total Right-of-Way Criterion / Category Score				25.00		25.00		25.00
Total Criterion / Category Score (Benefit)				125.00		125.00		125.00
ALTERNATIVE BENEFIT / COST		17%						
Cost/Benefit	See Ref. Score		25	3.57	25	3.57	25	3.57
Total Project Alternative Cost Estimate Criterion / Category Score				3.57		3.57		3.57
Total Criterion / Category Score + Cost/Benefit				128.57		128.57		128.57

EVALUATION CATEGORY / CRITERION	CRITERION WEIGHT	CATEGORY WEIGHT	ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 7	
			CRITERION RAW SCORE	CRITERION FACTORED SCORE	CRITERION RAW SCORE	CRITERION FACTORED SCORE	CRITERION RAW SCORE	CRITERION FACTORED SCORE
SAFETY AND OPERATIONS		17%						
Accidents	13%		25	3.13	25	3.13	25	3.13
Emergency response	13%		25	3.13	25	3.13	25	3.13
Evacuation route	13%		25	3.13	25	3.13	25	3.13
Standard geometry	13%		25	3.13	25	3.13	25	3.13
Alt transportation modes	13%		25	3.13	25	3.13	25	3.13
Recreation & river access	13%		25	3.13	25	3.13	25	3.13
Bridge washout	13%		25	3.13	25	3.13	25	3.13
Long-term maintenance	13%		25	3.13	25	3.13	25	3.13
Total Safety, Access and Operations Criterion / Category Score				25.00		25.00		25.00
CONSTRUCTION TRAFFIC HANDLING		17%						
Off-site detour	25%		25	6.25	25	6.25	25	6.25
On-site detour	25%		25	6.25	25	6.25	25	6.25
Maintain traffic	25%		25	6.25	25	6.25	25	6.25
Access	25%		25	6.25	25	6.25	25	6.25
Total Construction Impacts Criterion / Category Score				25.00		25.00		25.00
COMMUNITY CHARACTER		17%						
Bridge Placement	50%		25	12.50	25	12.50	25	12.50
Bridge Design	50%		25	12.50	25	12.50	25	12.50
Total Community Character Criterion / Category Score				25.00		25.00		25.00
ENVIRONMENTAL/GEOTECHNICAL RESOURCES		17%						
Wildlife	20%		25	5.00	25	5.00	25	5.00
Geology	20%		25	5.00	25	5.00	25	5.00
Viewshed from bridge	20%		25	5.00	25	5.00	25	5.00
Viewshed of bridge	20%		25	5.00	25	5.00	25	5.00
Cultural resources	20%		25	5.00	25	5.00	25	5.00
Total Environ/Geotechnical Resources Criterion / Category Score				25.00		25.00		25.00
RIGHT-OF-WAY		17%						
Land owners	25%		25	6.25	25	6.25	25	6.25
Land acquisition	25%		25	6.25	25	6.25	25	6.25
# of acquisitions	25%		25	6.25	25	6.25	25	6.25
Mineral rights	25%		25	6.25	25	6.25	25	6.25
Total Right-of-Way Criterion / Category Score				25.00		25.00		25.00
Total Criterion / Category Score (Benefit)				125.00		125.00		125.00
ALTERNATIVE BENEFIT / COST		17%						
Cost/Benefit	See Ref. Score		25	3.57	25	3.57	25	3.57
Total Project Alternative Cost Estimate Criterion / Category Score				3.57		3.57		3.57
Total Criterion / Category Score + Cost/Benefit				128.57		128.57		128.57



Screening Process

- ➔ Alternatives Scoring
 - ➔ Criterion per Category
 - ➔ Categories



ALTERNATIVES SCORING MATRIX															
EVALUATION CATEGORY / CRITERION	WEIGHT	ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5		ALTERNATIVE 6		ALTERNATIVE 7	
		CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE	CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE	CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE	CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE	CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE	CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE	CRITERION FACTORED SCORE	CATEGORY FACTORED SCORE
SAFETY and OPERATIONS	17%	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17
Accidents	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Emergency response	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Evacuation route	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Standard geometry	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Alt transportation modes	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Recreation & river access	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Bridge washout	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
Long-term maintenance	13%	3.13		3.13		3.13		3.13		3.13		3.13		3.13	
CONSTRUCTION TRAFFIC HANDLING	17%	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17
Off-site detour	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
On-site detour	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
Maintain traffic	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
Access	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
COMMUNITY CHARACTER	17%	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17
Bridge Placement	50%	12.50		12.50		12.50		12.50		12.50		12.50		12.50	
Bridge Design	50%	12.50		12.50		12.50		12.50		12.50		12.50		12.50	
ENVIRONMENTAL/GEOTECHNICAL RESOURCES	17%	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17
Wildlife	20%	5.00		5.00		5.00		5.00		5.00		5.00		5.00	
Geology	20%	5.00		5.00		5.00		5.00		5.00		5.00		5.00	
Viewshed from bridge	20%	5.00		5.00		5.00		5.00		5.00		5.00		5.00	
Viewshed of bridge	20%	5.00		5.00		5.00		5.00		5.00		5.00		5.00	
Cultural resources	20%	5.00		5.00		5.00		5.00		5.00		5.00		5.00	
RIGHT-OF-WAY	17%	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17	25.00	4.17
Land owners	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
Land acquisition	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
# of acquisitions	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
Mineral rights	25%	6.25		6.25		6.25		6.25		6.25		6.25		6.25	
ALTERNATIVE BENEFIT / COST	17%	3.57	0.60	3.57	0.60	3.57	0.60	3.57	0.60	3.57	0.60	3.57	0.60	3.57	0.60

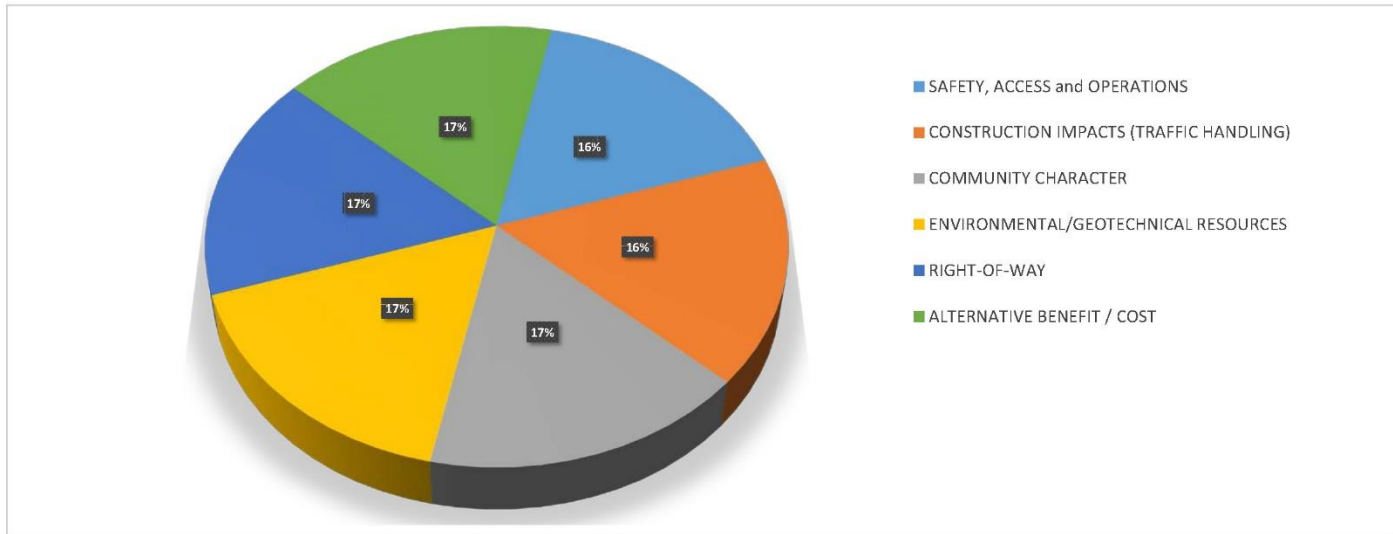
	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5	ALTERNATIVE 6	ALTERNATIVE 7
Total Criterion / Category Score	128.57	21.43	128.57	21.43	128.57	21.43	128.57



Screening Process

➔ Alternatives Ranking

ALTERNATIVE RANKING																													
EVALUATION CATEGORY / CRITERION	WEIGHT	ALTERNATIVE 1			ALTERNATIVE 2			ALTERNATIVE 3			ALTERNATIVE 4			ALTERNATIVE 5			ALTERNATIVE 6			ALTERNATIVE 7									
		CRITERION FACTORED SCORE	Criter Rank	CATEGORY FACTORED SCORE	Categ Rank	CRITERION FACTORED SCORE	Criter Rank	CATEGORY FACTORED SCORE	Categ Rank	CRITERION FACTORED SCORE	Criter Rank	CATEGORY FACTORED SCORE	Categ Rank	CRITERION FACTORED SCORE	Criter Rank	CATEGORY FACTORED SCORE	Categ Rank	CRITERION FACTORED SCORE	Criter Rank	CATEGORY FACTORED SCORE	Categ Rank	CRITERION FACTORED SCORE	Criter Rank	CATEGORY FACTORED SCORE	Categ Rank				
SAFETY, ACCESS and OPERATIONS	17%	25.00	1	4.17	1	25.00	1	4.17	1	25.00	2	4.17	2	25.00	4	4.17	4	25.00	4	4.17	4	25.00	1	4.17	1	25.00	3	4.17	3
CONSTRUCTION IMPACTS (TRAFFIC HANDLING)	17%	25.00	1	4.17	1	25.00	2	4.17	2	25.00	1	4.17	1	25.00	3	4.17	3	25.00	3	4.17	3	25.00	1	4.17	1	25.00	1	4.17	1
COMMUNITY CHARACTER	17%	25.00	3	4.17	3	25.00	3	4.17	3	25.00	2	4.17	2	25.00	1	4.17	1	25.00	1	4.17	1	25.00	2	4.17	2	25.00	2	4.17	2
ENVIRONMENTAL/GEOTECHNICAL RESOURCES	17%	25.00	4	4.17	3	25.00	7	4.17	6	25.00	5	4.17	4	25.00	2	4.17	2	25.00	6	4.17	5	25.00	3	4.17	4	25.00	1	4.17	1
RIGHT-OF-WAY	17%	25.00	4	4.17	4	25.00	3	4.17	3	25.00	7	4.17	7	25.00	1	4.17	1	25.00	2	4.17	2	25.00	5	4.17	5	0.00	6	4.17	6
ALTERNATIVE BENEFIT / COST	17%	3.57	1	0.60	3	3.57	1	0.60	4	3.57	2	0.60	2	3.57	4	0.60	6	3.57	3	0.60	7	3.57	2	0.60	1	3.57	2	0.60	5
TOTAL PERFORMANCE		128.57	4	21.43	3	128.57	5	21.43	4	128.57	2	21.43	2	128.57	6	21.43	6	128.57	7	21.43	7	128.57	1	21.43	1	103.57	3	21.43	5





Questions & Answers





AGENDA

- ↳ **Welcome / Introduction / Schedule**
 - ↳ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- ↳ **Work To Date / Nature of Project**
 - ↳ Jon Balzer, County
- ↳ **Project Process**
 - ↳ Jon Balzer, County

WHERE WE ARE

- ↳ **Overview of Alternatives**
 - ↳ Howard Michael, Quincy
- ↳ **Screening Criteria / Screening Process**
 - ↳ Howard Michael, Quincy
- ↳ **Aesthetics Design Process / Factors**
 - ↳ Steve Noll, Design Workshop

WHERE WE'RE GOING

- ↳ **Next Steps**
 - ↳ Jon Balzer, County
- ↳ **Open House Period**





Aesthetic Design Process

↳ Objectives

- ↳ Principle One: Functional Clarity
- ↳ Principle Two: Scale and Proportion
- ↳ Principle Three: Order and balance
- ↳ Principle Four: Simplicity and Continuity
- ↳ Principle Five: Site and Environmental Integration



What is Bridge Aesthetics?





Aesthetic Design Objectives





Principle One: Functional Clarity





Principle Two: Scale and Proportion





Principle Three: Order and Balance





Principle Four: Simplicity and Continuity





Principle Five: Site and Environmental Integration





Principle Five: Site and Environmental Integration





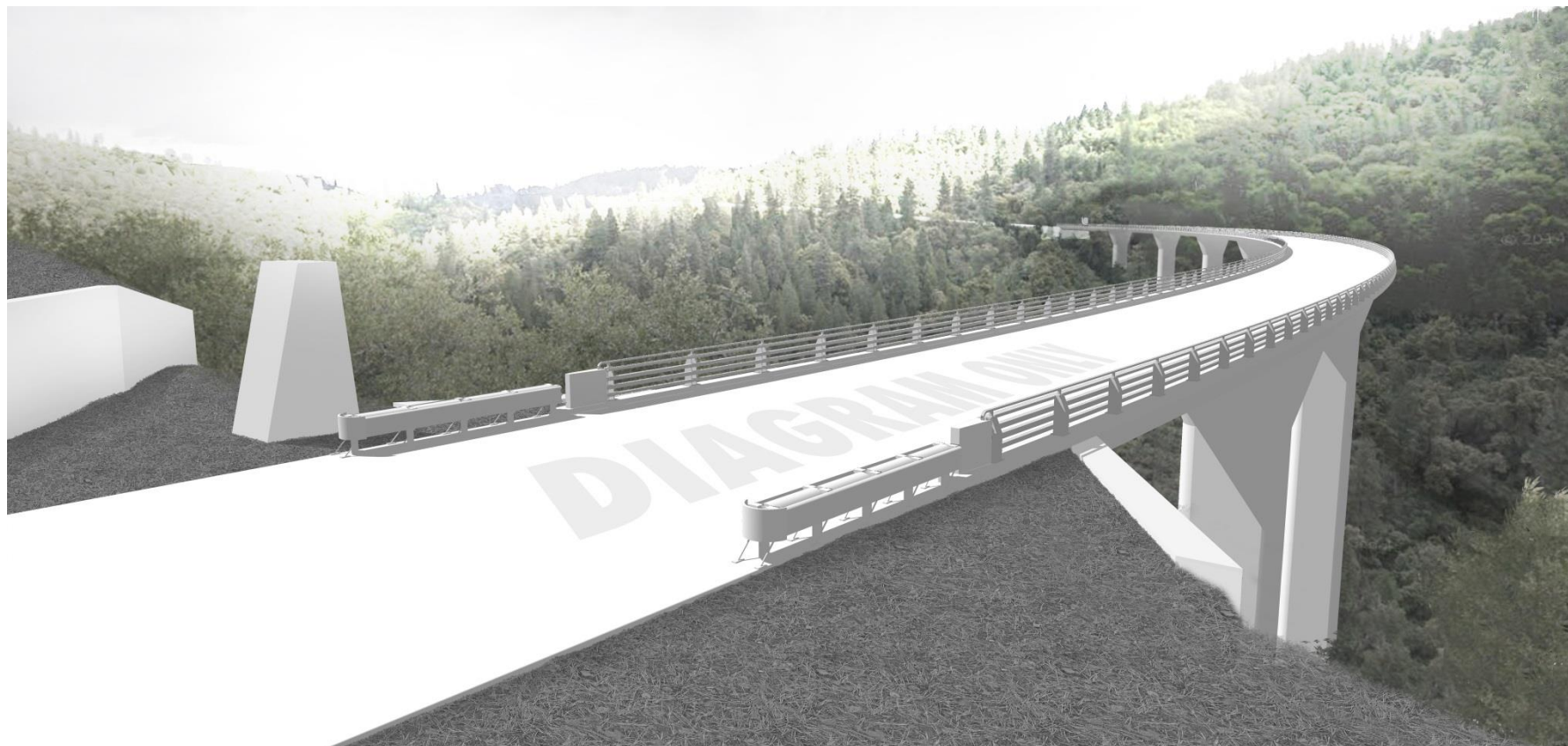
Aesthetic Design Factors

↳ Elements

- ↳ Primary Aesthetic Design Elements
- ↳ Secondary Aesthetic Design Elements
- ↳ Aesthetic Theming: Standard
- ↳ Aesthetic Theming: Historic
- ↳ Aesthetic Theming: Natural

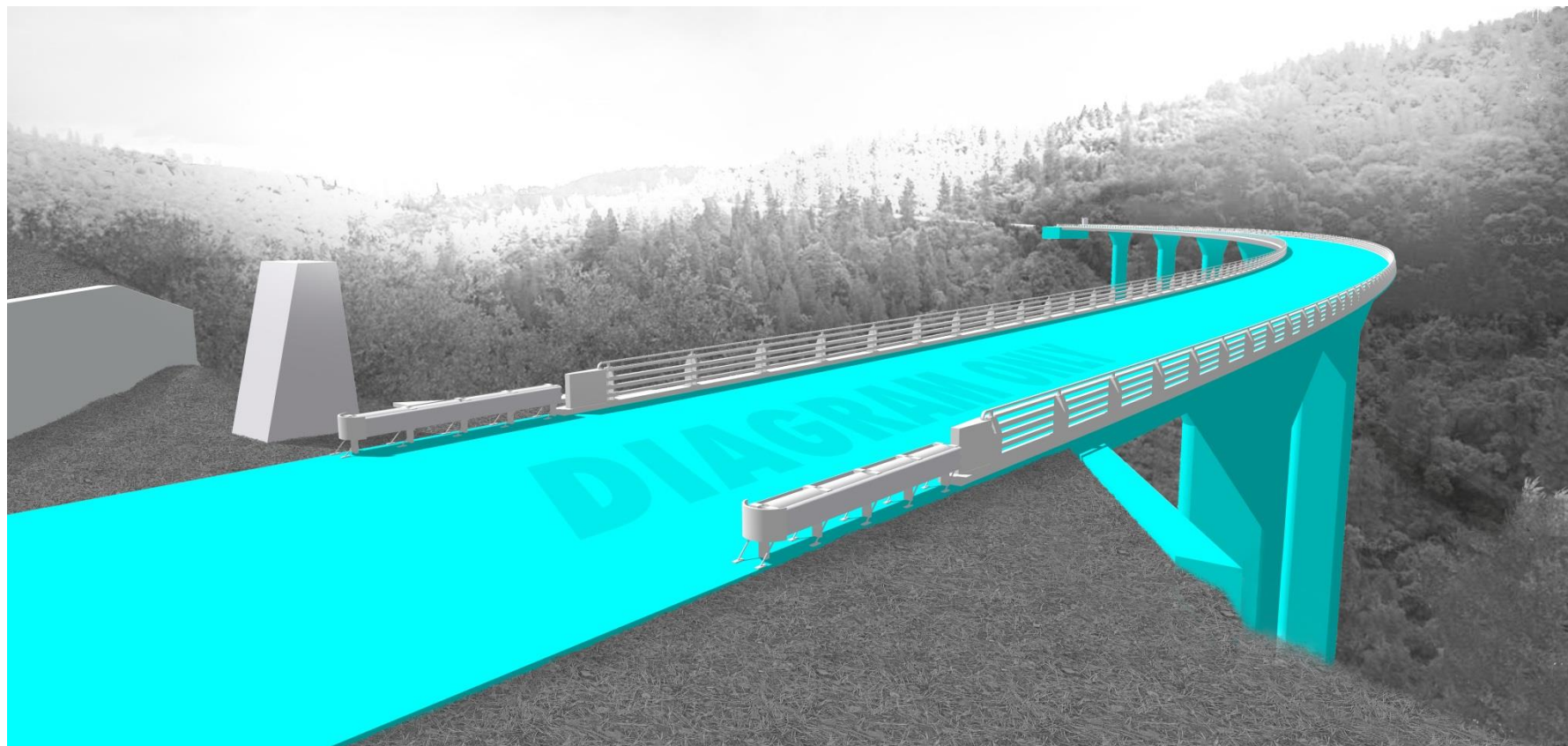


Aesthetic Design Elements



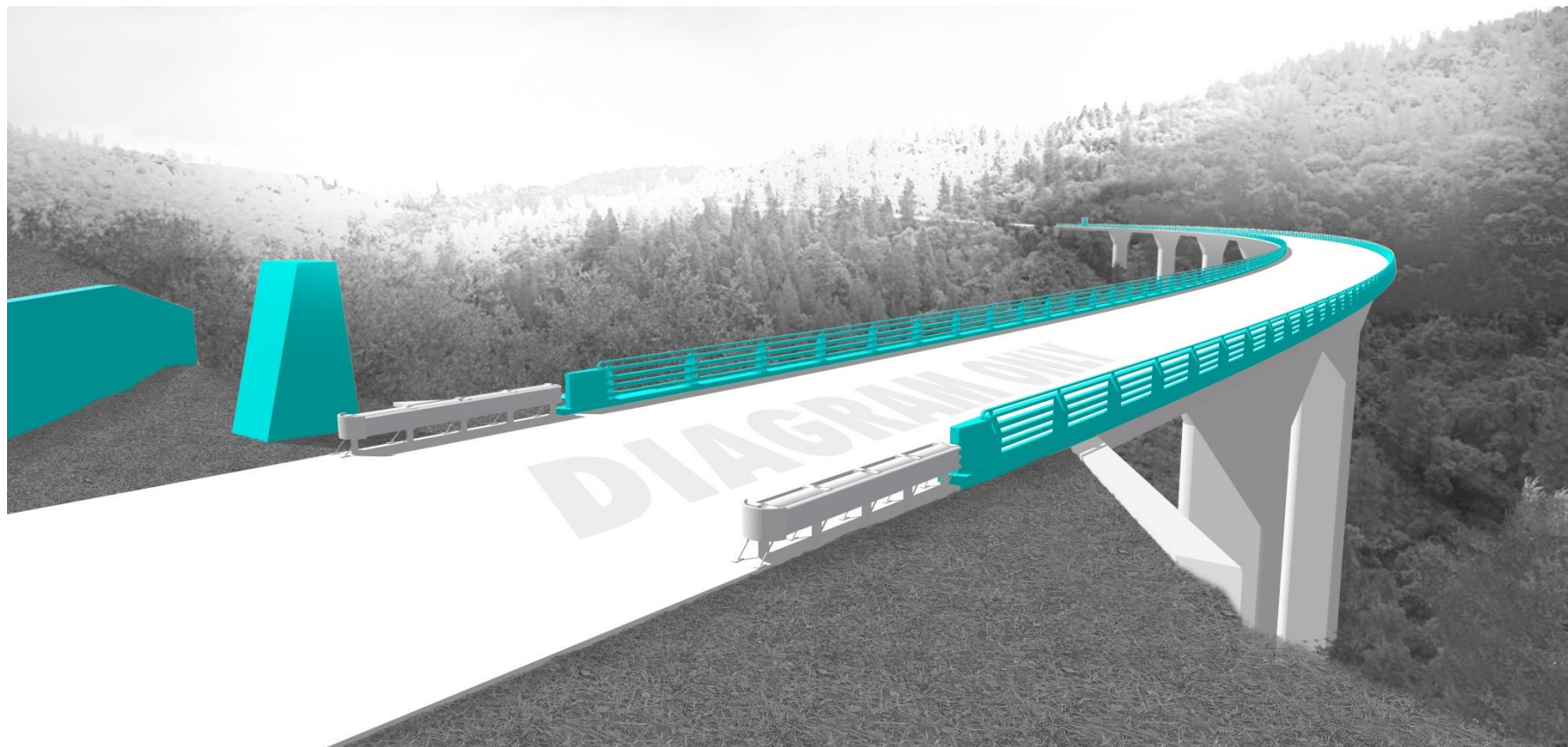


Primary Aesthetic Design Elements





Secondary Aesthetic Design Elements



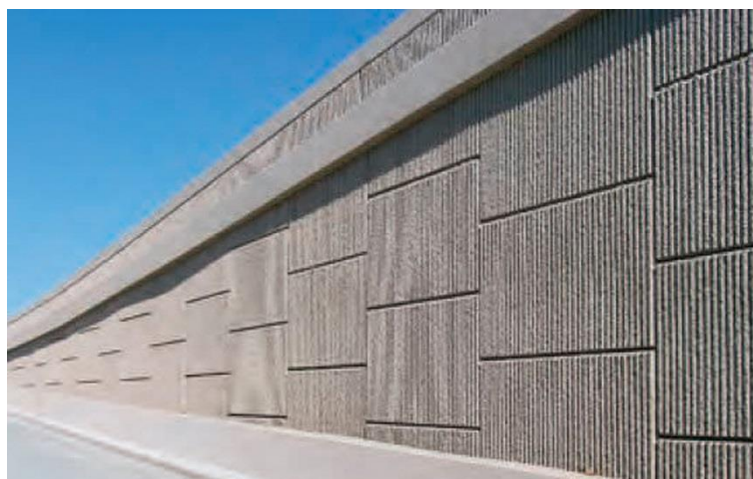


Aesthetic Theming: Standard





Standard: Walls and Abutments





Standard: Gateway Features





Standard: Vehicle Barriers and Railings





Aesthetic Theming: Historic





Historic: Walls and Abutments





Historic: Gateway Features





Historic: Vehicle Barriers and Railings





Aesthetic Theming: Natural



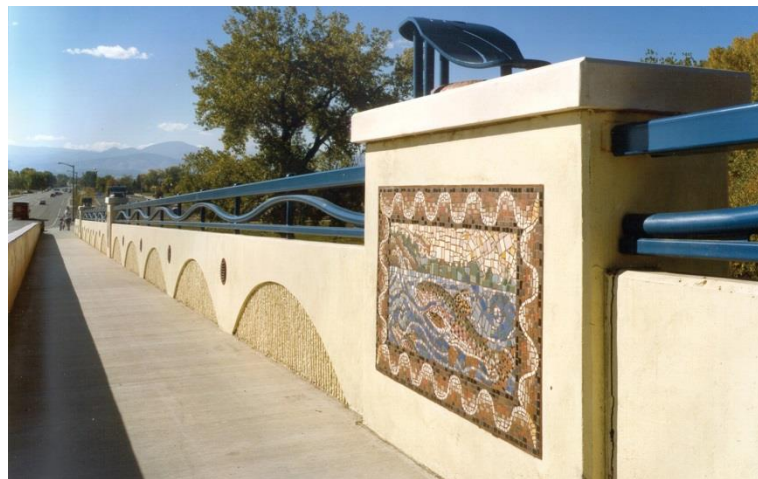
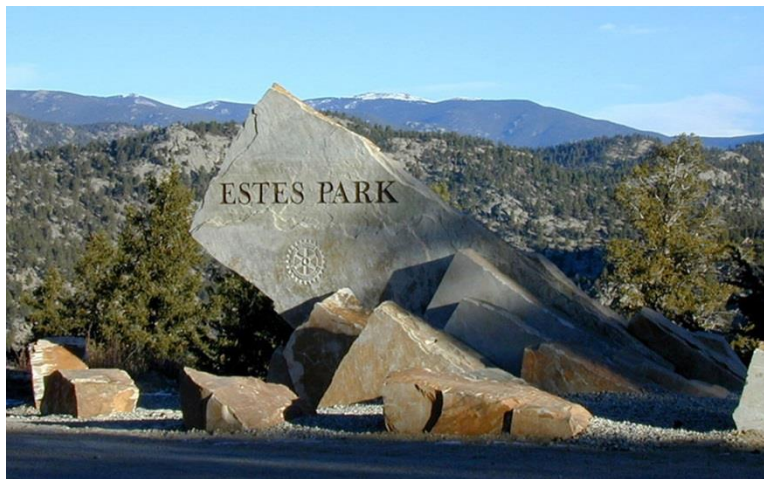


Natural: Walls and Abutments





Natural: Gateway Features





Natural: Vehicle Barriers and Railings





Questions & Answers





AGENDA

- **Welcome / Introduction / Schedule**
 - Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- **Work To Date / Nature of Project**
 - Jon Balzer, County
- **Project Process**
 - Jon Balzer, County

WHERE WE ARE

- **Overview of Alternatives**
 - Howard Michael, Quincy
- **Screening Criteria / Screening Process**
 - Howard Michael, Quincy
- **Aesthetics Design Process / Factors**
 - Steve Noll, Design Workshop

WHERE WE'RE GOING

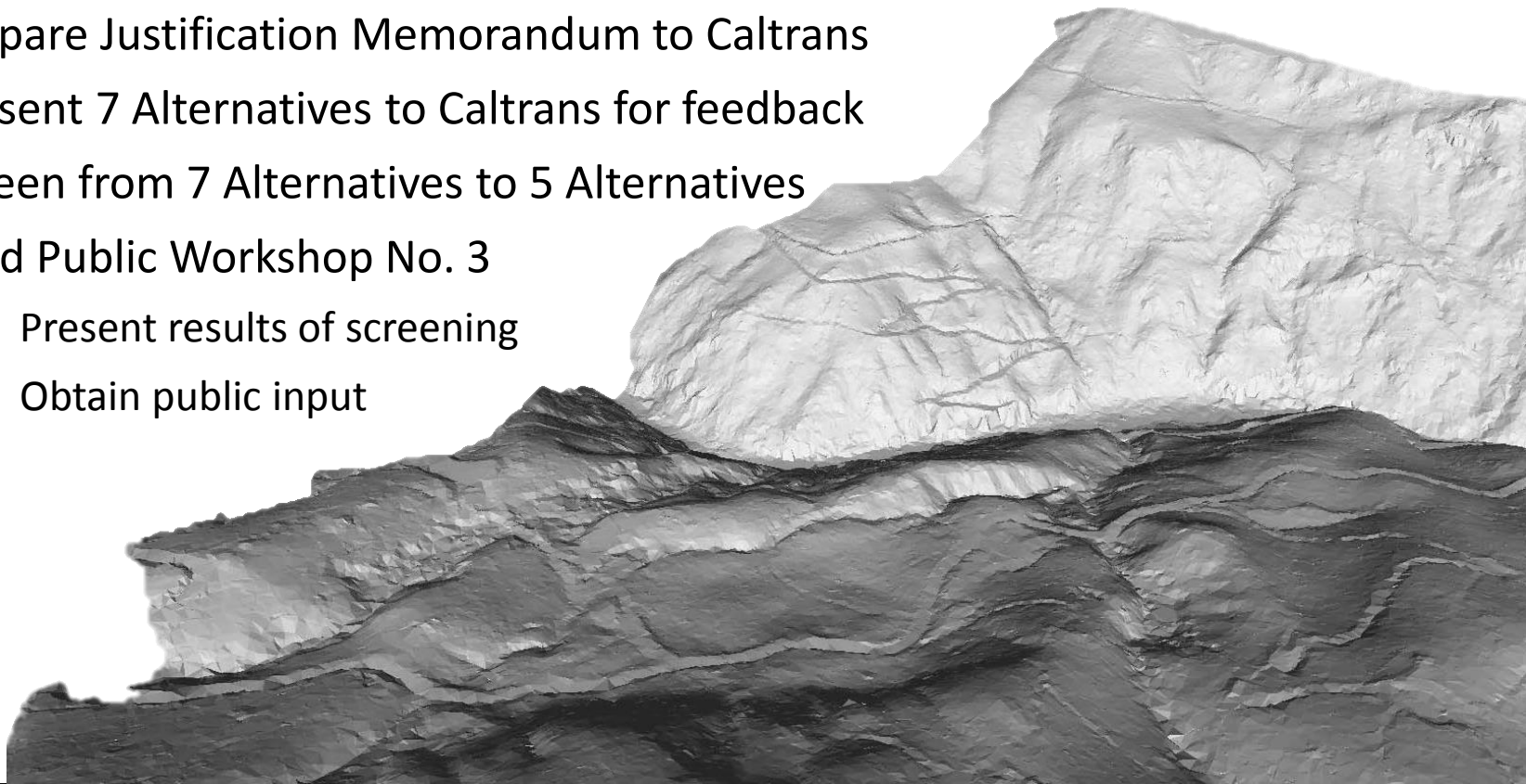
- **Next Steps**
 - Jon Balzer, County
- **Open House Period**





Next Steps

- ↳ Complete Field Exploration Studies
- ↳ Adjust Concept Alternative Alignments
- ↳ Analyze 7 Alternatives
- ↳ Prepare Justification Memorandum to Caltrans
- ↳ Present 7 Alternatives to Caltrans for feedback
- ↳ Screen from 7 Alternatives to 5 Alternatives
- ↳ Hold Public Workshop No. 3
 - ↳ Present results of screening
 - ↳ Obtain public input





Overall Schedule

WHERE WE'RE GOING

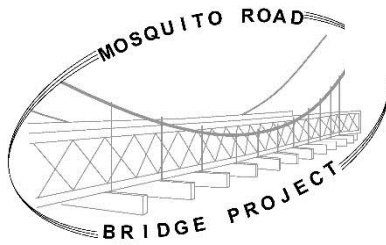
-  Project Development
-  Key Bridge Facts



We Are Here !!



Project Logo





AGENDA

- ↳ **Welcome / Introduction / Schedule**
 - ↳ Matt Smeltzer & Jon Balzer, County

WHERE WE'VE BEEN

- ↳ **Work To Date / Nature of Project**
 - ↳ Jon Balzer, County
- ↳ **Project Process**
 - ↳ Jon Balzer, County

WHERE WE ARE

- ↳ **Overview of Alternatives**
 - ↳ Howard Michael, Quincy
- ↳ **Screening Criteria / Screening Process**
 - ↳ Howard Michael, Quincy
- ↳ **Aesthetics Design Process / Factors**
 - ↳ Steve Noll, Design Workshop

WHERE WE'RE GOING

- ↳ **Next Steps**
 - ↳ Jon Balzer, County
- ↳ **Open House Period**

