

TOWN OF PARADISE VALLEY

Doubletree Ranch Road Reconstruction

December 6, 2018



DOUBLETREE RANCH ROAD

- Background
- Road Classification & Capacity
- Design Considerations
- Project Alternatives
- Costs
- Council Discussion



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BACKGROUND

- January 11, 2018 Design contract discussion
(Construction contract to follow)
- April 26, 2018 CIP Discussion
- June 14, 2018 CIP Adopted with FY 2018-2019 Budget
- Public meetings held April 25 and September 12
- November 1 Council Study Session
- November 15 Council Meeting



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ROAD CLASSIFICATION & CAPACITY

- Minor Arterial (serves as main feeder street and provides linkages between major arterials)
- CIP Project No. 2018-04 calls for bike lanes, medians, sidewalks, roundabout, landscaping, and full curb and gutter
- Similar elements of work were installed on Doubletree Ranch Rd, west of Invergordon, in accordance with the roadway cross-section defined in the General Plan

Roundabouts are encouraged for traffic control



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ROAD CLASSIFICATION & CAPACITY

- Traffic Impact Analysis Criteria, May 2015
(service volumes and level of service (LOS))

LOS A: 11,280 ADT (two lane minor arterial)

- Doubletree Ranch Rd, April 2018

7,529 ADT weekday

4,802 ADT weekend

85th percentile speed: 38 mph (36 mph WB, 39 mph EB)



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ROAD CLASSIFICATION & CAPACITY

- Intersection Analysis, May 2018

Table 1 Level-of-Service Summary for Doubletree Ranch Rd at Invergordon Rd LOS (Average Delay in seconds/vehicle)					
Intersection	Approach	Existing Conditions		Proposed Conditions	
		AM Peak	PM Peak	AM Peak	PM Peak
Doubletree Ranch Road & Invergordon Road	NB	C (17.1)	C (19.3)	A (7.6)	A (6.6)
	SB	F (78.6)	C (16.4)	A (9.1)	A (7.2)
	EB	F (58.1)	B (14.5)	B (13.4)	A (5.3)
	WB	C (21.1)	D (29.5)	A (5.5)	A (9.2)
	Overall	F (52.9)	C (21.7)	A (9.7)	A (7.5)

Note: Unacceptable level-of-service results (LOS E or F) are shown in bold

DESIGN CONSIDERATIONS

- No additional right of way required under the current design
- Meandering alignment design based on previous town projects
- Other considerations: electric gate access, existing utilities, existing landscape (mature landscapes, back lots, undeveloped lots)
- Speed humps are limited to residential streets only, not arterials
- Mill/overlay completed in 2010
- Mill/overlay tentatively scheduled for 2025
- Cost of 1.5" mill/overlay in today's dollars is approx. \$170,000

DOUBLETREE RANCH ROAD

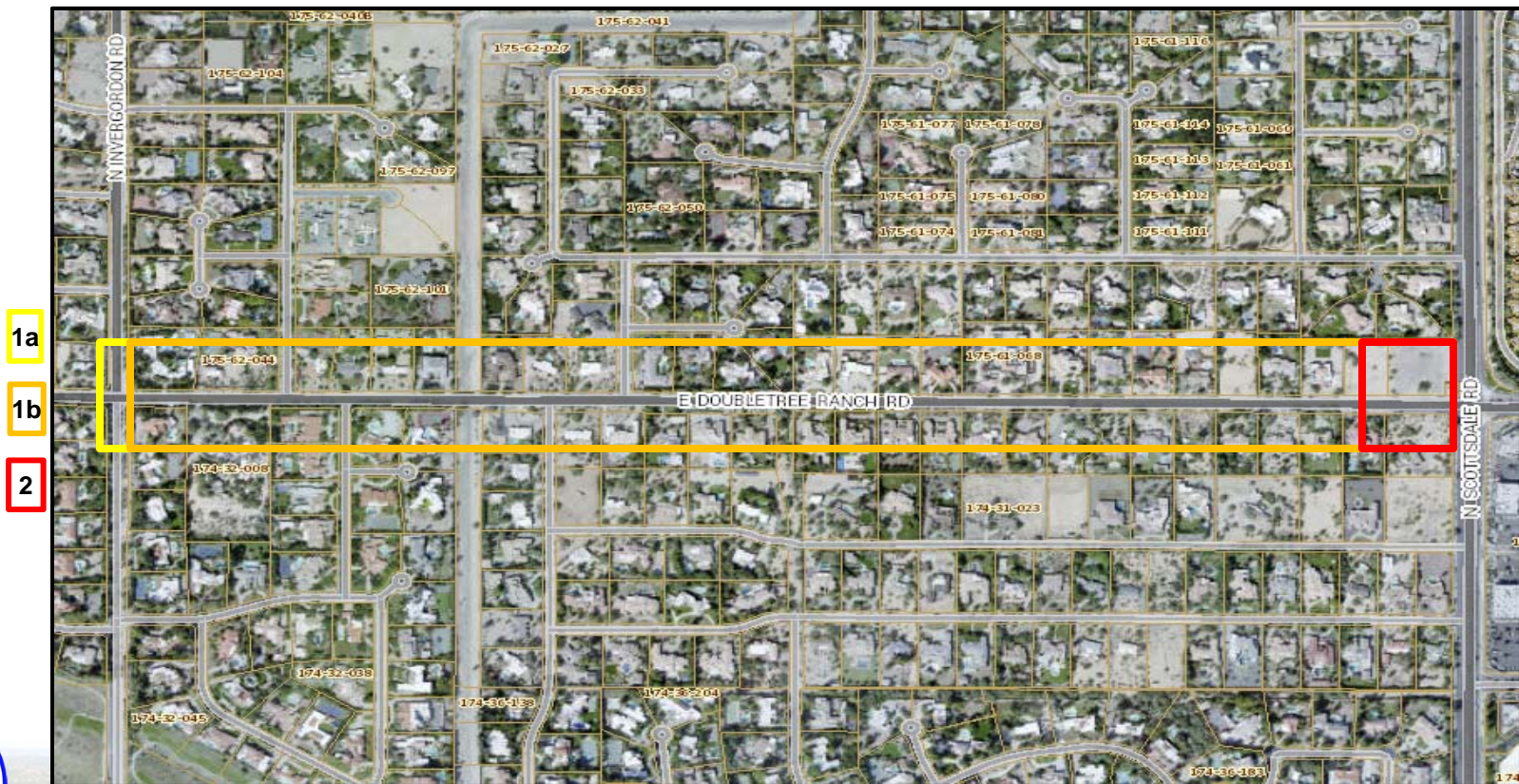
Project Alternatives (in no particular order):

- 1a) Design with roundabout at Invergordon Rd
- 1b) Design without roundabout at Invergordon Rd
- 2) Entry only (as presented at Nov 15, 2018 Council Meeting)
- 3) Redesign with additional public input (potential resident task force)
- 4) Table project (re-assess project priority with annual CIP update)



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PROJECT ALTERNATIVES



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PROJECT ALTERNATIVES



1a With roundabout

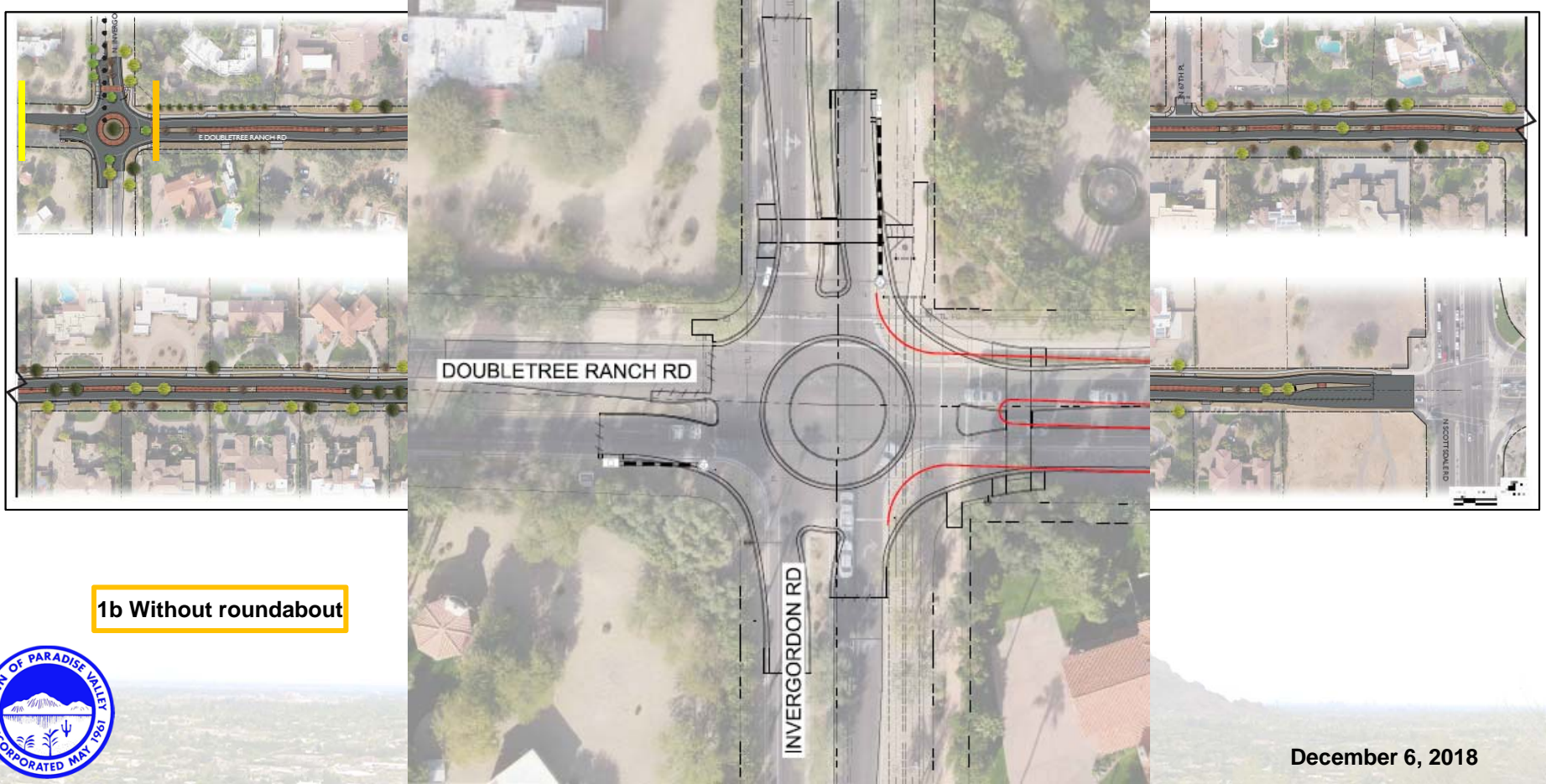
1b Without roundabout

2 Entry only

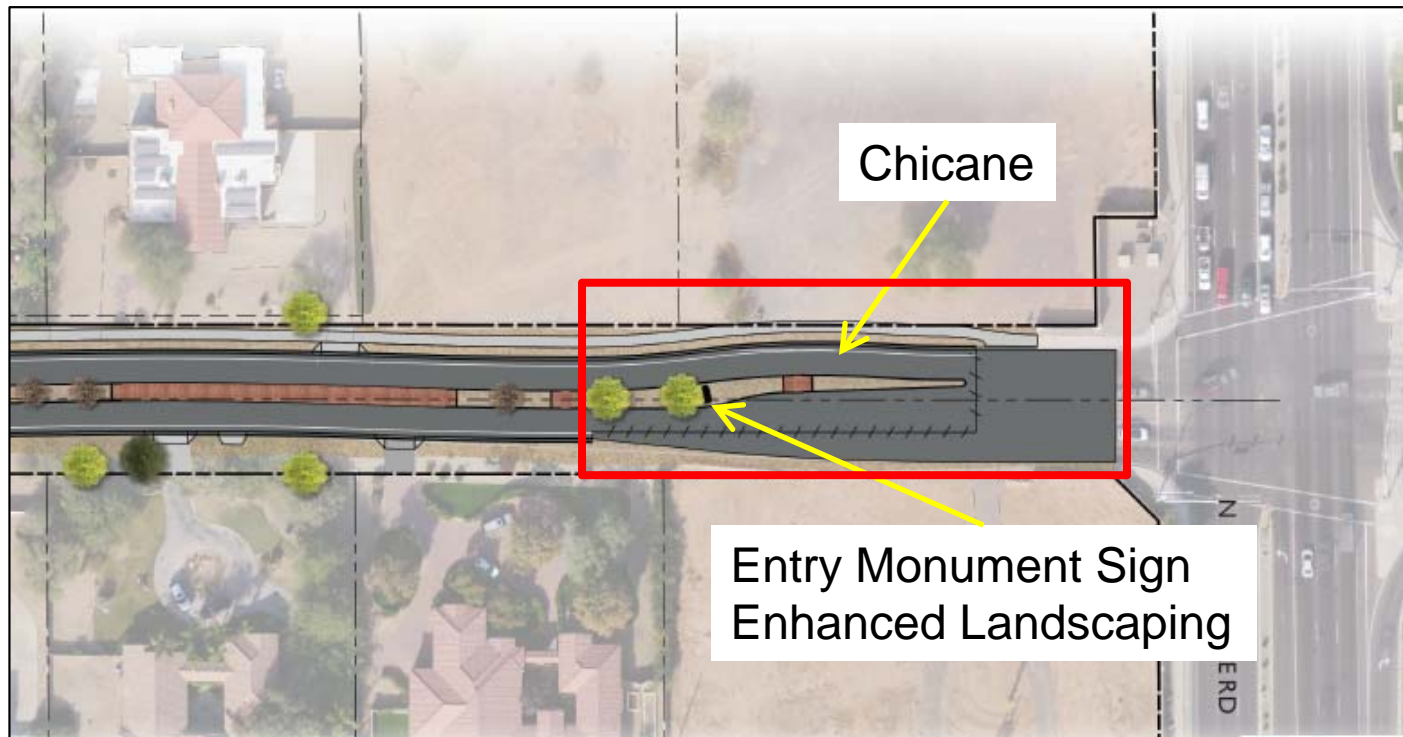


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PROJECT ALTERNATIVES



DESIGN



2 Entry only

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DESIGN



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COSTS

Project Alternatives (in no particular order)

- 1a) Design with roundabout at Invergordon Rd, \$3.2M
- 1b) Design without roundabout at Invergordon Rd, Cost TBD
- 2) Entry only, \$400k (as presented at Nov 15, 2018 Council Meeting)
- 3) Redesign with additional public input, Cost TBD
- 4) Re-evaluate project with other CIP requests, Cost TBD



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DOUBLETREE RANCH ROAD

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COUNCIL DISCUSSION



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