October 29, 2015

# **Public Hearing**



Financial Project Number: 433660-1 & 433661-1



Public Hearing SR 500 (S. Pine Ave) at SR 464 & SR 40, Marion County, Florida Financial Project Number: 433660-1 & 433661-1

## **Public Participation**

This public hearing is being held in accordance with Section 339.155, Florida Statutes; Section 339.199, Florida Statutes; and Section 120.525, Florida Statutes. This public hearing was advertised consistent with federal and state requirements and is being conducted consistent with the Americans with Disabilities Act of 1990.

This hearing is being held to give all interested persons the right to understand the project and comment on their concerns to the Department. Public participation at this hearing is encouraged and solicited without regard to race, color, religion, sex, age, national origin, disability or family status.

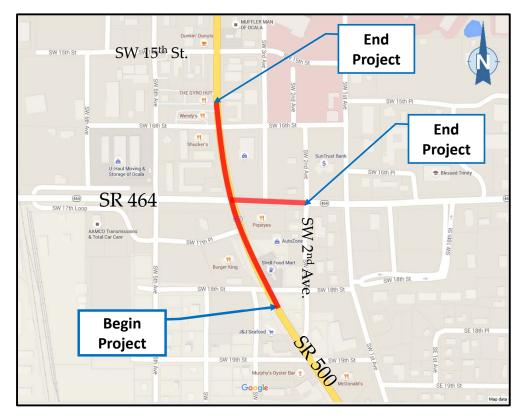
The purpose of this public hearing is to share information about the SR 500 project improvements. This public hearing also serves as an official forum to give you the opportunity to express your opinions and concerns about this project.

Official transcript is being made of all verbal comments made and will become part of the public record for these projects.



# Project Limits - SR 500 @ SR 464 (433660-1)

- SR 500 Mainline
  - Begin at SW 2<sup>nd</sup>Ave.
  - End at 200' North Of SW 16th St.
  - Approximately 1,785'
- SR 464 Mainline
  - Begin at SR 500
  - End SW 2<sup>nd</sup>Ave.
  - Approximately 488'
- Total project distance 0.430 miles





# **Existing Access\Lane Configurations**

- SR 500
  - 3 Thru Lanes
  - NB Left onto SR 464
  - SB Left onto SR 464
  - Bi-Direction Turn lane
- SR 464
  - 2 Thru Lanes
  - WB Left onto SR 500
  - EB Left onto SR 500
  - Bi-Direction Turn lane
- Driveway/Sidestreet Access
  - Full Access Via Bi-Directional
  - Restricted turn movement





## **Design Process**

- Evaluated 6 different alternatives during Study Phase
- Criteria for selecting alternatives:
  - Reduce delay (Time spent at the intersection)
  - Increase capacity (moving more vehicles in less time)
  - Minimizing need for property acquisition
- Developed conceptual design for the feasible alternatives (Nos. 5 & 6)

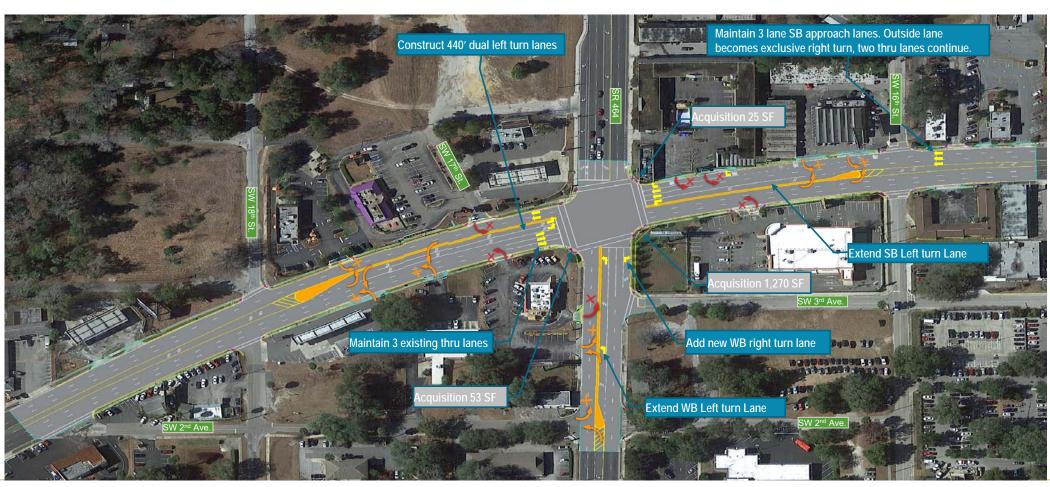
Table 4

SD 500 at SD 464 VD 2018 Intersection Analysis

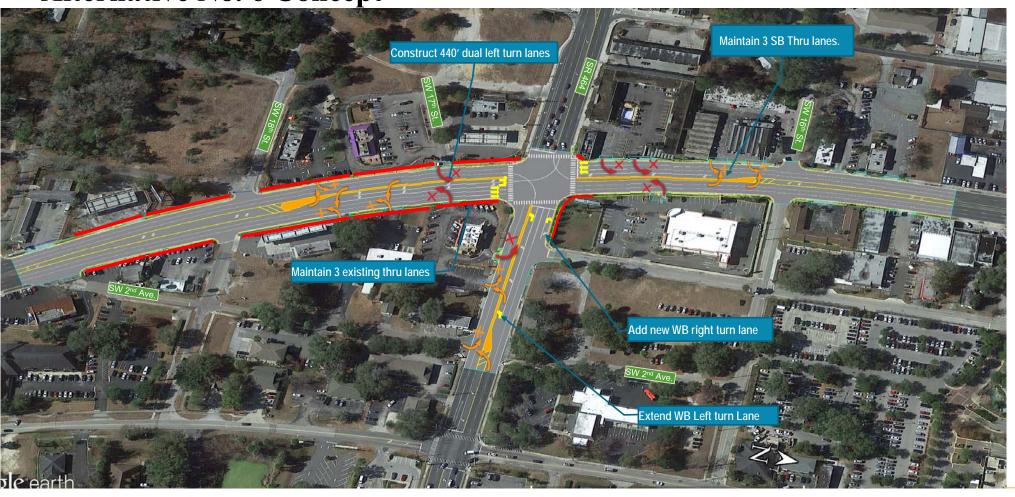
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Weethward Approach Intersection Approach Control Contr	78.2 99  78.2 99  78.2 99  1.68-8-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	Delay Block 4: B F F F Belay Block 5: B E Belay Block 5: B B B B B B B B B B B B B B B B B B B	91.5 778 y Company NRL Three Delay 191.5 1266 50.9 778.0 635 50.9 778.0 437 78.0 437	arison of I (Lancough LUS) F D D E arison of T-WRS arison of T	5.9 5.3 7.4 61 Delay Delay 2.1 6.5 5.8 5.3 5.8 5.3 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8	A A A A A A A A A Build	Overall Delay 67.4 -4.9% Overall Delay 53.5	LOS E	136.8 187 Alterna 1.eft Delay 96.3 283 118.7 36.8 169 137.0 137.0 120.0	F  F  F  F  F  F  F  F  F  F  F  F  F	061   914   1914   1914   1915	T (Lune ough 1.03 E	17.7 247 122 21-24 122 21-24 122 21-24 122 26-6 113 26-6 113 Right	B B B ane Bray LOS A C B	Overall   Delay   67.4 -18.796 Overall   Delay   70.6
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Weehward  Janinsertien Appear  Vantheund  Genes Length (9)  Latinsertien Appear  Vantheund  Genes Length (9)  Santheund  Genes Length (9)  Versite Length (9)  Fantheund  Genes Length (9)  Genes Length (9)  Janinsertien Appear  Kentheund  Janinsertien Appear  Versite Length (9)	78.2   50   60   61   64   64   65   65   65   65   65   65	Delay Block 4: B F F F Belay Block 5: B E Belay Block 5: B B B B B B B B B B B B B B B B B B B	91.5 778 97 Computed NRL Three 191.3 141.5 161.5	arison of Class Sugh LUSS D D D E arison of T-4William Class D D D D D D D D D D D D D D D D D D	in the No Despire Village of Despire Village of Despire Village of Section 1 Despire Village Of Section	A A A A A A A A A Build	Overall Delay 67.4 -4.9% Overall Delay 53.5	LOS E	136.8 187 Alterna 1.eft Delay 96.3 255 118.7 655 50.8 169 127.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6 551 110.0 120.6	F  F  F  F  F  F  F  F  F  F  F  F  F	961   914   104   104   104   104   104   104   104   104   104   105	T (Lune ough 1.03 E	Drep)+4   Itoght   Delay	B B B ane Bray LOS A C B	Overall   Delay   67.4 -18.796 Overall   Delay   70.6
Weethward (Jenne Lough (H)  Intersection Approach  Variablement  General Lough (H)  Weethward  General Lough (H)  Weethward  General Lough (H)  Weethward  General Lough (H)  Intersection Approach  General Lough (H)  Intersection Approach  Constitution  General Lough (H)  General	78.2   59   50   50   50   50   50   50   50	Delas (1994 - 1994 ) Delas (1994 ) Delas (19	91.5 778 9 Compp. and NBL Three Policy 191.3 266 441.5 266 455 45.5 278 40.5 178.0 9 447 5 49.5 178.0 9 447 5 49.5 178.0 9 447 5 49.5 178.0 9 448.5 14	T (Lancaugh LOS D D D D D D D D D D D D D D D D D D D		A A A A A A A A A A A A A A A A A A A	Overall Delay 67.4 -4.9% Overall Delay 53.5	LOS E	136.8 187 Alterna 1.eft Delay 96.3 255 56.8 137.0 137.0 120.6 137.0 120.6 120.6 120.0 120.6 120.0 120.6 120.0 120.6 120.0 120.	F  F  E  F  F  F  F  F  F  F  F  F  F  F	961   614   78   10   10   10   10   10   10   10   1	T (Line cough LOS E E D Cough LOS E E E E E E E E E E E E E E E E E E E	Drep +1   Dollay   Delay	B B B Ante Brogs LOS A C B B Tum LOS	Overall   Delay   67.4 -18.796 Overall   Delay   70.6
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# **Alternative No. 5 Concept**



**Alternative No. 6 Concept** 



# **Alternatives Summary**

Traffic Performance Measures											
	NO B	UILD	Alterna	tive #5	Alternative #6						
	AM	PM	AM	PM	AM	PM					
Average Delay, sec/veh.	70.7	74.6	53.5	70.6	52.9	61.5					
Delay Reduction %	-	-	<b>24.3%</b>	<i>-</i> 5.4	<i>-</i> 25.2%	<i>-</i> 17.6%					
Level of Service	E	E	D	E	D	E					
Est. Queue Length, ft.											
NB LT	535	551	280	317	268	277					
Construction Cost	\$	0	\$1,596	5,000	\$1,792,000.00						
Required Right-of-way, sq. ft.	(	)	1,34	48	7,731						
Acquisition Costs	\$	0	\$325,	000	\$1,600,000						
Total Cost	\$	0	\$1,921	,000	\$3,392,000						
No. of Affected Parcels	(	)	(3		(12)						



Recommendation: Alternative 5

## **Schedule & Estimated Construction Cost**

- Plans Complete—July 2016
- Construction Begin TBD
- 2016 Construction Cost Estimate \$1.6M
- 2016 Right-of Way Acquisition Cost \$325,000



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433660-1 SR 500 (US 441) and SR 464 (MP 24.215 TO MP 24.582)



#### About

The project begins 0.203 miles south of SR 464 (MP 24.227) on SR 500 (US 441) and extends northward for 1,789 feet on SR 500 (US 441) to MP 24.566. The intent of the project is to implement traffic operation improvements to relief congestion at the intersection of SR 500 and SR 464. The proposed improvements will create a dual left turn for northbound traffic on SR 500 to SR 464, and extend the left turn queue length of the southbound left turn on SR 500 onto SR 464. A new exclusive right turn lane will be added for westbound SR 464 traffic turning north onto SR 500. Minor drainage, pedestrian, sidewalk, signalization, and lighting improvements will also be included with this project.

#### Phase: Design Work Add Turn Lane

Type:
Length: 0.431 Miles
City: Ocala

County: Marion

Project Details

US 441 SR 464

Road: SR 500

#### Estimated Costs

ROW: \$325 K Construction:\$2 M

#### Contact Information

Project Todd Alexander Manager: (386) 943-5420

Todd.Alexander@dot.state.fl.us

Ask a Questio

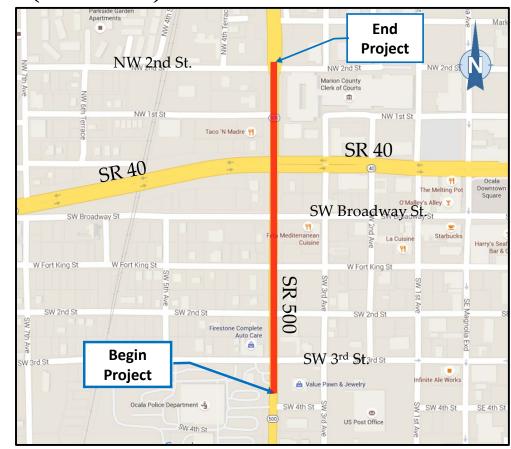
Design Vanasse Hangen Brustlin, Inc.

Firm: VHB



## PROJECT LIMITS - SR 500 @ SR 40 (433661-1)

- SR 500 Mainline
  - Begin 130' South of SW 3rd St.
  - End 180' North of NW 2<sup>nd</sup> St.
  - Approximately 1,785'
  - Net Length 0.33 miles





## **EXISTING ACCESS\LANE CONFIGURATIONS**

- SR 500
  - 3 Thru Lanes @ SR 40
  - 2 Thru Lanes @ NW 2<sup>nd</sup> St.
  - NB Left to SR 40
  - SB Left to SR 40
  - Bi-Direction Turn lane



- NB Left to NW 2<sup>nd</sup> St.
- SB Left to NW 2<sup>nd</sup> St.
- Right Turn Lane Drop to NW 2<sup>nd</sup> St.
- SR 40
  - 2 Thru Lanes on SR 40
  - Dual WB Left Turn lanes
  - Single EB Left Turn lane
  - Right-in/Right-out to SW 2nd St.
  - Right-in/Right-out to Broadway St.
- Driveway/Sidestreet Access
  - Restricted turn movements X







SR 500 Improvements east of SR 500 will be ongoing in spring of 2016

## **Design Process**

- Evaluated four different alternatives during Study
   Phase plus the no-build
- Criteria for selecting alternatives:
  - Reduce delay (Time spent at the intersection)
  - Increase capacity (moving more vehicles in less time)
  - Minimize need for property acquisition
- Developed conceptual design for the feasible alternatives (Nos. 1, 2A, & 2B)



Table 4
SR 500 at SR 40 - YR 2018 Intersection Analysis

PM Peak Hour Condition

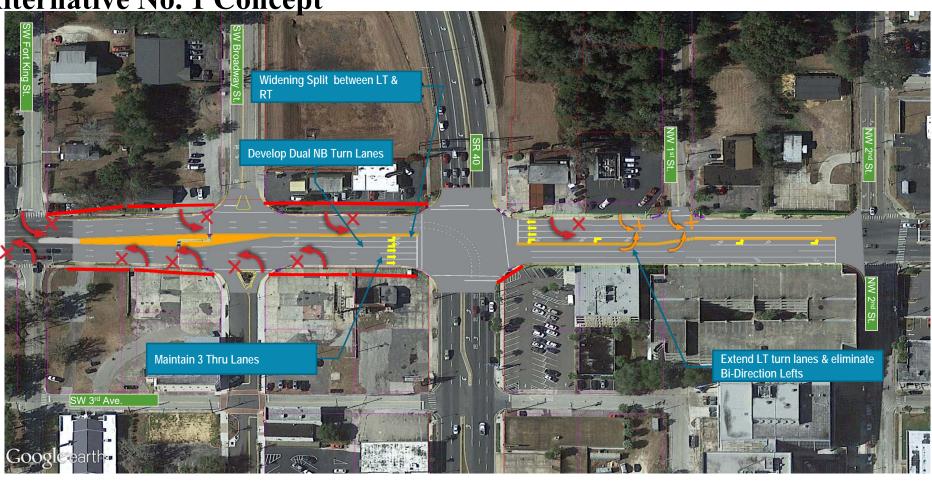
**AM Peak Hour Conditions** 

	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound	74.6	E	72.9	E	11.0	В	70.1	E	70.8	E	64.8	E	7.9	A	66.0	E
Queue Length (ft)	280		620		96				256		691		87			
Southbound	206.1	F	61.6	E					117.6	F	50.2	D	-			
Queue Length (ft)	307		497						254		472			- 5		
Eastbound	98.7	F	57.6	E				_	113.1	F	74.3	E				
Queue Length (ft)	310		488						267	_	577					
Westbound	64.1	Е	77.0	Ε					82.7	E	71	Ε				
Queue Length (ft)	223	_	616	-					300	_	677	_		- 0		
Queue Length (js)			010		•				300		1 0,,					
Intersection Approach	Alterna	tive 1:	Dual NB	T+NB	Outside l	ane De	facto RT		Alterna	tive 1:	Dual NB	LT+NB	Outside l	ane De	facto RT	
Market Market Committee Co	Left-	Turn	Thro	ugh	Right-	Turn	Overa	Il Int.	Left-	Turn	Thro	ugh	Right	Turn	Overa	II Int.
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound	70.3	E	64.4	Ε	6.0	A	66.9	E	80.0	E	60.4	E	12.0	В	63.0	E
Queue Length (ft)	143		633	_	60		1 0015		144	-	676	_	122	-	0010	_
Southbound	113.0	F	45.0	D	-				144.1	F	35.8	D		_		
Queue Length (ft)	293		476				i		273		451					
Eastbound	113.4	F	68.1	E					107.9	F	72.2	E				
Queue Length (ft)	337	· F	521						262	-	574			- 0		
Westbound	75.1	Е	91.7	F					86.1	F	71.2	E				
Queue Length (ft)	269		664	F					291	-	675	-				
Queue Length (ft)	269				L				291		1 0/5		1		1	
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	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound	70.3	E	60.4	Ε	6.0	Α	67.0	Ε	80.0	E	60.4	E	7.7	A	62.5	E
Queue Length (ft)	143		633		60				144		676		86			
Southbound	114.2	F	45.1	D					144.1	F	35.8	D				
Queue Length (ft)	293		476						273		251					
Eastbound	113.4	F	64.6	E					107.9	F	73.7	E				
Queue Length (ft)	337		521						262		574					
Westbound	92.2	F	88.6	F					79.8	E	70.7	E				
Queue Length (ft)	266		648						300		675			- 0		
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	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Northbound	81.9	F	55.2	Ε	7.1	Α	84.0	F	97.4	F	51.0	D	10.3	В	65.4	E
Queue Length (ft)	154		614		71		-		163		612		111			
Southbound	77.2	Е	112.0	F					104.1	F	55.7	E				
Queue Length (ft)	118		925						124		649					
Eastbound	119.8	F	73.0	Ε			_		107.9	F	72.2	E				
Queue Length (ft)	358		582						262		574					
Westbound	84.2	F	99.0	F					95.3	F	71	E				
Queue Length (ft)			700						298		675		ė.		i	
	250		v Comp	arison v	with No I		16.5%								-0.9%	
								Drop	Alterna	tive 4:	Dual NB	LT+NBF	RT Lane D	rop+S	BRT Lane	
Intersection Approach	Alterna	tive 4:	Dual NB	LT+NBF											Overs	ili Int.
Intersection Approach	Alterna Left-	tive 4: Turn	Dual NBI	LT+NBF	Right	-Turn	Overa	ill Int.	Left-	Turn		ough	Right	-Turn		
	Alterna Left- Delay	Turn LOS	Dual NBI Thro Delay	ugh LOS	Right Delay	-Turn LOS	Overa Delay	III Int.	Left- Delay	Turn	Delay	LOS	Delay	-Turn LOS	Delay	LOS
Northbound	Alterna Left- Delay 80.4	tive 4: Turn	Dual NBI Thro Delay 63.1	LT+NBF	Right Delay 13.8	-Turn	Overa	ill Int.	Left- Delay 84.2	Turn	Delay 64.8		Delay 12.6	-Turn		LOS
Northbound Queue Length (ft)	Alterna Left- Delay 80.4 152	Turn LOS	Dual NBI Thro Delay	LT+NBF lugh LOS E	Right Delay	-Turn LOS	Overa Delay	III Int.	Left- Delay 84.2 146	Turn	Delay	LOS	Delay	-Turn LOS	Delay	
Northbound	Alterna Left- Delay 80.4	Turn LOS	Dual NBI Thro Delay 63.1	ugh LOS	Right Delay 13.8	-Turn LOS	Overa Delay	III Int.	Left- Delay 84.2	Turn	Delay 64.8	LOS	Delay 12.6	-Turn LOS	Delay	
Northbound Queue Length (ft)	Alterna Left- Delay 80.4 152	Turn LOS F	Dual NBi Thro Delay 63.1 655	LT+NBF lugh LOS E	Right- Delay 13.8 118	LOS B	Overa Delay	III Int.	Left- Delay 84.2 146	Turn LOS F	Delay 64.8 691	LOS	Delay 12.6 125	LOS B	Delay	
Northbound Queue Length (ft) Southbound	Alterna Left- Delay 80.4 152 117.6	Turn LOS F	Dual NBI Thro Delay 63.1 65.5 84.1	LT+NBF lugh LOS E	Right- Delay 13.8 118 1.4	LOS B	Overa Delay	III Int.	Left- Delay 84.2 146 117.6	Turn LOS F	Delay 64.8 691 49.3	LOS	Delay 12.6 125 2.1	LOS B	Delay	
Northbound Queue Length (ft) Southbound Queue Length (ft)	Alterna Left- Delay 80.4 152 117.6 298	Turn LOS F	Dual NBI Thro Delay 63.1 655 84.1 838	LT+NBF lugh LOS E	Right- Delay 13.8 118 1.4	LOS B	Overa Delay	III Int.	Left- Delay 84.2 146 117.6 254	Turn LOS F	Delay 64.8 691 49.3 538	LOS E D	Delay 12.6 125 2.1	LOS B	Delay	
Northbound Queue Length (ft) Southbound Queue Length (ft) Eastbound	Alterna Left- Delay 80.4 152 117.6 298 108.8	Turn LOS F	Dual NBI Thro Delay 63.1 655 84.1 838 70.8	LT+NBF lugh LOS E	Right- Delay 13.8 118 1.4	LOS B	Overa Delay	III Int.	Left- Delay 84.2 146 117.6 254 113.1	Turn LOS F	Delay 64.8 691 49.3 538 73.9	LOS E D	Delay 12.6 125 2.1	LOS B	Delay	

Delay Comparison with No Build 11.7%

0.9%

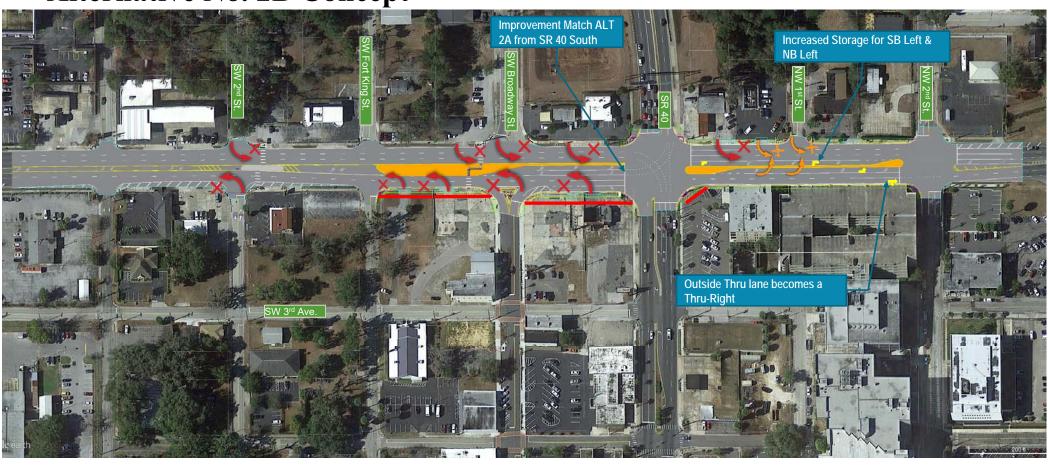
Alternative No. 1 Concept



**Alternative No. 2A Concept** 



**Alternative No. 2B Concept** 



# **Alternatives Summary**

Traffic Performance Measures											
	NO BUILD		Alterna	ative #1	Alterna	tive #2A	Alternative #2B				
	AM	PM	AM	PM	AM	PM	AM	PM			
Average Delay, sec/veh.	70.1	66.0	66.9	63.0	67.0	62.5	67.0	60.7			
Delay Reduction %	-	-	-4.7%	-4.5%	-4.4%	-5.3%	-4.4%	-8.0%			
Level of Service	E	E	Е	E	E	E	E	E			
Est. Queue Length, ft.											
NB LT	280	256	143	144	143	144	143	144			
Construction Cost	\$0	.00	\$1,56	68,000	\$1,49	4,000	\$1,494,000				
Required Right-of-way, sq. ft.		0	4,3	365	3,3	324	3,324				
Acquisition Costs	\$	\$0		0,000	\$727	7,000	\$727,000				
Total Cost	\$	<b>50</b>	\$2,528,000		\$2,22	1,000	\$2,221,000				
No. of Affected Parcels		0		9)	(i	5)	5				



Recommendation: Alternative 2B

## **Schedule & Estimated Construction Cost**

- Plans Complete—July 2016
- Construction Begin TBD
- 2016 Construction Cost Estimate \$1.3M
- 2016 Right-of Way Acquisition Cost \$727,000



#### **CFL ROADS**

## WWW.CFLROADS.COM

Home

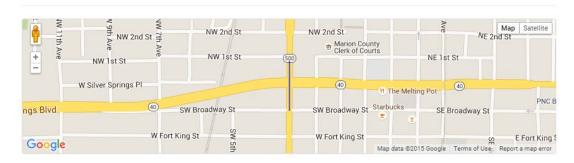
Lane Closures -

Current Construction Projects -

Future Projects ▼

News -

#### 433661-1 SR 500 (US 441) from SW 3rd St. to NW 2nd St.



#### About

The project begins 1,218' south of SR 40 on SR 500 (US 441) and extends northward for 1969' stretching between SW 3<sup>rd</sup> Street to NW 2<sup>nd</sup> Street. The intent of the project is to implement traffic operation improvements and improve the life of the pavement through milling and resurfacing the existing travel lanes, and the additional of turn lane widening. Minor drainage, pedestrian, sidewalk, intersection and signalization improvements are also a part of this project. The proposed improvements will add a dual left turn on NB SR 500 onto SR 40, and extend the left turn queue length of the SB left turn on SR 500 onto SR 40 and the NB left turn on SR 500 onto NW 2<sup>nd</sup> Street.

#### Project Details

Phase: Design Work

Type:

Add Turn Lane

Length: 0.384 Miles

Ocala

City: County:

Road:

Marion

US 441 SR 40

SR 500

#### Estimated Costs

ROW: \$727 K Construction:\$1.3 M

#### Contact Information

Project Todd Alexander Manager: (386) 943-5420

Todd.Alexander@dot.state.fl.us

Ask a Question

Design Vanasse Hangen Brustlin, Inc.

Firm: VHE



## **Comment Sheets**



# COMMENT SHEETS AVAILABLE

- Please complete here
- Mail before November 8



## THANK YOU FOR ATTENDING

For additional information please contact:

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Florida Department of Transportation

Phone: (386) 943-5420

<u>Todd.Alexander@dot.state.fl.us</u>

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