

Barron Road/Capstone Drive Re-Alignment Public Meeting #2



June 28, 2016



Project Team

City of College Station

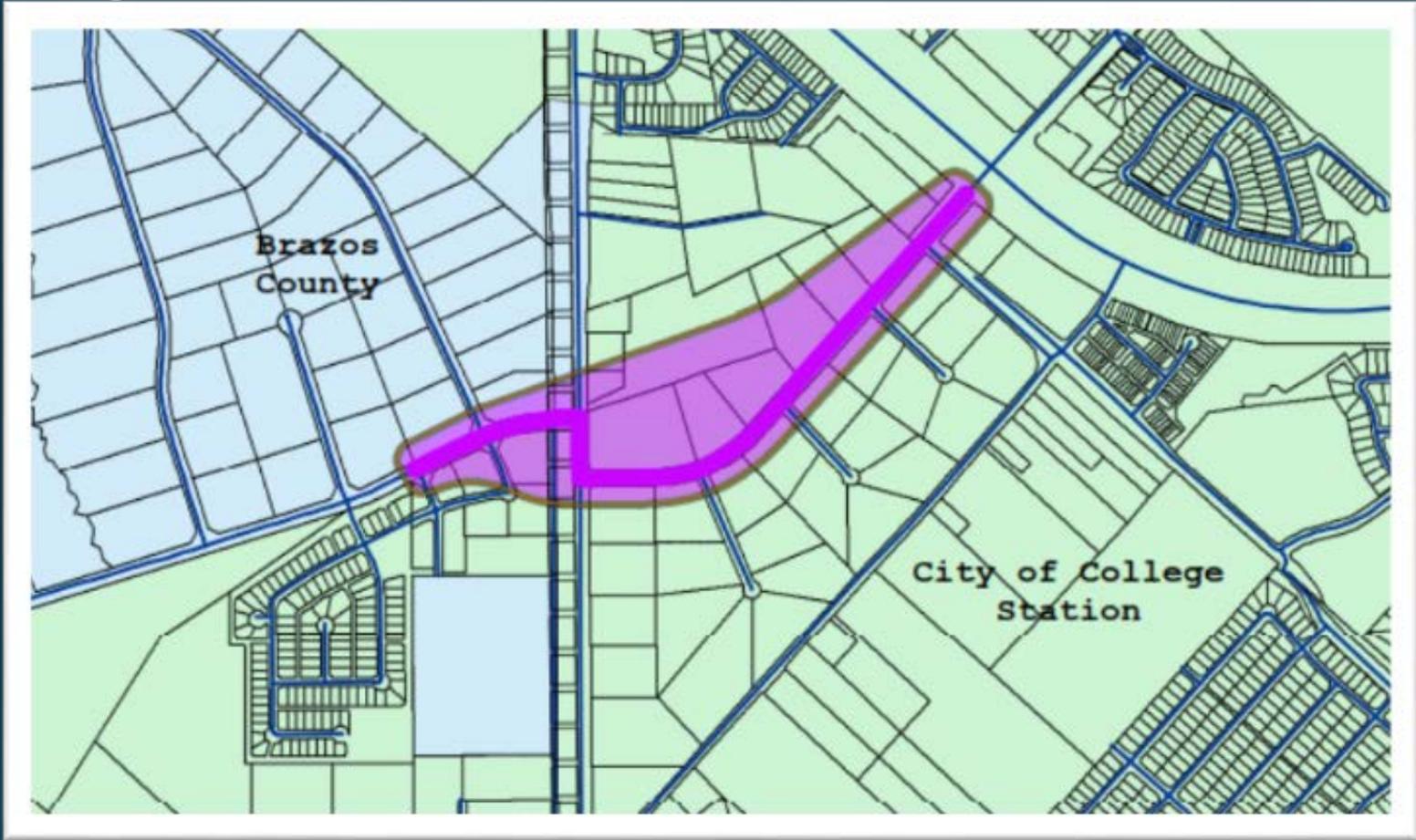
- James Smith P.E. - Project Manager

Consultant (Halff Associates, Inc.)

- Eric Ratzman P.E. - Project Manager
- Matthew Bushak P.E.
- Kirollos Malaty



Project Location



Existing Conditions

- Offset stop controlled intersections at Capstone Drive & Wellborn Road and Barron Road & Wellborn Road



Existing Conditions

- **Railroad (U.P.R.R.) crossing Capstone Drive**
- **The existing Right-of-Way is 100 feet wide for Barron Rd and 80 feet wide for Capstone Dr**
- **Intersections are offset at Wellborn Rd (FM 2154)**

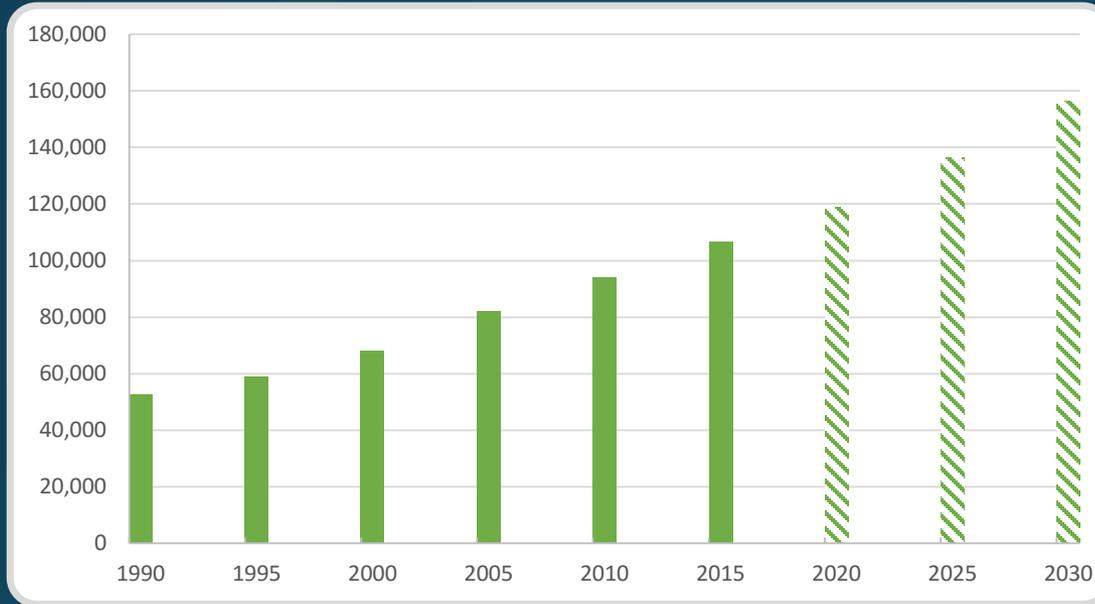


Purpose and Need

- **Insufficient distance between the Barron and Capstone intersections with Wellborn Rd (FM 2154)**
- **Intersections too close for two traffic signals**
- **Discontinuous route in east-west direction**
- **Intersection safety issue/accident history**
- **Traffic projected to increase**



Population Growth



- **Current Population = 106,636**
- **Projected Population 2017 = 109,595**
- **Projected Population 2030 = 156,436**

Traffic Projections

ADT- Average Daily Traffic

- Existing ADT = 5,001-15,000
- 2035 Projected ADT = 15,001-25,000

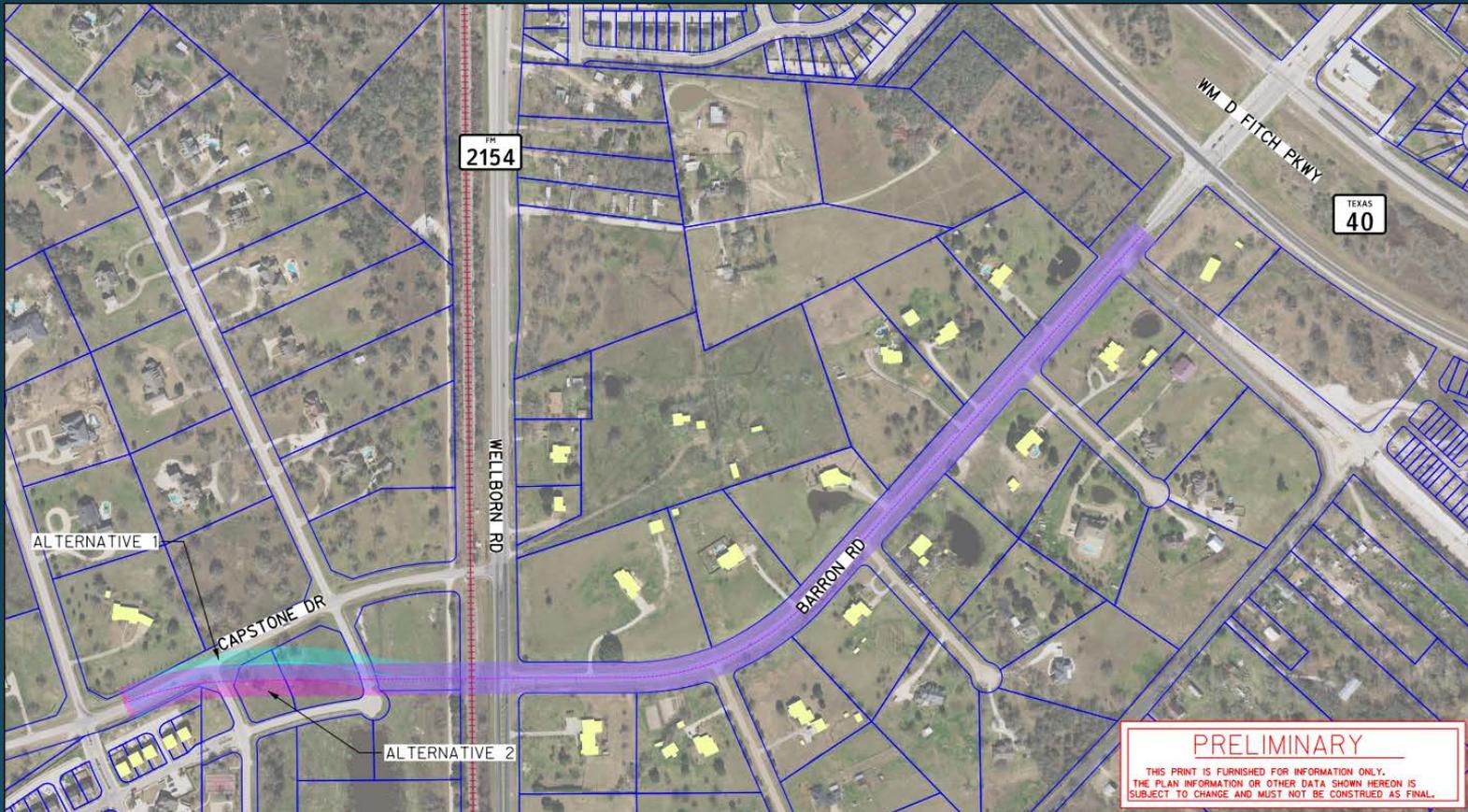


Project Goals

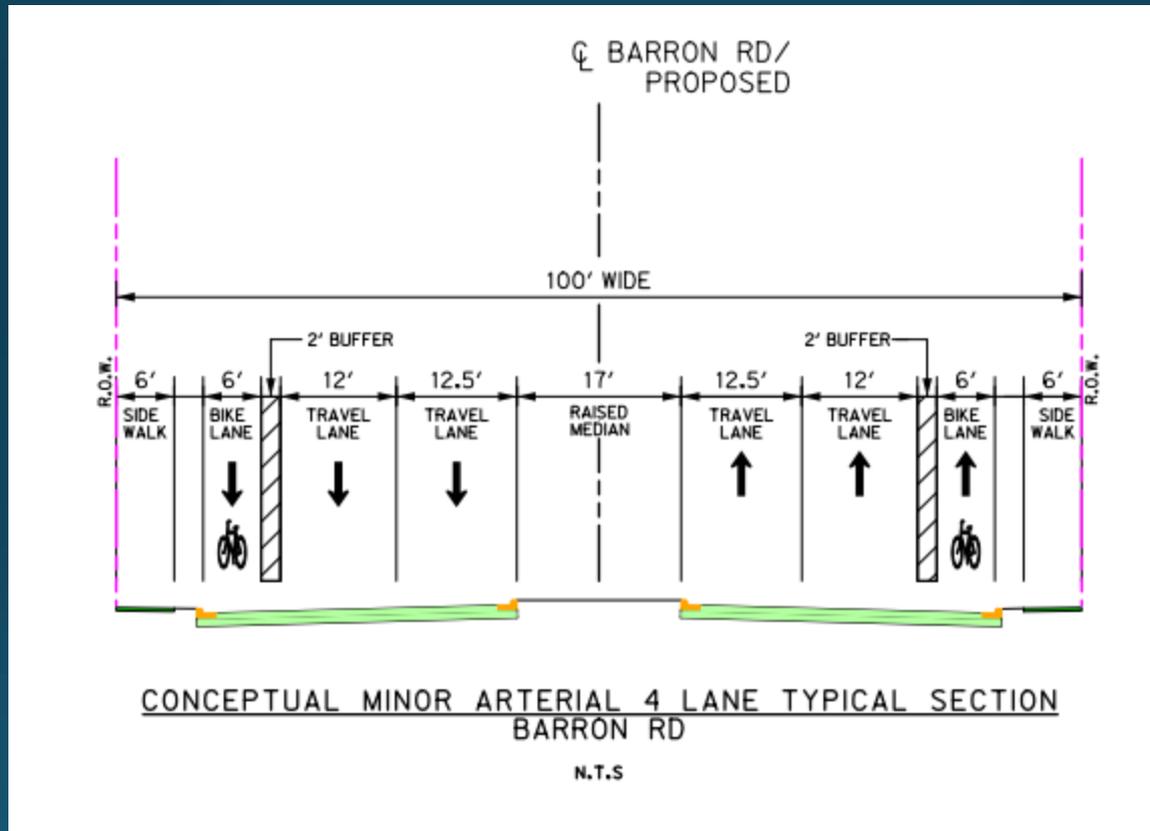
- 1. Re-align either Barron Road or Capstone Drive into a single signalized intersection with Wellborn Road**
- 2. Widen Barron Road to accommodate future traffic volumes and multiple modes of travel**
- 3. Widen the at-grade railroad crossing for the ultimate roadway cross section**



Recommended Alignments



Barron Road Section

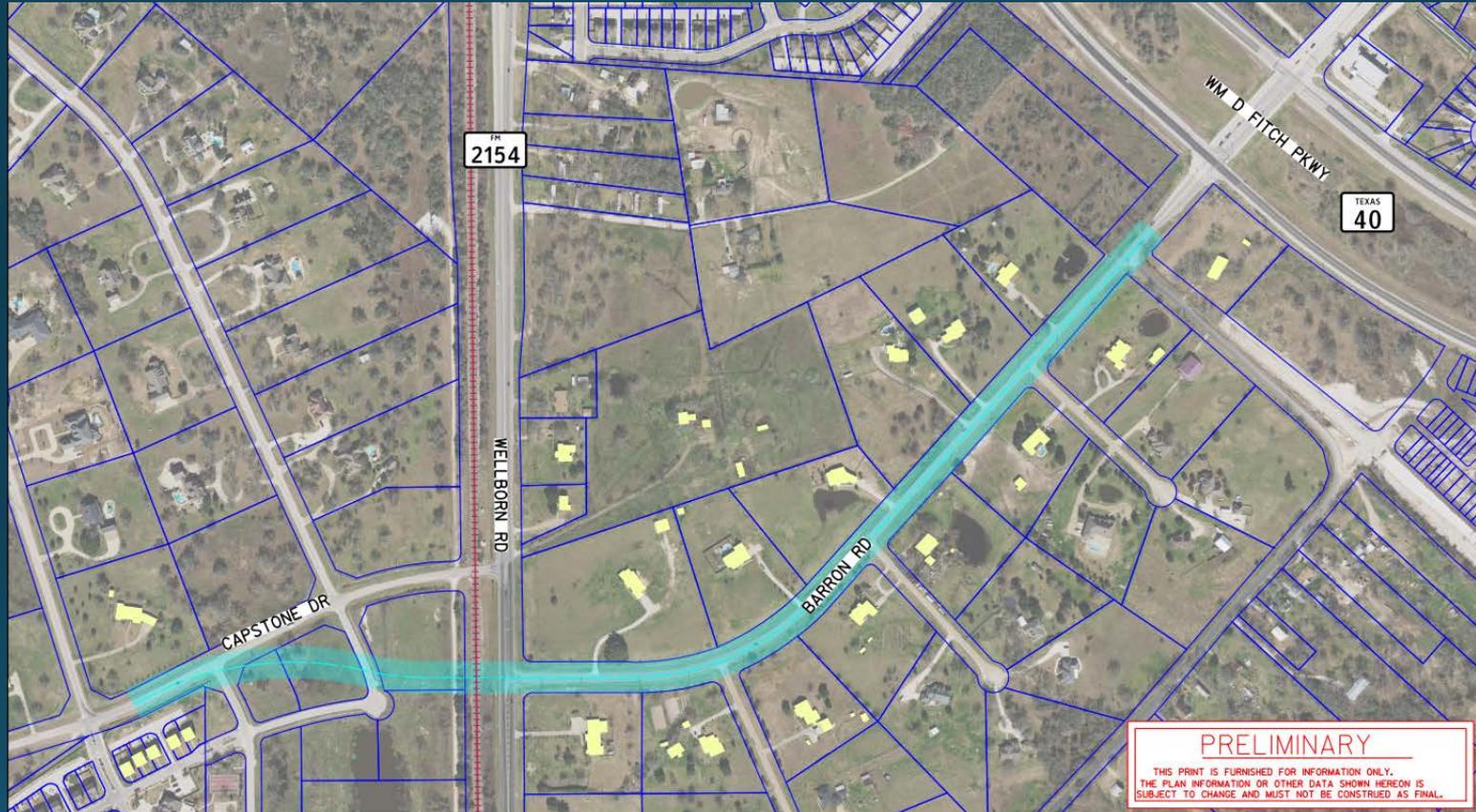


Evaluation Criteria and Alternatives Analysis

- **Improve Safety**
- **Improve Mobility**
- **Right of Way Impacts**
- **Public Comments**
- **Construction Cost**
- **Right of Way Cost**
- **Pavement Maintenance Cost**



Alternative 1



Alternative 1 Pros/Cons

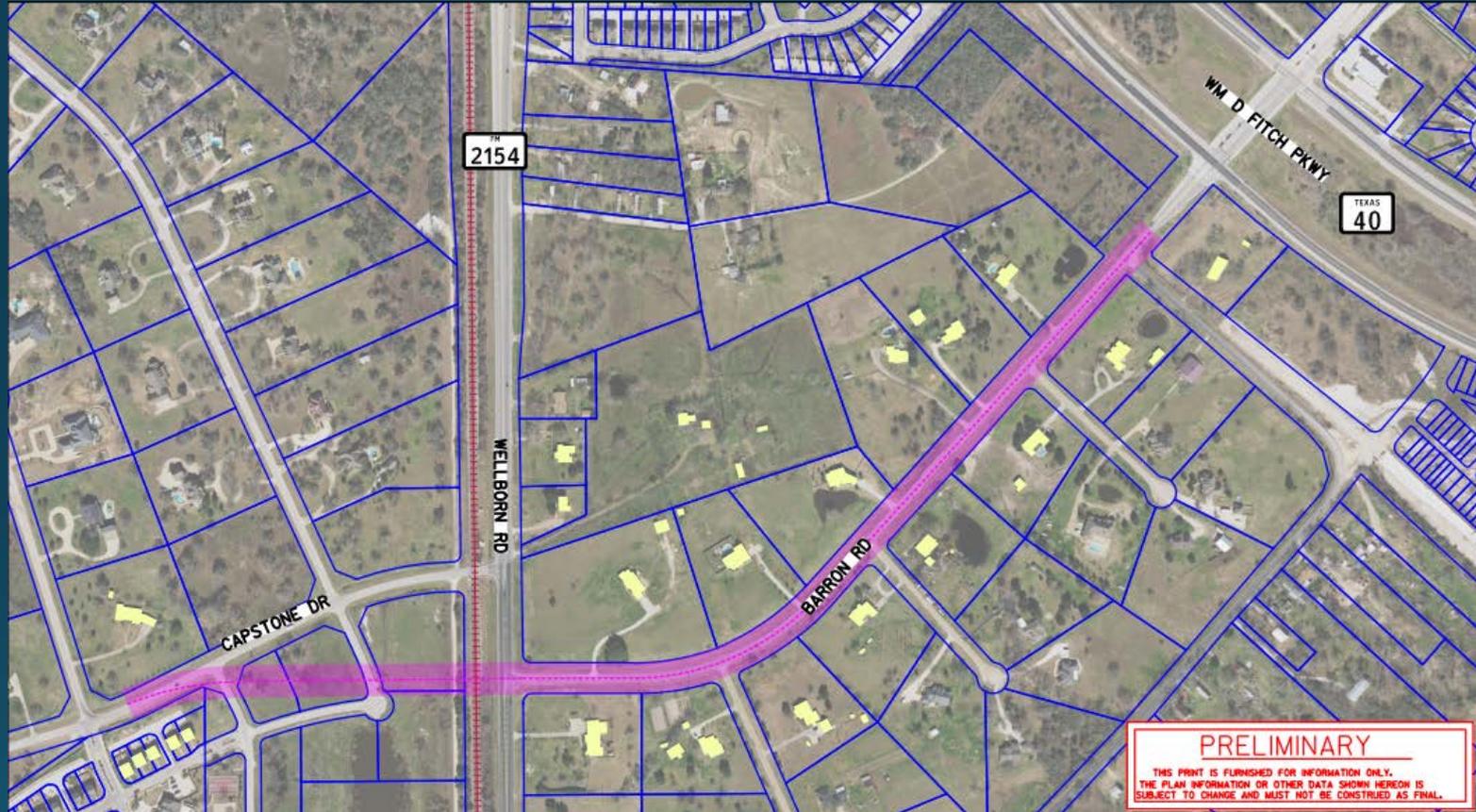
Pros

1. Improves Safety
2. Improves Mobility
3. Relatively low Right-of-Way Acquisition Cost
4. Lower impacts to most property owners

Cons

1. Above average construction cost

Alternative 2



Alternative 2 Pros/Cons

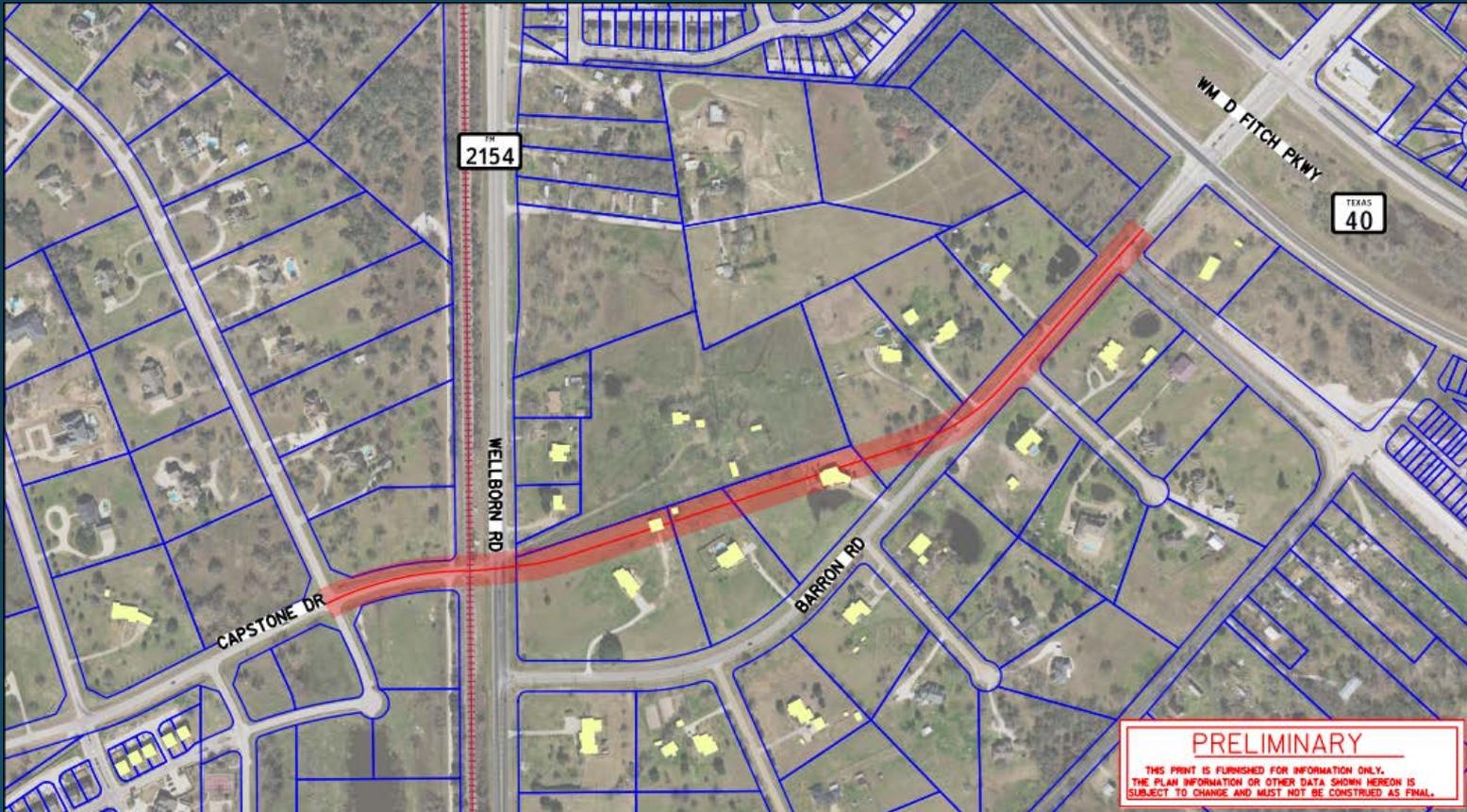
Pros

1. Improves Safety
2. Improves Mobility
3. Relatively low Right-of-Way Acquisition Cost
4. Lower impacts to most property owners

Cons

1. Above average construction cost

Alternative 3



Alternative 3 Pros/Cons

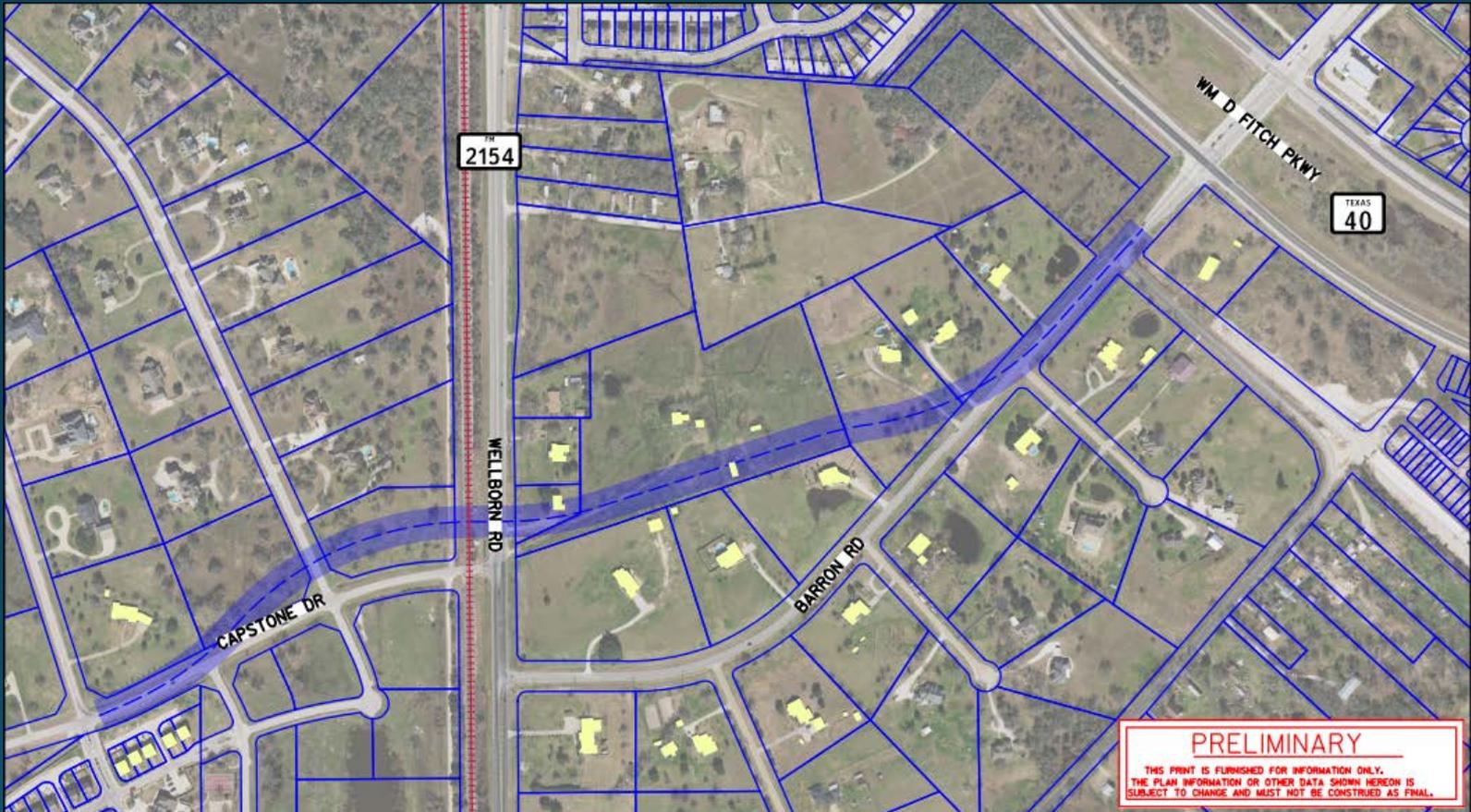
Pros

1. Improves Safety
2. Improves Mobility

Cons

1. Public Opposition
2. Negative Impact on Several Properties
3. Expensive Right-of-Way Acquisition
4. Involves added long term pavement maintenance

Alternative 4



Alternative 4 Pros/Cons

Pros

1. Improves Safety
2. Improves Mobility
3. Utilizes potential ROW donations

Cons

1. Public Opposition
2. Negative Impact on Several Homesteads
3. Expensive Right-of-Way Acquisition
4. Involves added long term pavement maintenance

Alternative 5



Alternative 5 Pros/Cons

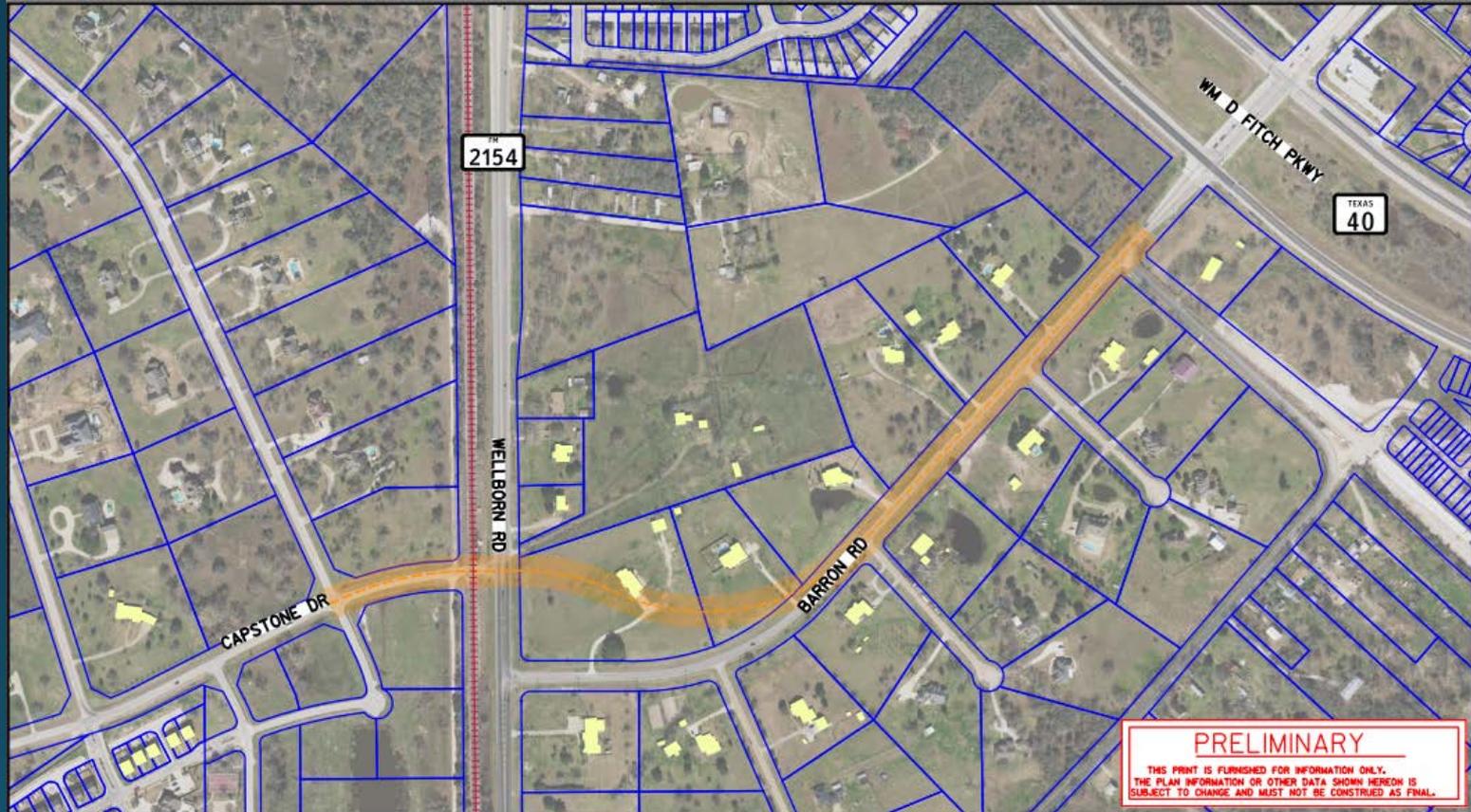
Pros

1. Improves Safety
2. Improves Mobility
3. Lower construction cost

Cons

1. Public Opposition
2. Negative Impact on Several Homesteads
3. Involves added long term pavement maintenance

Alternative 6



Alternative 6 Pros/Cons

Pros

1. Improves Safety
2. Improves Mobility

Cons

1. Public Opposition
2. Negative Impact on two Homesteads
3. Expensive Right-of-Way Acquisition
4. Requires additional long term pavement maintenance

Project Costs of Alternatives

- **Alternative 1 = \$6.2 million**
- **Alternative 2 = \$6.2 million**
- **Alternative 3 = \$6.6 million**
- **Alternative 4 = \$6.6 million**
- **Alternative 5 = \$6.0 million**
- **Alternative 6 = \$6.4 million**



Evaluation Summary

Evaluation Matrix								
Evaluation Criteria		Existing**	Alignment Alternatives					
			1	2	3	4	5	6
A.	Improve Safety	--	++	++	++	++	++	++
B.	Improve Mobility	--	++	++	++	++	++	++
C.	Right of Way Impacts	++	+	0	--	-	-	--
D.	Public Comments	-	+	+	--	--	--	--
E.	Construction Cost	++	-	-	+	+	+	0
F.	Right of Way Cost*	++	++	++	--	--	+	0
G.	Long Term PVMT Maintenance	0	++	++	--	--	0	0
(-- Major Negative Effect, - Minor Negative Effect, 0 Neutral/No Effect, + Minor Positive Effect, ++ Major Positive Effect)								
* Right of Way Cost provided by the City of College Station								
** If roadways are rebuilt on existing alignment and offset intersections left in place								

Scoring

Scoring									
<u>CRITERIA</u>		<u>WEIGHTING</u>	<u>ALTERNATIVES</u>						
			Existing	1	2	3	4	5	6
A.	Improve Safety	4	-8	8	8	8	8	8	8
B.	Improve Mobility	3	-6	6	6	6	6	6	6
C.	Right of Way Impacts	3	6	3	0	-6	-3	-3	-6
D.	Public Comments	3	-3	3	3	-6	-6	-6	-6
E.	Construction Cost	2	4	-2	-2	2	2	2	0
F.	Right of Way Cost	2	4	4	4	-4	-4	2	0
G.	Pavement Maintenance	1	0	2	2	-2	-2	0	0
TOTAL:			-3	24	21	-2	1	9	2

QUESTIONS?

