

CORRIDOR TRAFFIC AND OPERATIONS ANALYSIS

CRTPA BOARD

NOVEMBER 26, 2018



Corridor Traffic and Operations Analysis

- Evaluate Potential Projects to Improve Mobility
 - Operational Improvements without Major Capacity Enhancements

- Four Corridors Identified for Analysis
 - Tharpe Street: Ocala Road to Capital Circle
 - Pensacola Street: Appleyard Drive to Capital Circle
 - Bannerman Road: Thomasville Road to Tekesta Drive
 - South Adams Street: Orange Avenue to Bronough and Duval Streets

Corridor Traffic and Operations Analysis

- Project Status
 - Tharpe Street and Pensacola Street: Underway
 - Bannerman Road: Underway
 - South Adams Street: Coordination with FAMU Master Plan Update

Corridor Traffic and Operations Analysis

- Tharpe Street
 - 2040 Regional Mobility Plan
 - Widening from 2 to 4 lanes
 - Ocala Road to Capital Circle
 - Cost: ~ \$51.4 million
 - Blueprint Project



Source: 2040 Regional Mobility Plan

Traffic and Operations Analysis: Tharpe Street

- Existing Conditions
 - Corridor Sections based on Similar Characteristics

Section	Number of Lanes	Lane Width (in Feet)	Right of Way (in Feet)
Industrial: E. of Capital Cir. NW to Mission Rd	2	12	100
Residential: Mission Road to Ivan Drive	2	12	66
Sheridan: Ivan Drive to Devra Drive	2	12	76
Residential: Devra Drive to West of Ocala Road	2	12	123

Traffic and Operations Analysis: Tharpe Street

- Corridor Sections based on Similar Characteristics



Traffic and Operations Analysis: Tharpe Street

- Issues
 - Transit Accessibility
 - Stops are not ADA compliant
 - Compliance only required where sidewalks and shelters exist
 - StarMetro focused on all stops meeting ADA standards



Traffic and Operations Analysis: Tharpe Street

- Issues
 - Spot Congestion
 - Bus stops
 - Trash pick-up
 - Turning movements
 - Constraints for traffic to avoid back-ups
 - Prevalent in Residential Sections Primarily in Peak Hours



Traffic and Operations Analysis: Tharpe Street

- Issues
 - Lack of Bicycle/Pedestrian Facilities
 - 90% of parcels have no access to sidewalks/bicycle facilities
 - Desire paths along the roadway from pedestrian traffic



Traffic and Operations Analysis: Tharpe Street

- Issues
 - Lack of Bicycle/Pedestrian Facilities
 - Grass shoulder/ditch is not always present
 - Culvert with guardrail 500 feet east of Trimble Road



Traffic and Operations Analysis: Tharpe Street

- Issues
 - Flooding and Runoff
 - Roadside erosion throughout the corridor
 - Lack of stormwater treatment other than flow time in grass ditches



Traffic and Operations Analysis: Tharpe Street

- Analysis

- Traffic Level of Service

- Tharpe at Mission Road: LOS E in PM peak
 - All other intersections: LOS B, C or D in AM and PM peak

- Safety

- Crash data from CMP Update (2012-2016)
 - 709 total crashes with 333 injury crashes and 1 fatal crash
 - Rear end collisions the most common (50% of all crashes)
 - Crash Rate (crashes per million vehicle miles of travel)

	Tharpe Street	State Average
Crash Rate	6.14	0.299*

*State Average for 2-3 lane, 2 way, undivided facilities

Traffic and Operations Analysis: Tharpe Street

- Recommendations: Industrial Section

Location	Projects/Strategies	
East of Capital Circle NW to Mission Road	Addition of 5' sidewalk with 4' utility strip on the north side	<ul style="list-style-type: none"> Addresses lack of pedestrian connectivity Improves pedestrian safety Reduction in pedestrian/driver conflict
	Addition of shared lane markings (sharrows)	<ul style="list-style-type: none"> Provides bicycle facilities esp. for advanced cyclists
Blountstown Highway at Tharpe Street	Conversion to a T intersection	<ul style="list-style-type: none"> Reduces conflict points to improve safety
Blountstown Highway at Blountstown Street	8' wide sidewalk with curb and gutter along Blountstown Highway	<ul style="list-style-type: none"> Provides pedestrian connectivity Reduces conflict points Improves drainage

Traffic and Operations Analysis: Tharpe Street

• Recommendations: Residential Sections

Location	Projects/Strategies	
Mission Road to Falconcrest	Addition of 8' sidewalk with curb and gutter and culvert system	<ul style="list-style-type: none"> • Addresses lack of pedestrian and bicycle facilities • Improves safety • Improves drainage
Box Culvert at Central Drainage Ditch (500' from Trimble Rd)	Addition of pedestrian bridge	<ul style="list-style-type: none"> • Addresses lack of pedestrian and bicycle facilities • Improves safety
Mission Road to Trimble Road	Widen 10' along south side for median installation	<ul style="list-style-type: none"> • Improves operations • Improves multimodal safety
Mission Road and West of Gloria Drive	Addition of two U-turn areas	<ul style="list-style-type: none"> • Provides accessibility with installation of medians
West of Mission Road to West of Meridac Road	Addition of turnout bays	<ul style="list-style-type: none"> • Improves safety with queue space
Ocala Road to 800' West	Restriping to include bike lane	<ul style="list-style-type: none"> • Improves multimodal safety

Traffic and Operations Analysis: Tharpe Street

- Recommendations: Sheridan Road Section

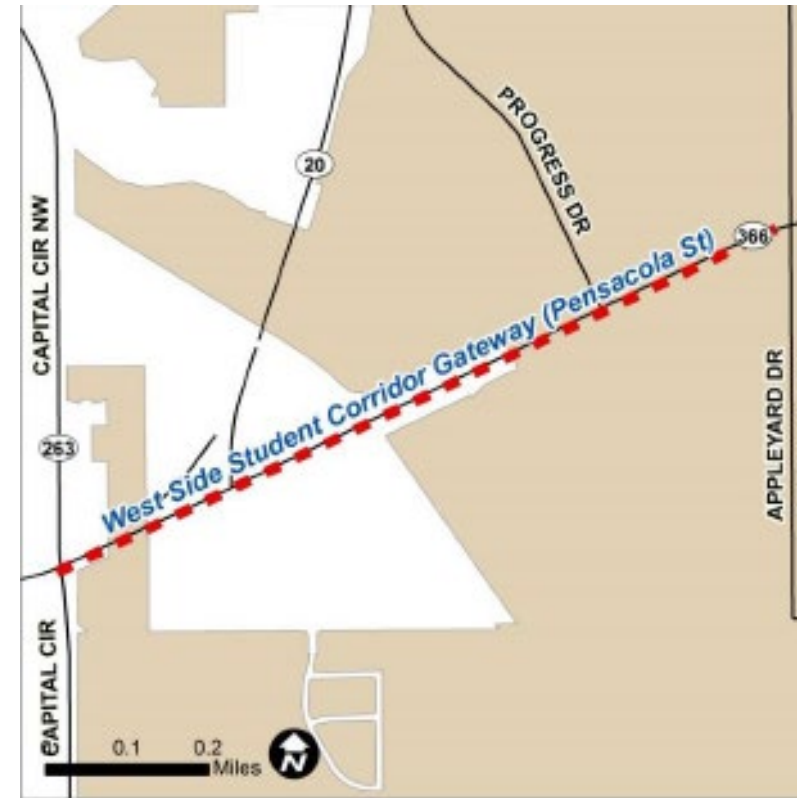
Location	Projects/Strategies	
Ivan Drive to Devra Drive	Addition of 8' sidewalk with curb and gutter and culvert system	<ul style="list-style-type: none">• Addresses lack of pedestrian and bicycle facilities• Improves safety• Improves drainage

Traffic and Operations Analysis: Tharpe Street

- Summary of Recommendations
 - Addition of sidewalks and curb and gutter
 - Addition of sharrows and bike lane
 - Addition of pedestrian bridge over Central Drainage Ditch
 - Reconfiguration of Blountstown and Tharpe intersection
 - Addition of median between Mission Road and Trimble Road with U-turn access points

Corridor Traffic and Operations Analysis

- Pensacola Street
 - 2040 Regional Mobility Plan
 - Widening from 2 to 4 lanes
 - Capital Circle to Appleyard Drive
 - Cost: ~ \$29.7 million
 - Blueprint Project



Source: 2040 Regional Mobility Plan

Traffic and Operations Analysis: Pensacola Street

- Issues
 - Spot Congestion
 - Primarily associated with Tallahassee Community College
 - Traffic spikes entering and existing parking facilities
 - Motorists ignoring traffic restrictions contribute to congestion and safety



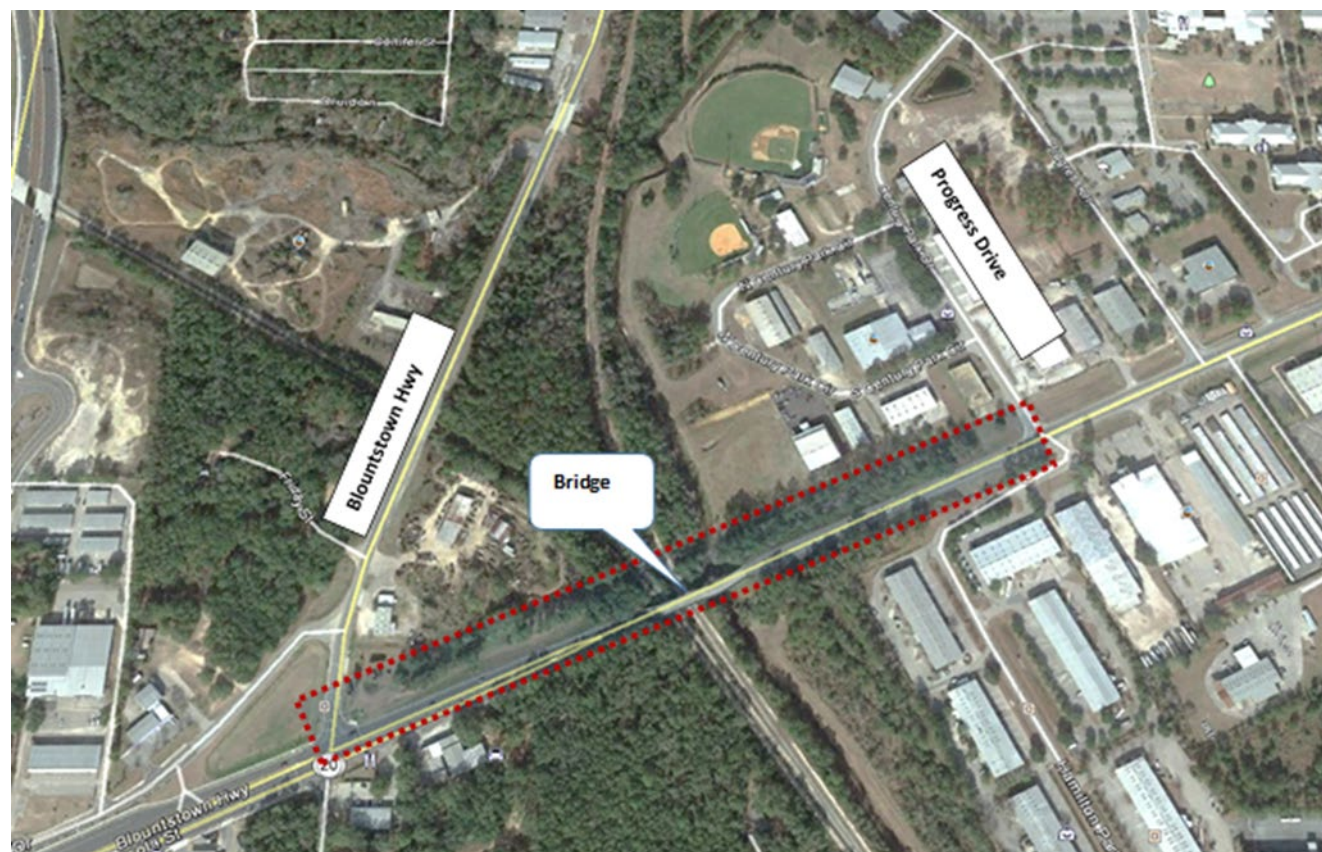
Traffic and Operations Analysis: Pensacola Street

- Issues
 - Traffic Bottlenecks
 - Lane transitions from Capital Circle eastward
 - Lanes transition from 6-lanes to 2-lanes west of the bridge
 - Continues as 2-lanes and transitions to 4-lanes near TCC



Traffic and Operations Analysis: Pensacola Street

- Issues
 - Lack of Bicycle/Pedestrian Facilities
 - Grass shoulder/ditch is not always present
 - No facilities on bridge

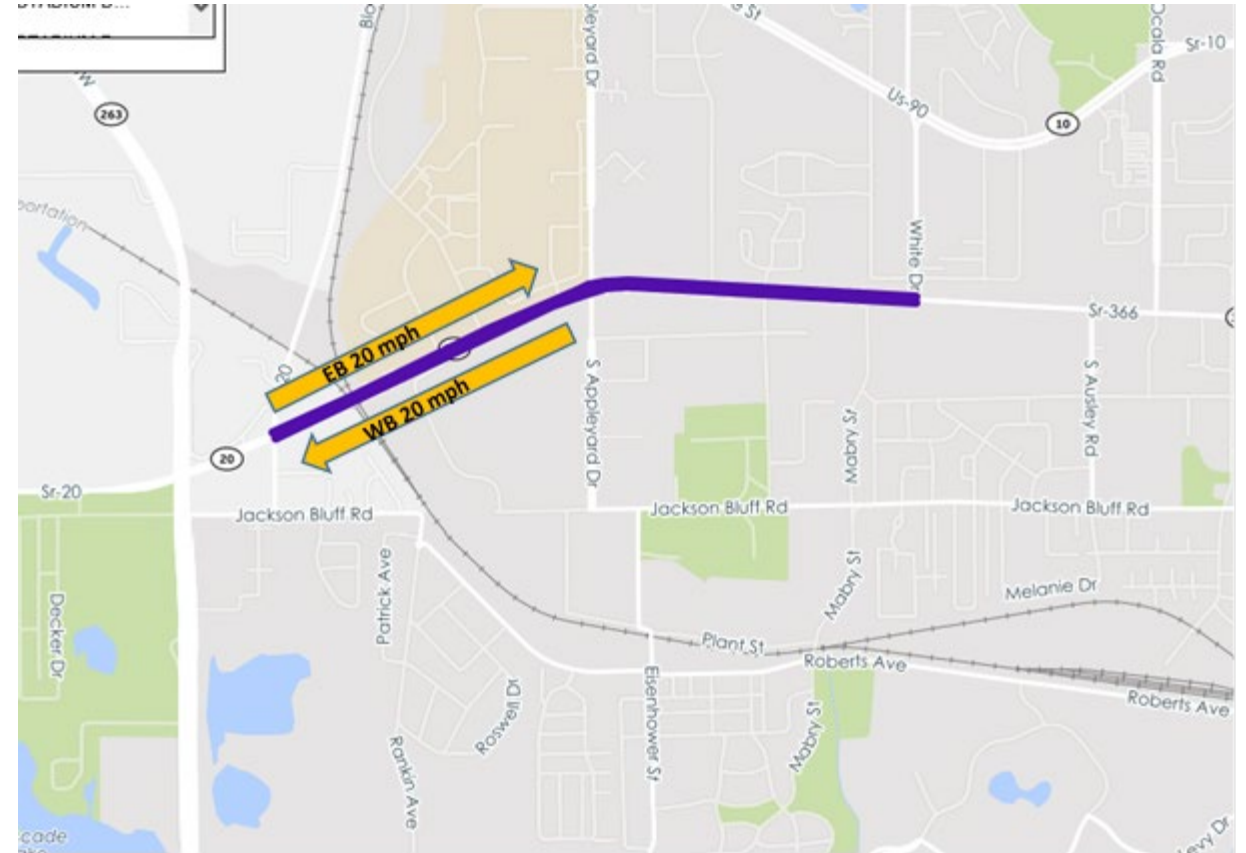


Traffic and Operations Analysis: Pensacola Street

- Analysis
 - Traffic Level of Service
 - Capital Circle at Blountstown Highway: LOS D in AM and PM peak
 - Pensacola Street at Appleyard Drive: LOS D in AM and PM peak
 - All other intersections: LOS A, B or C in AM and PM peak
 - Highest volumes occur between Blountstown and Capital Circle
 - AADT: 18,300
 - Safety
 - Crash data from CMP Update (2012-2016)
 - 160 crashes
 - Highest crash rate occurs at Pensacola Street and Appleyard due to TCC access points (1.74 crashes per million vehicle miles of travel)

Traffic and Operations Analysis: Pensacola Street

- Analysis
 - Congestion
 - Average peak hour travel speed between Appleyard Drive and Blountstown Highway
 - 20 miles per hour eastbound and westbound
 - Posted speed limit of 45 miles per hour



Traffic and Operations Analysis: Pensacola Street

- Recommendation: Bottleneck
 - Widen bridge and 2-lane section of Pensacola Street to 4 lanes
- Recommendation: Spot Congestion
 - Improved signage
 - Reconfiguration of TCC access points
 - Dedicated 2-lane entrance and exit



QUESTIONS?





REVISIONS				 4269 OLD WATER OAK ROAD, SUITE 202 TALLAHASSEE, FLORIDA 32312	CAPITAL REGION TRANSPORTATION PLANNING AGENCY			ROADWAY PLAN SHEET	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	TASK WORK ORDER		
					CR 157	LEON	RHS-2017-02		



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

RS&H
8289 OLD WATER OAK ROAD, SUITE 202
TALLAHASSEE, FLORIDA 32312

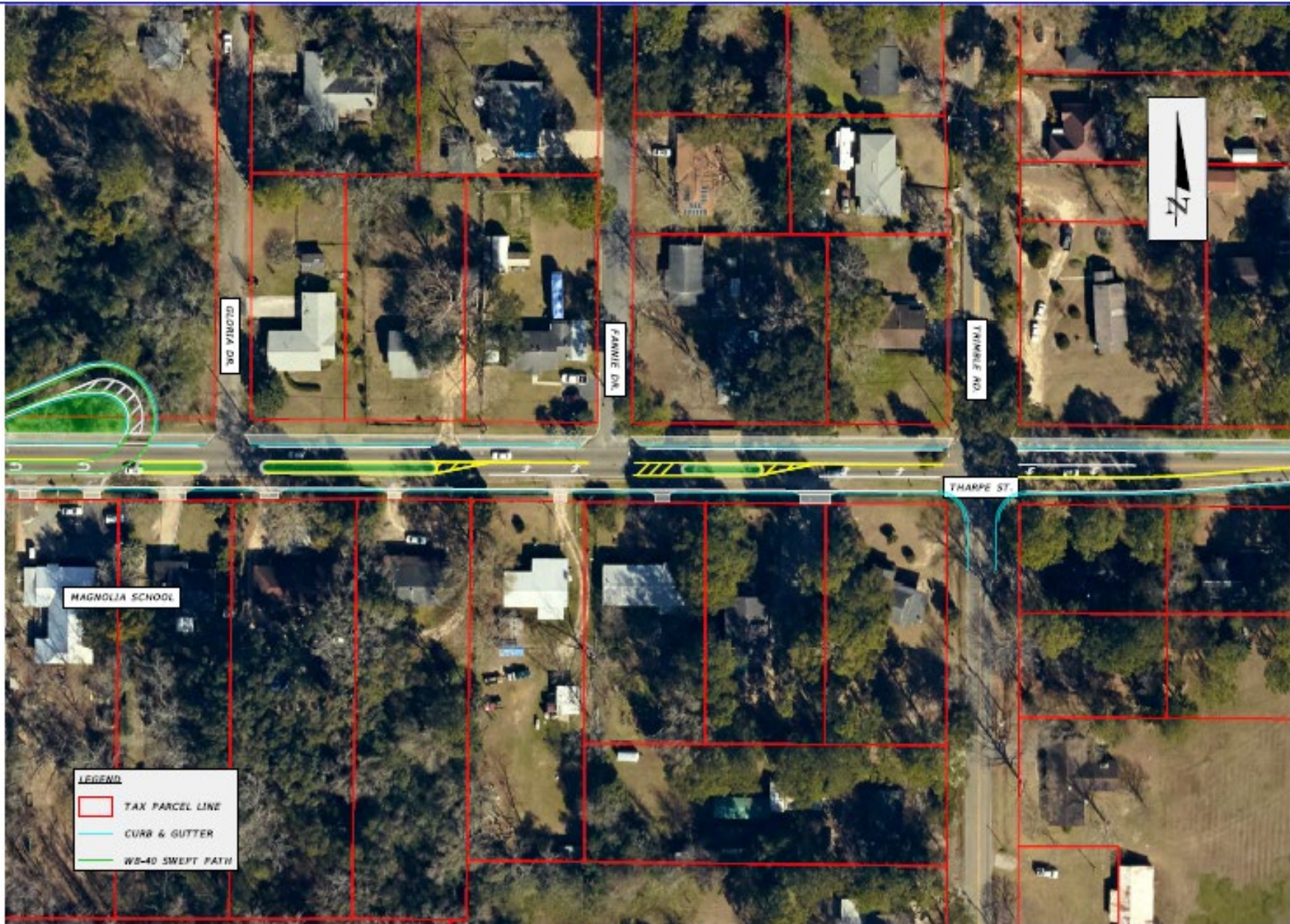
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LEGEND	
	TAX PARCEL LINE
	CURB & GUTTER
	WS-40 SWEEP PATH

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

RS&H
4295 OLD WATER OAK ROAD, SUITE 202
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**ROADWAY
PLAN SHEET**

SHEET NO.





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