



# WILDWOOD

## MEMORANDUM

To: Administration and Public Works Committee Members  
From: Rick C. Brown, Director of Public Works / City Engineer  
Date: August 30, 2022  
Re: Potential Locations for Additional Guardrail on State Route 100

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**Background:** In 2014, new timber guardrail was installed along the shoulder of State Route 100, adjacent to a section of the Wildwood Greenway, between Taylor Road and Westglen Farms Drive. In these areas, the path is located about 5 feet from the shoulder of State Route 100, so there was a desire to improve the safety for users of the path. That project installed almost 3,000 feet of guardrail along both shoulders of State Route 100 for a cost of about \$400,000, including about \$30,000 in engineering fees. To help reduce the cost of that project, federal funds were obtained through the East-West Gateway Council of Governments.

The Department of Public Works has completed a conceptual study of potential locations to install additional guardrail along State Route 100, adjacent to the Wildwood Greenway shared use path. The study was conducted to determine costs to install timber backed guardrail to shield sections of the path that are located within 20 feet of the edge of pavement. The study has identified three locations, where a total of about 4,000 feet of guardrail could be installed. These locations are shown as **Exhibit A** following this memorandum.

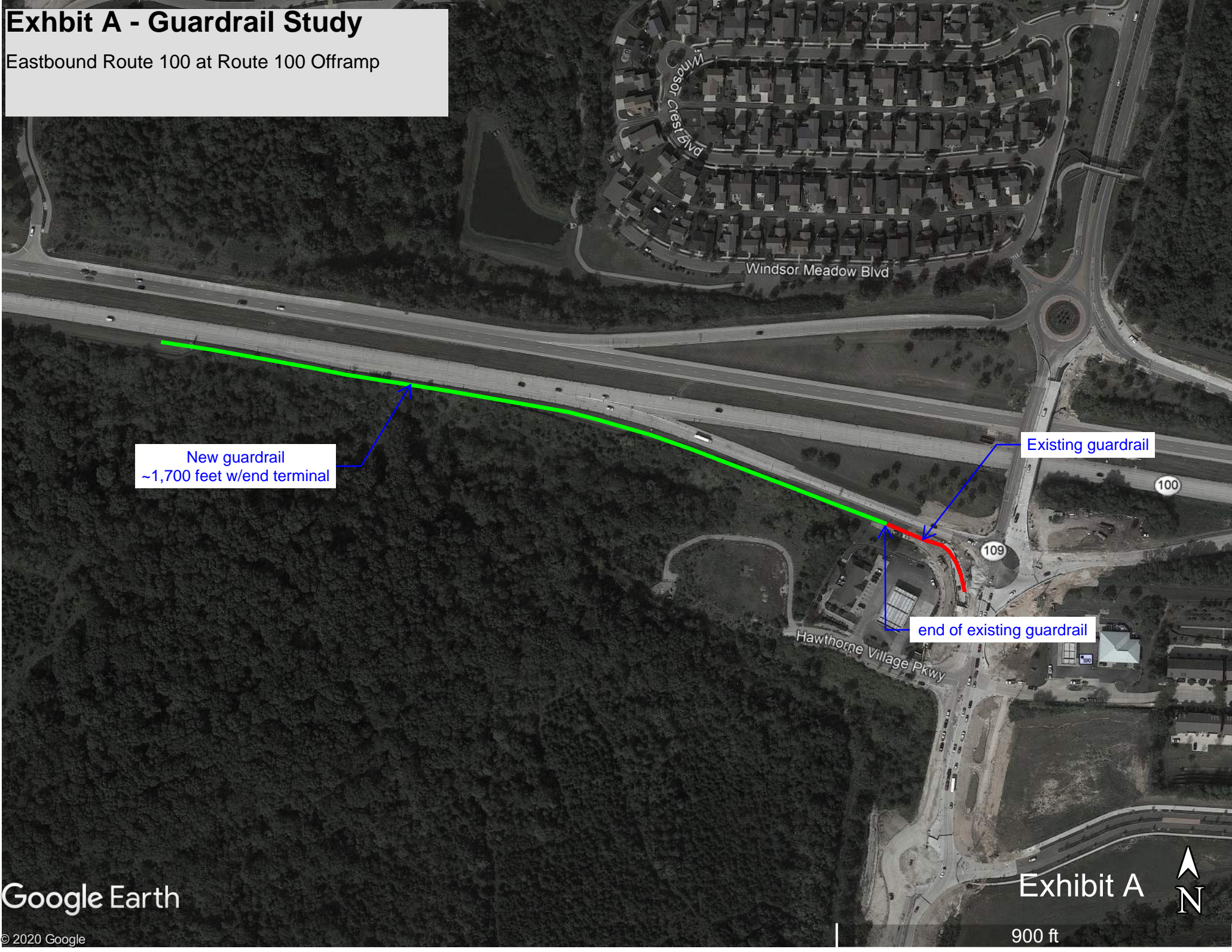
**Cost:** The cost to install guardrail at the three identified locations on State Route 100 has been estimated at about \$510,000, plus engineering costs. The conceptual cost estimate has been included as **Exhibit B**. If the Committee desires to implement this improvement project, it should be added to the 5-Year Capital Improvement Plan of the City, which could be done this fall, as well as the Strategic Plan. To potentially reduce the City's cost, a federal funding application could be submitted for this project.

I will be available for any questions regarding this matter at the September 6, 2022, Administration and Public Works Committee meeting.

RCB

# Exhibit A - Guardrail Study

Eastbound Route 100 at Route 100 Offramp



New guardrail  
~1,700 feet w/end terminal

Existing guardrail

end of existing guardrail

Google Earth

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Exhibit A



900 ft

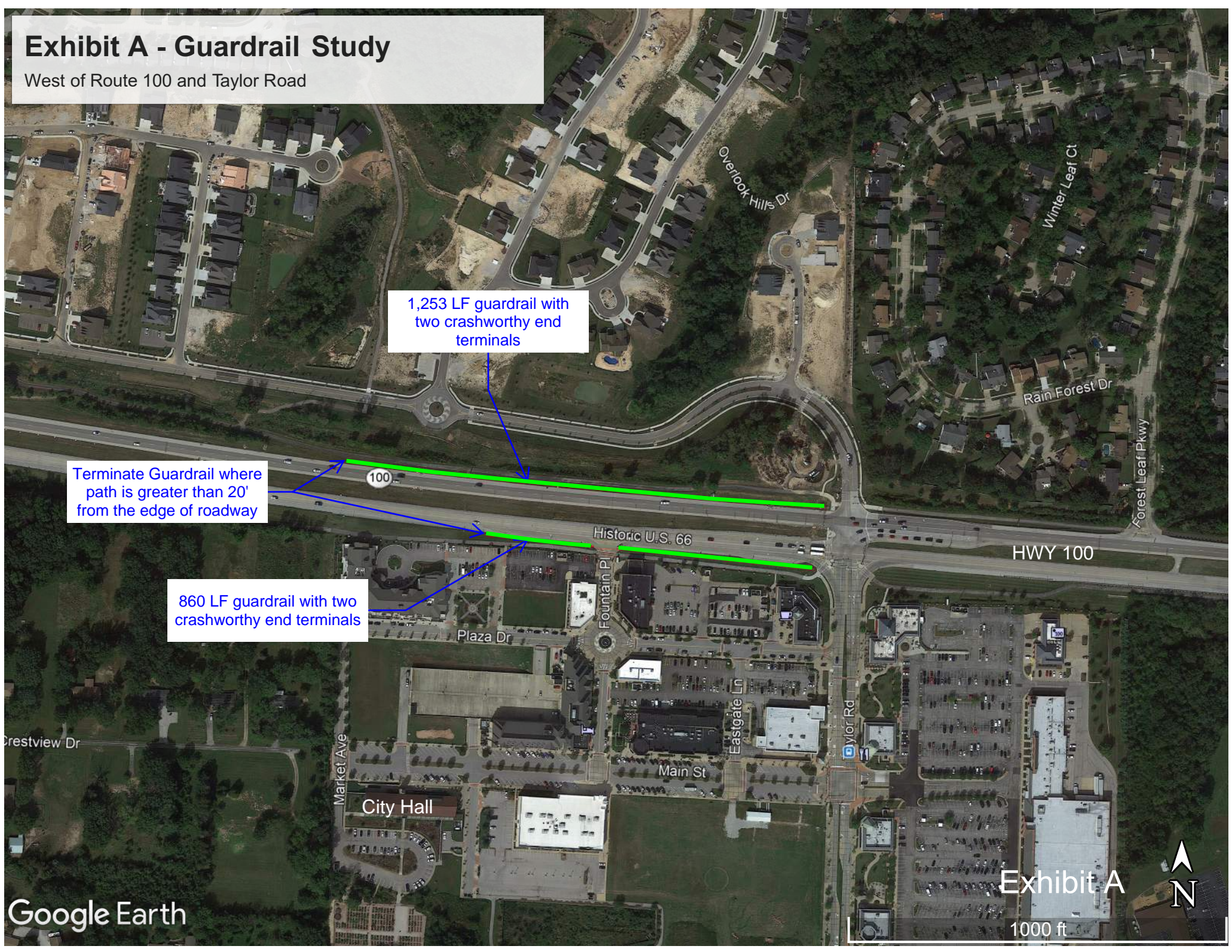
# Exhibit A - Guardrail Study

West of Route 100 and Taylor Road

1,253 LF guardrail with two crashworthy end terminals

Terminate Guardrail where path is greater than 20' from the edge of roadway

860 LF guardrail with two crashworthy end terminals





# WILDWOOD

## Exhibit B

Proposed Guardrail - Route 100				
Conceptual Cost Estimate				
Description	Quantity	Unit	Unit Cost	Extended Cost
Crashworthy End Terminal (Painted Brown)	4	Each	\$ 5,000.00	\$ 20,000.00
Type A Guardrail (Corten)	250	LF	\$ 50.00	\$ 12,500.00
Guardrail - steel-backed timber WB Route 100 at Taylor Road	1250	LF	\$ 90.00	\$ 112,500.00
Guardrail - steel backed timber EB Route 100 at Taylor Road	860	LF	\$ 90.00	\$ 77,400.00
Guardrail - steel backed timber EB Route 100 at Route 109	1700	LF	\$ 90.00	\$ 153,000.00
Subtotal				\$ 375,400.00
Removal of Improvements	1	LS	\$ 10,000.00	\$ 10,000.00
Traffic Contol	1	LS	\$ 5,000.00	\$ 5,000.00
Mobilzation	1	LS	\$ 15,000.00	\$ 15,000.00
Seeeding	1	ACRE	\$ 3,000.00	\$ 3,000.00
Subtotal				\$ 408,400.00
Design Contingency (10%)				\$ 40,840.00
Construction Contingency and Inspection (15%)				\$ 61,260.00
<b>Construction Total</b>				<b>\$ 510,500.00</b>
<b>Design Total (10%)</b>				<b>\$ 51,050.00</b>
<b>Total (Design and Construction)</b>				<b>\$ 561,550.00</b>

1. Length of guardrail was measured from the intersection to a point where the path is greater than 20' from the edge of Route 100