

NOISE TECHNICAL MEMORANDUM

Florida Department of Transportation

District 1

SR 72 PD&E Study

Limits of Project: from CR 661 to SR 70 and SR 70 from CR 661 to the Peace River Bridge

DeSoto County, Florida

Financial Management Number: 443123-1-52-01

ETDM Number: N/A

Date: August 31, 2023

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration and FDOT.

NOISE TECHNICAL MEMORANDUM

DATE: August 31, 2023

TO: Patrick Bateman, PE, Project Manager
Florida Department of Transportation, District I

FROM: Stantec

SUBJECT: **Noise Technical Memorandum**
Project Name: State Road (SR) 72 Project Development & Environment (PD&E) Study
Financial Management No.: 443123-1-52-01
Federal Aid Project No.: N/A
Limits: from CR 661 to SR 70 and SR 70 from CR 661 to the Peace River Bridge
County: DeSoto
Description: SR 72 Roundabout

Project Description

The Florida Department of Transportation (FDOT), District One, is conducting a Project Development and Environment (PD&E) study for the proposed improvements, including raising the vertical profile of both SR 70 and SR 72, and consideration of a single lane roundabout at the intersection of SR 70 and SR 72 in Arcadia, Florida. The purpose of this PD&E study is to evaluate and document potential engineering and environmental effects of any proposed safety improvements considered, including acquiring right of way in DeSoto County, Florida. Alternatives to be evaluated include pedestrian and bicycle crossings, multi-use pathways to provide safe connectivity for the area, shifting the alignment of SR 72 slightly to the west to provide an appropriate approach to the proposed roundabout, the construction of roadside ditches and a dry detention pond, and the reconstruction of SR 70 from CR 661 to the Peace River Relief Bridge (**Figure 1**). The project area is being evaluated for resilient design concepts that would raise the roadway to alleviate flooding caused by the Peace River.

Purpose and Need

The purpose of this PD&E study is to evaluate resilient design concepts to alleviate flooding on SR 72 and SR 70 caused by the Peace River. Severe storms and historic flooding have been known to inundate segments of SR 72 and SR 70, which consequently restrict mobility in the region, and affect safety for the local communities. As part of this study, we will document potential engineering and environmental effects, including right of way. Alternatives will be resiliency focused and include raising the roadway profiles of SR 72 and SR 70 in the locations where flooding is most prevalent. Another purpose for this study is to evaluate the operations of the SR 72 and SR 70 intersection relative to safety and capacity.

Project Background

SR 70 spans five counties, providing intrastate travel between the City of Fort Pierce in St Lucie County on the east coast, to the City of Bradenton in Manatee County on the west coast. SR 72 is an alternative route to the west coast, starting from its Eastern terminus at SR 70 and is the most direct route to Siesta Key and Venice in Sarasota County. Maintaining access to this route is crucial for commerce, safety, and the overall transportation network and regional connectivity.

The segment of SR 72 between CR 661 and SR 70 has been prone to severe flooding over the years. The Federal Emergency Management Agency's (FEMA) effective Flood Insurance Rate Maps (FIRMs), dated November 6, 2013, depict Zone AE, A, and X floodplain limits within the project proximity. The Zone AE floodplains, which are areas that have a 1% chance of annual flooding, and are consistent with the Peace River and its overbank area. This riverine floodplain encroaches into the SR 72 and SR 70 right-of-way and has a Base Flood Elevation (BFE) of 25.0 feet and 26.0 feet. The Zone A floodplains, which are areas that have a 1% annual chance of flooding, but do not have an established BFE are located along the western portion of SR 72 within the project limits. Several publications and other historical records have shown this portion of the roadway frequently inundating during hurricane season. A shallow base clearance coupled with repeated flooding, decreases the overall service life of the roadway and leads to more unscheduled repairs and maintenance. The project area is within an open basin where runoff flows via sheet flow to roadside ditches and through existing cross drains in a generally southeast direction towards the Peace River. Frequent flooding restricts regional travel as well as adversely affects access and mobility for the local community. Public safety is at notable risk during these flooding events as it can delay emergency response from first responders, restrict access to important shelters, hospitals, or medical facilities and restrict access to other goods and necessities.

The proposed project does not address any capacity deficiencies along the corridor (i.e. there is no addition of a through traffic lane). The proposed project modifies the traffic operations for both corridors with the introduction of the roundabout. The secondary improvement discussed is replacing the stop-controlled intersection with a roundabout. A 2014 Roundabout Feasibility Study which screened the operational, geometric, and safety conditions at the intersection of SR 72 and SR 70 for a roundabout. In 2021, a Stage I Intersection Control Evaluation (ICE) was conducted to further evaluate the roundabout alternative as compared to a traffic signal. The ICE study determined that a single-lane roundabout would outperform a traffic signal in regard to safety, and would adequately service commuters.

One Build Alternative was developed for this PD&E Project. The Build Alternative proposes raising the profile of SR 72 and SR 70 several feet above the current elevation. This change in profile does not meet the standard of a "substantial" alteration per FDOT PD&E Noise Guidelines. Roadside ditches and a dry detention pond are also proposed to manage and mitigate flooding concerns. Another improvement that was adopted from previous traffic studies was introducing a roundabout at the intersection of SR 72 and SR 70. This improvement addresses the safety needs of the project by reducing the overall severity of crashes as well as the overall number of crashes as compared to the current stop control. The roundabout would require realigning the SR 72 and SR 70 alignments to the north in order for the intersection to operate safely. Again, this realignment does not rise to the standard of "substantial" with regards to halving the distance between the roadway and any receptors. The main typical sections for both SR 72 and SR 70 consist of two 12-foot lanes with 10-foot shoulders (5-foot paved) with various configurations of roadside and treatment ditches. The right-of-way varies from 200' to 250'. The typical section package is attached to the memo.

Highway Traffic Noise Consideration

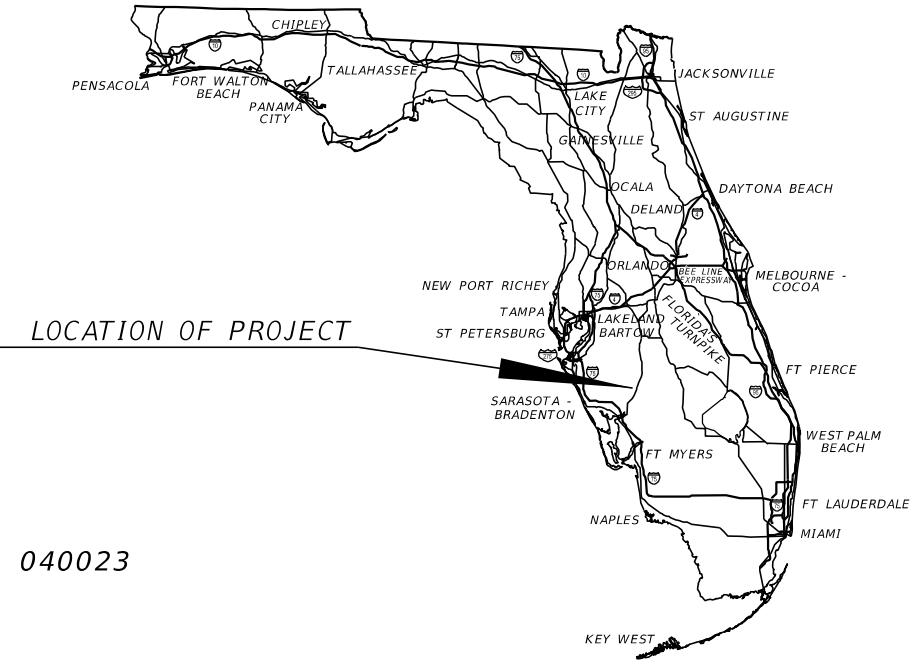
This project is a safety improvement and does not meet the definition of a Type I project as defined in Title 23 CFR Part 772 and the FDOT PD&E Manual. There is no capacity improvement and no substantial horizontal or vertical alteration of the roadway. The proposed improvement is classified as a Type III project. Therefore, this project does not require a traffic noise analysis or consideration of traffic noise abatement measures.

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 443123-1-52-01
(FEDERAL FUNDS)
DESOTO COUNTY (04040 & 04060)
STATE ROAD NO. 70 & 72

ROUNABOUT AT SR 70 & SR 72
RESURFACING OF SR 70 FROM CR 661 TO PEACE RIVER BRIDGE NO. 040023
RECONSTRUCTION OF SR 72 FROM CR 661 TO SR 70



FDOT DISTRICT DESIGN ENGINEER
FDOT DISTRICT TRAFFIC OPERATIONS ENGINEER

CONCURRING WITH:
TYPICAL SECTION ELEMENTS
TARGET SPEED
DESIGN & POSTED SPEEDS

FDOT DISTRICT INTERMODAL SYSTEMS DEVELOPMENT MANAGER
FDOT DISTRICT STRUCTURES DESIGN ENGINEER

CONCURRING WITH:
CONTEXT CLASSIFICATION
TARGET SPEED

FHWA TRANSPORTATION ENGINEER
LOCAL TRANSPORTATION ENGINEER

CONCURRING WITH:
TYPICAL SECTION ELEMENTS

NOT USED
NOT USED

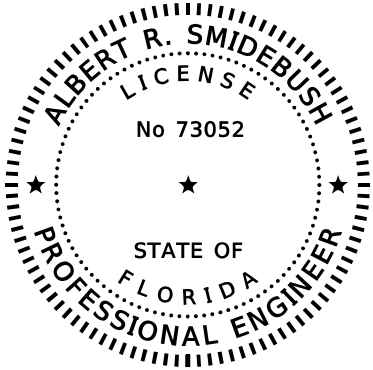
CONCURRING WITH:
CONCURRING WITH:

PROJECT LOCATION URL: <https://tinyurl.com/443123SR72>
PROJECT LIMITS: SR 70 BEGIN MP 11.150 END MP 12.260
SR 72 BEGIN MP 10.208 END MP 10.974
EXCEPTIONS: NONE
BRIDGE LIMITS: SR 70 BEGIN MP 11.786 END MP 11.892
RAILROAD CROSSING: NONE

INDEX OF SHEETS

SHEET NO	SHEET DESCRIPTION
1	KEY SHEET
2	TYPICAL SECTION NO. 1
3	TYPICAL SECTION NO. 2
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6	TYPICAL SECTION NO. 5
7	TYPICAL SECTION NO. 6
8	TYPICAL SECTION NO. 7
9	TYPICAL SECTION NO. 8
10	TYPICAL SECTION NO. 9
11	TYPICAL SECTION NO. 10

APPROVED BY:



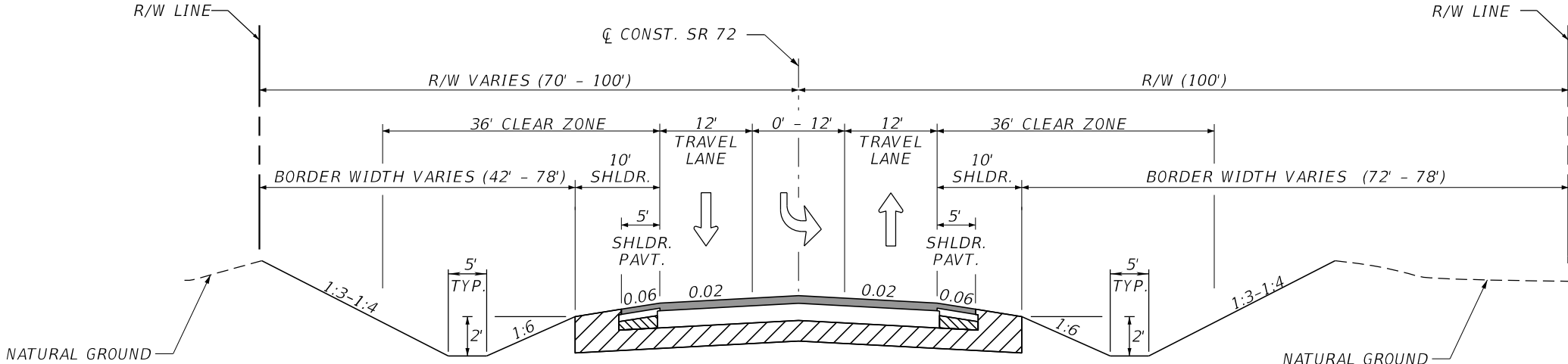
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THE BALMORAL GROUP
165 LINCOLN AVENUE
WINTER PARK, FL 32789
PHONE: (407) 629-2185
ALBERT R. SMIDEBUSH, P.E. NO. 73052

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE
FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

5/10/2023 4:17:07 PM jkiriazes
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PROJECT CONTROLS		TYPICAL SECTION No. 1					
CONTEXT CLASSIFICATION ☐ C1 : NATURAL ☒ C2 : RURAL ☐ C2T : RURAL TOWN ☐ C3R : SUBURBAN RES. ☐ N/A : L.A. FACILITY ☐ C3C : SUBURBAN COMM. ☐ C4 : URBAN GENERAL ☐ C5 : URBAN CENTER ☐ C6 : URBAN CORE		 SR 72 MP 10.208 TO MP 10.318 NOT TO SCALE					
FUNCTIONAL CLASSIFICATION ☐ INTERSTATE ☐ MAJOR COLLECTOR ☐ FREEWAY/EXPWY. ☐ MINOR COLLECTOR ☐ PRINCIPAL ARTERIAL ☐ LOCAL ☒ MINOR ARTERIAL							
HIGHWAY SYSTEM ☐ NATIONAL HIGHWAY SYSTEM ☐ STRATEGIC INTERMODAL SYSTEM ☒ STATE HIGHWAY SYSTEM ☐ OFF-STATE HIGHWAY SYSTEM							
ACCESS CLASSIFICATION ☐ 1 - FREEWAY ☐ 2 - RESTRICTIVE w/Service Roads ☐ 3 - RESTRICTIVE w/660 ft. Connection Spacing ☒ 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing ☐ 5 - RESTRICTIVE w/440 ft. Connection Spacing ☐ 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing ☐ 7 - BOTH MEDIAN TYPES							
CRITERIA ☒ NEW CONSTRUCTION / RECONSTRUCTION ☐ RESURFACING (LA FACILITIES) ☐ RRR (ARTERIALS & COLLECTORS)							
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: DESIGN EXCEPTIONS NONE DESIGN VARIATIONS NONE		SR 72 TRAFFIC DATA CURRENT YEAR = 2022 AADT = 8600 ESTIMATED OPENING YEAR = 2025 AADT = 7000 ESTIMATED DESIGN YEAR = 2045 AADT = 15600 K = 9.5% D = 53.2% T = 12.3% (24 HOUR) DESIGN HOUR T = 6.15% TARGET SPEED = 60 MPH DESIGN SPEED = 65 MPH POSTED SPEED = 60 MPH <table><tr><td>FINANCIAL PROJECT ID</td><td>SHEET NO.</td></tr><tr><td>443123-1-52-01</td><td>2</td></tr></table>		FINANCIAL PROJECT ID	SHEET NO.	443123-1-52-01	2
FINANCIAL PROJECT ID	SHEET NO.						
443123-1-52-01	2						

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

- ☐ C1 : NATURAL

☒ C2 : RURAL

☐ C2T : RURAL TOWN

☐ C3R : SUBURBAN RES.

☐ N/A : L.A. FACILITY
- ☐ C3C : SUBURBAN COMM.

☐ C4 : URBAN GENERAL

☐ C5 : URBAN CENTER

☐ C6 : URBAN CORE

FUNCTIONAL CLASSIFICATION

- ☐ INTERSTATE

☐ FREEWAY/EXPWY.

☐ PRINCIPAL ARTERIAL

☒ MINOR ARTERIAL
- ☐ MAJOR COLLECTOR

☐ MINOR COLLECTOR

☐ LOCAL

HIGHWAY SYSTEM

- ☐ NATIONAL HIGHWAY SYSTEM

☐ STRATEGIC INTERMODAL SYSTEM
- ☒ STATE HIGHWAY SYSTEM

☐ OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ☐ 1 - FREEWAY

☐ 2 - RESTRICTIVE w/Service Roads

☐ 3 - RESTRICTIVE w/660 ft. Connection Spacing

☒ 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing

☐ 5 - RESTRICTIVE w/440 ft. Connection Spacing

☐ 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing

☐ 7 - BOTH MEDIAN TYPES

CRITERIA

- ☒ NEW CONSTRUCTION / RECONSTRUCTION

☐ RESURFACING (LA FACILITIES)

☐ RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

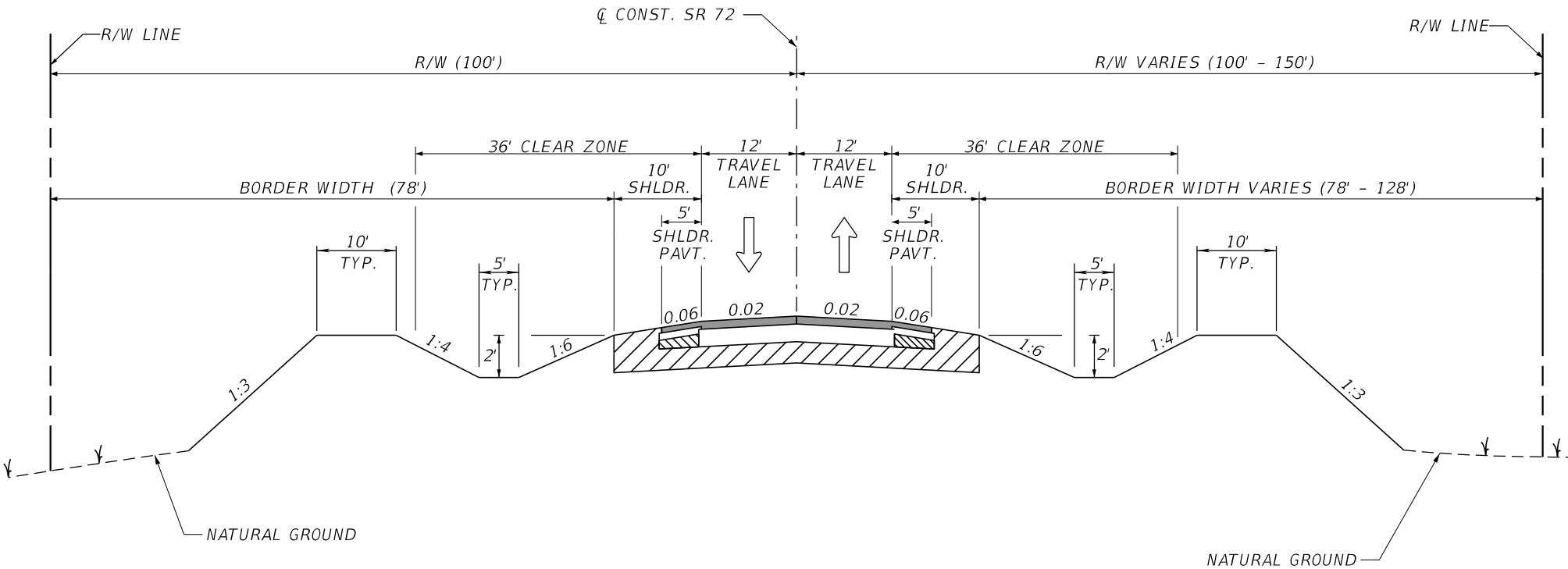
DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

TYPICAL SECTION No. 2



SR 72 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 8600
ESTIMATED OPENING YEAR = 2025 AADT = 7000
ESTIMATED DESIGN YEAR = 2045 AADT = 15600
K = 9.5% D = 53.2% T = 12.3% (24 HOUR)
DESIGN HOUR T = 6.15%
TARGET SPEED = 60 MPH
DESIGN SPEED = 65 MPH
POSTED SPEED = 60 MPH

FINANCIAL PROJECT ID

443123-1-52-01

SHEET
NO.

3

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

- ☐ C1 : NATURAL

☒ C2 : RURAL

☐ C2T : RURAL TOWN

☐ C3R : SUBURBAN RES.

☐ N/A : L.A. FACILITY
- ☐ C3C : SUBURBAN COMM.

☐ C4 : URBAN GENERAL

☐ C5 : URBAN CENTER

☐ C6 : URBAN CORE

FUNCTIONAL CLASSIFICATION

- ☐ INTERSTATE

☐ FREEWAY/EXPWY.

☐ PRINCIPAL ARTERIAL

☒ MINOR ARTERIAL
- ☐ MAJOR COLLECTOR

☐ MINOR COLLECTOR

☐ LOCAL

HIGHWAY SYSTEM

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☐ STRATEGIC INTERMODAL SYSTEM

☒ STATE HIGHWAY SYSTEM

☐ OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

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☐ 5 - RESTRICTIVE w/440 ft. Connection Spacing

☐ 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing

☐ 7 - BOTH MEDIAN TYPES

CRITERIA

- ☒ NEW CONSTRUCTION / RECONSTRUCTION

☐ RESURFACING (LA FACILITIES)

☐ RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

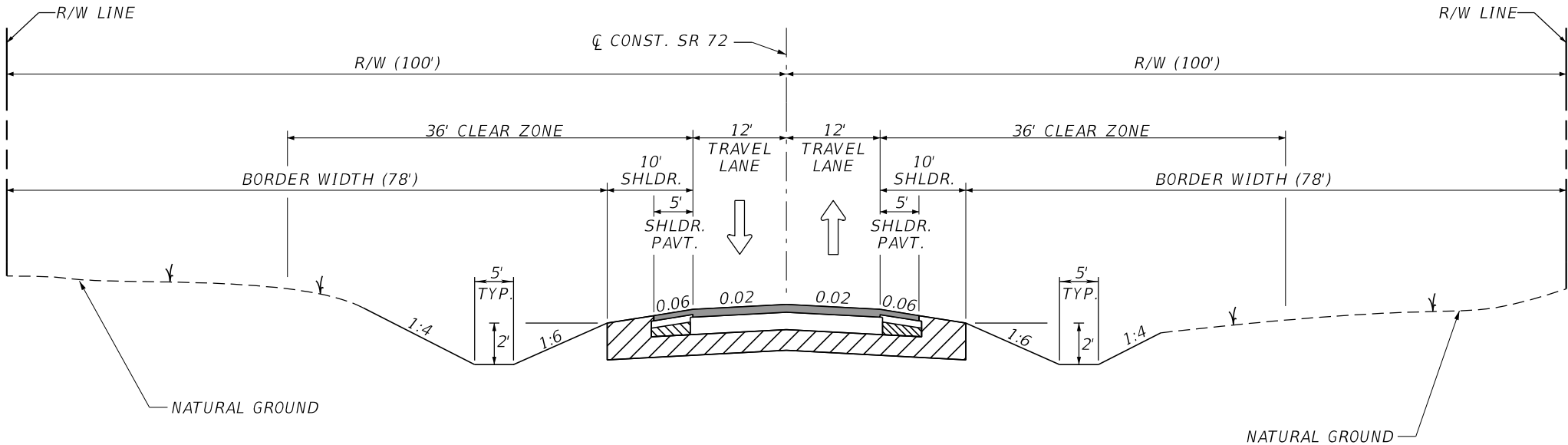
DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

TYPICAL SECTION No. 3



SR 72
MP 10.425 TO MP 10.558

NOT TO SCALE

SR 72 TRAFFIC DATA

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ESTIMATED OPENING YEAR = 2025 AADT = 7000
ESTIMATED DESIGN YEAR = 2045 AADT = 15600
K = 9.5% D = 53.2% T = 12.3% (24 HOUR)
DESIGN HOUR T = 6.15%
TARGET SPEED = 60 MPH
DESIGN SPEED = 65 MPH
POSTED SPEED = 60 MPH

FINANCIAL PROJECT ID

443123-1-52-01

SHEET
NO.

4

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

()

C1 : NATURAL

()

C3C : SUBURBAN COMM.

(x)

C2 : RURAL

()

C4 : URBAN GENERAL

()

C2T : RURAL TOWN

()

C5 : URBAN CENTER

()

C3R : SUBURBAN RES.

()

C6 : URBAN CORE

()

N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

()

INTERSTATE

()

MAJOR COLLECTOR

()

FREEWAY/EXPWY.

()

MINOR COLLECTOR

()

PRINCIPAL ARTERIAL

()

LOCAL

(x)

MINOR ARTERIAL

HIGHWAY SYSTEM

()

NATIONAL HIGHWAY SYSTEM

()

STRATEGIC INTERMODAL SYSTEM

(x)

STATE HIGHWAY SYSTEM

()

OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

()

1 - FREEWAY

()

2 - RESTRICTIVE w/Service Roads

()

3 - RESTRICTIVE w/660 ft. Connection Spacing

(x)

4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing

()

5 - RESTRICTIVE w/440 ft. Connection Spacing

()

6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing

()

7 - BOTH MEDIAN TYPES

CRITERIA

(x)

NEW CONSTRUCTION / RECONSTRUCTION

()

RESURFACING (LA FACILITIES)

()

RRR (ARTERIALS & COLLECTORS)

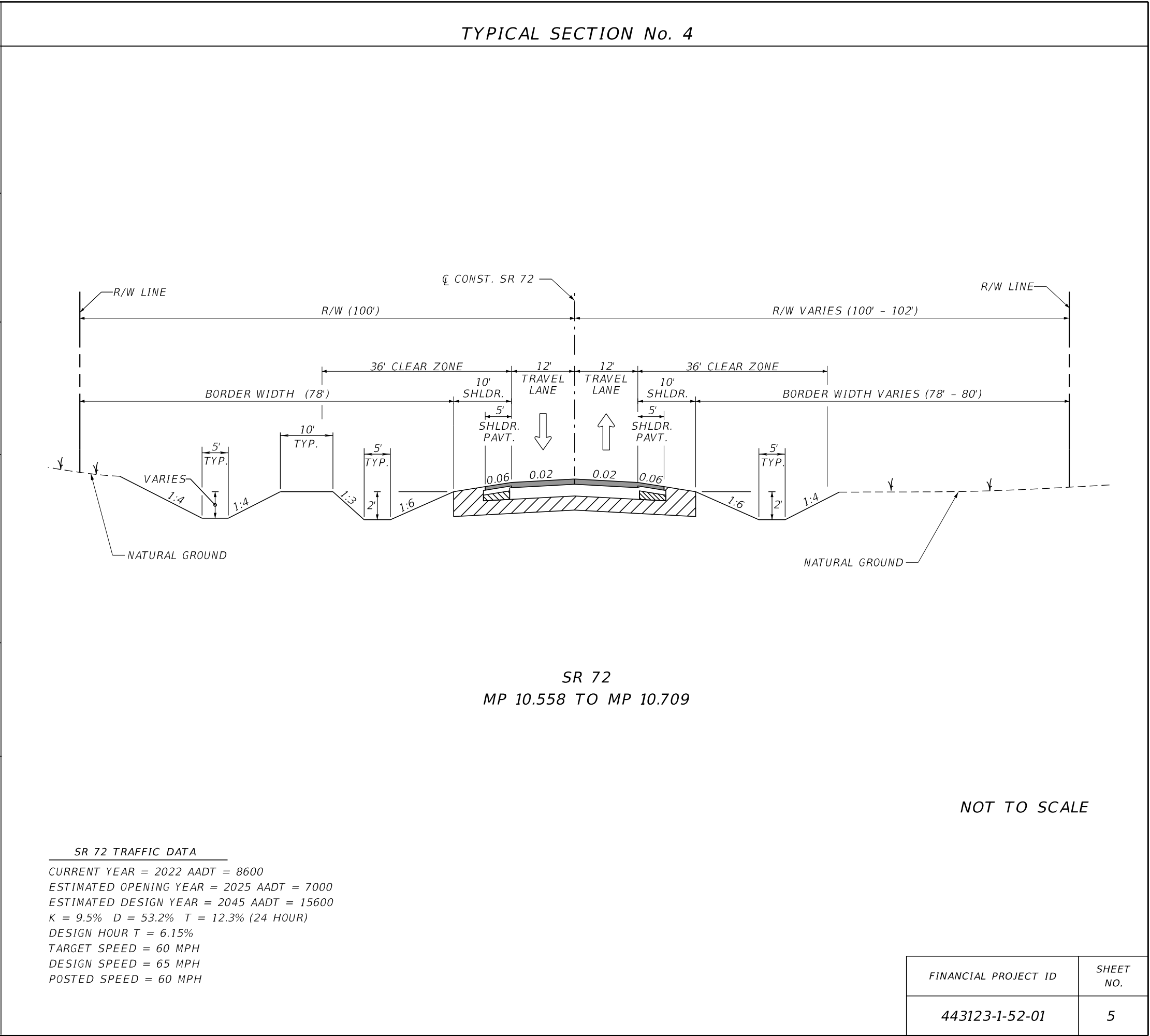
POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:

DESIGN EXCEPTIONS

NONE

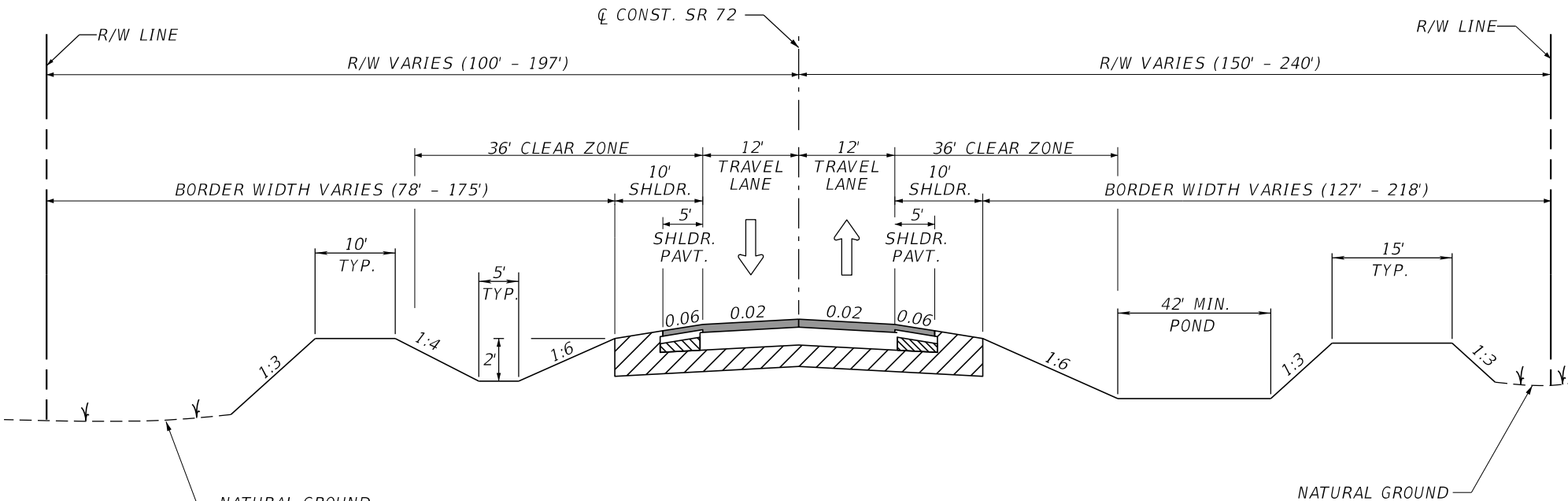
DESIGN VARIATIONS

NONE



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PROJECT CONTROLS		TYPICAL SECTION No. 5					
CONTEXT CLASSIFICATION () C1 : NATURAL (x) C2 : RURAL () C2T : RURAL TOWN () C3R : SUBURBAN RES. () N/A : L.A. FACILITY () C3C : SUBURBAN COMM. () C4 : URBAN GENERAL () C5 : URBAN CENTER () C6 : URBAN CORE		 SR 72 MP 10.823 TO MP 10.974 NOT TO SCALE					
FUNCTIONAL CLASSIFICATION () INTERSTATE () FREEWAY/EXPWY. () PRINCIPAL ARTERIAL (x) MINOR ARTERIAL () MAJOR COLLECTOR () MINOR COLLECTOR () LOCAL							
HIGHWAY SYSTEM () NATIONAL HIGHWAY SYSTEM () STRATEGIC INTERMODAL SYSTEM (x) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM							
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing (x) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing () 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES							
CRITERIA (x) NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) () RRR (ARTERIALS & COLLECTORS)							
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: DESIGN EXCEPTIONS NONE DESIGN VARIATIONS NONE		SR 72 TRAFFIC DATA CURRENT YEAR = 2022 AADT = 8600 ESTIMATED OPENING YEAR = 2025 AADT = 7000 ESTIMATED DESIGN YEAR = 2045 AADT = 15600 K = 9.5% D = 53.2% T = 12.3% (24 HOUR) DESIGN HOUR T = 6.15% TARGET SPEED = 60 MPH DESIGN SPEED = 65 MPH POSTED SPEED = 60 MPH <table><tr><th>FINANCIAL PROJECT ID</th><th>SHEET NO.</th></tr><tr><td>443123-1-52-01</td><td>6</td></tr></table>		FINANCIAL PROJECT ID	SHEET NO.	443123-1-52-01	6
FINANCIAL PROJECT ID	SHEET NO.						
443123-1-52-01	6						

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PROJECT CONTROLS

CONTEXT CLASSIFICATION

<u>FUNCTIONAL CLASSIFICATION</u>	
() INTERSTATE	() MAJOR COLLECTOR
() FREEWAY/EXPWY.	() MINOR COLLECTOR
(x) PRINCIPAL ARTERIAL	() LOCAL
() MINOR ARTERIAL	

- | <u>FUNCTIONAL CLASSIFICATION</u> | |
|----------------------------------|---------------------|
| () INTERSTATE | () MAJOR COLLECTOR |
| () FREEWAY/EXPWAY. | () MINOR COLLECTOR |
| (x) PRINCIPAL ARTERIAL | () LOCAL |
| () MINOR ARTERIAL | |

HIGHWAY SYSTEM

- (x) NATIONAL HIGHWAY SYSTEM
- (x) STRATEGIC INTERMODAL SYSTEM
- (x) STATE HIGHWAY SYSTEM
- () OFF-STATE HIGHWAY SYSTEM

- ## HIGHWAY SYSTEM
- (x) NATIONAL HIGHWAY SYSTEM
 - (x) STRATEGIC INTERMODAL SYSTEM
 - (x) STATE HIGHWAY SYSTEM
 - () OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- () 1 - FREEWAY
- () 2 - RESTRICTIVE w/Service Roads
- (x) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- () 5 - RESTRICTIVE w/440 ft. Connection Spacing
- () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- () 7 - BOTH MEDIAN TYPES

- ## ACCESS CLASSIFICATION
- () 1 - FREEWAY
 - () 2 - RESTRICTIVE w/Service Roads
 - (x) 3 - RESTRICTIVE w/660 ft. Connection Spacing
 - () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
 - () 5 - RESTRICTIVE w/440 ft. Connection Spacing
 - () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
 - () 7 - BOTH MEDIAN TYPES

<u>CRITERIA</u>	
(x)	NEW CONSTRUCTION / RECONSTRUCTION
()	RESURFACING (LA FACILITIES)
()	RRR (ARTERIALS & COLLECTORS)

- | <u>CRITERIA</u> | |
|-----------------|-----------------------------------|
| (x) | NEW CONSTRUCTION / RECONSTRUCTION |
| () | RESURFACING (LA FACILITIES) |
| () | RRR (ARTERIALS & COLLECTORS) |

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

*POTENTIAL EXCEPTIONS AND VARIATIONS
RELATED TO TYPICAL SECTION:*

DESIGN EXCEPTIONS

NONE

DESIGN VARIATIONS

NONE

TYPICAL SECTION No. 6

The diagram illustrates a cross-section of a road with the following dimensions and features:

- R/W LINE:** Right-of-Way boundary.
- R/W (132'):** Total Right-of-Way width on the left side.
- R/W (68'):** Total Right-of-Way width on the right side.
- BORDER WIDTH (110'):** Width from the left R/W line to the start of the clear zone.
- BORDER WIDTH (46'):** Width from the end of the clear zone to the right R/W line.
- 36' CLEAR ZONE:** Clear zone on both sides of the travel lanes.
- 10' SHLDR.:** Shoulder width on both sides of the travel lanes.
- 5' SHLDR. PAVT.:** Pavement shoulder width on both sides of the travel lanes.
- 12' TRAVEL LANE:** Width of each travel lane.
- 0.06:** Slope of the shoulder/pavement transition.
- 0.02:** Slope of the travel lane.
- 1.6:** Slope of the embankment.
- 1:4:** Slope of the embankment.
- NATURAL GROUND:** Profile of the natural ground.
- VARIES:** Indication that the shoulder width varies.
- 5' TYP.:** Typical shoulder width.
- CL CONST. SR 70:** Centerline of the road.

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

SR 70 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 15200
 ESTIMATED OPENING YEAR = 2025 AADT = 14000
 ESTIMATED DESIGN YEAR = 2045 AADT = 25600
 K = 9% D = 54.1% T = 15.6% (24 HOUR)
 DESIGN HOUR T = 7.8%
 TARGET SPEED = 45 MPH
 DESIGN SPEED = 60 MPH
 POSTED SPEED = 45 MPH

FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

TYPICAL SECTION No. 6

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

SR 70 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 15200
ESTIMATED OPENING YEAR = 2025 AADT = 14000
ESTIMATED DESIGN YEAR = 2045 AADT = 25600
K = 9% D = 54.1% T = 15.6% (24 HOUR)
DESIGN HOUR T = 7.8%
TARGET SPEED = 45 MPH
DESIGN SPEED = 60 MPH
POSTED SPEED = 45 MPH

FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

TYPICAL SECTION No. 6

The diagram illustrates a cross-section of a road with the following dimensions and features:

- R/W LINE:** Right-of-Way boundary.
- R/W (132'):** Total Right-of-Way width on the left side.
- R/W (68'):** Total Right-of-Way width on the right side.
- BORDER WIDTH (110'):** Width from the left R/W line to the start of the clear zone.
- BORDER WIDTH (46'):** Width from the end of the clear zone to the right R/W line.
- 36' CLEAR ZONE:** Clear zone on both sides of the travel lanes.
- 10' SHLDR.:** Shoulder width on both sides of the travel lanes.
- 12' TRAVEL LANE:** Width of each travel lane.
- 5' SHLDR. PAVT.:** Pavement shoulder width on both sides of the travel lanes.
- 0.06:** Slope of the shoulder pavement.
- 0.02:** Slope of the travel lane pavement.
- 1.6:** Slope of the embankment.
- 1:4:** Slope of the embankment.
- NATURAL GROUND:** Profile of the natural ground.
- VARIES:** Indication that the shoulder width varies.
- 5' TYP.:** Typical shoulder width.
- CL CONST. SR 70:** Centerline of the road.

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

SR 70 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 15200
 ESTIMATED OPENING YEAR = 2025 AADT = 14000
 ESTIMATED DESIGN YEAR = 2045 AADT = 25600
 K = 9% D = 54.1% T = 15.6% (24 HOUR)
 DESIGN HOUR T = 7.8%
 TARGET SPEED = 45 MPH
 DESIGN SPEED = 60 MPH
 POSTED SPEED = 45 MPH

FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

TYPICAL SECTION No. 6

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

SR 70 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 15200
ESTIMATED OPENING YEAR = 2025 AADT = 14000
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TYPICAL SECTION No. 6

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FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

TYPICAL SECTION No. 6

The diagram illustrates a typical cross-section of a two-lane highway with a center turn lane. The total right-of-way (R/W) is 132 feet on the left and 68 feet on the right. The border width is 110 feet on the left and 46 feet on the right. The central section consists of two 12-foot travel lanes separated by a 12-foot center turn lane. Each travel lane has a 10-foot shoulder and a 5-foot paved shoulder. The center turn lane has a 5-foot paved shoulder. The road surface is shown with a 1.6% cross-slope and a 0.02% longitudinal slope. The natural ground is shown on the left and right sides of the road.

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

SR 70 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 15200
ESTIMATED OPENING YEAR = 2025 AADT = 14000
ESTIMATED DESIGN YEAR = 2045 AADT = 25600
K = 9% D = 54.1% T = 15.6% (24 HOUR)
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TARGET SPEED = 45 MPH
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443123-1-52-01	7

TYPICAL SECTION No. 6

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

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443123-1-52-01	7

TYPICAL SECTION No. 6

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

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DESIGN SPEED = 60 MPH
POSTED SPEED = 45 MPH

FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

TYPICAL SECTION No. 6

The diagram illustrates a cross-section of a road with the following dimensions and features:

- R/W LINE:** Right-of-Way boundary.
- R/W (132'):** Total Right-of-Way width on the left side.
- R/W (68'):** Total Right-of-Way width on the right side.
- BORDER WIDTH (110'):** Width from the left R/W line to the start of the clear zone.
- BORDER WIDTH (46'):** Width from the end of the clear zone to the right R/W line.
- 36' CLEAR ZONE:** Clear zone on both sides of the travel lanes.
- 10' SHLDR.:** Shoulder width on both sides of the travel lanes.
- 12' TRAVEL LANE:** Width of each travel lane.
- 5' SHLDR. PAVT.:** Pavement shoulder width on both sides of the travel lanes.
- 0.06:** Slope of the shoulder pavement.
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- 1.6:** Slope of the embankment.
- 1:4:** Slope of the embankment.
- NATURAL GROUND:** Profile of the natural ground.
- VARIES:** Indication that the shoulder width varies.
- 5' TYP.:** Typical shoulder width.
- CL CONST. SR 70:** Centerline of the road.

SR 70
MP 11.150 TO MP 11.497

NOT TO SCALE

SR 70 TRAFFIC DATA

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FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

TYPICAL SECTION No. 6

The diagram illustrates a cross-section of a road with the following dimensions and features:

- R/W LINE:** Right-of-way boundary lines.
- R/W (132'):** Total right-of-way width on the left side.
- R/W (68'):** Total right-of-way width on the right side.
- BORDER WIDTH (110'):** Width from the left R/W line to the start of the clear zone.
- BORDER WIDTH (46'):** Width from the end of the clear zone to the right R/W line.
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- 10' SHLDR.:** Shoulder width on both sides of the travel lanes.
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- 1.6:** Slope of the embankment.
- 1:4:** Slope of the natural ground.
- NATURAL GROUND:** Profile of the natural ground.
- VARIES:** Indication that the shoulder width varies.
- 5' TYP.:** Typical shoulder width.
- CL CONST. SR 70:** Centerline of the road.

SR 70
MP 11.150 TO MP 11.497

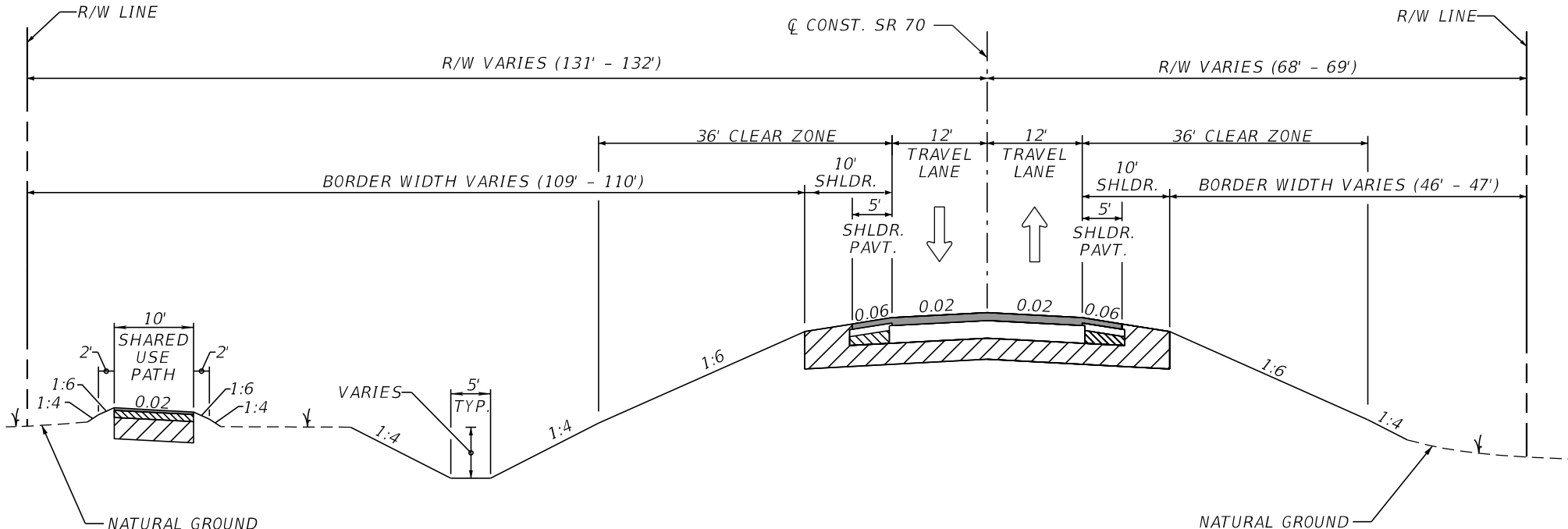
NOT TO SCALE

SR 70 TRAFFIC DATA

CURRENT YEAR = 2022 AADT = 15200
 ESTIMATED OPENING YEAR = 2025 AADT = 14000
 ESTIMATED DESIGN YEAR = 2045 AADT = 25600
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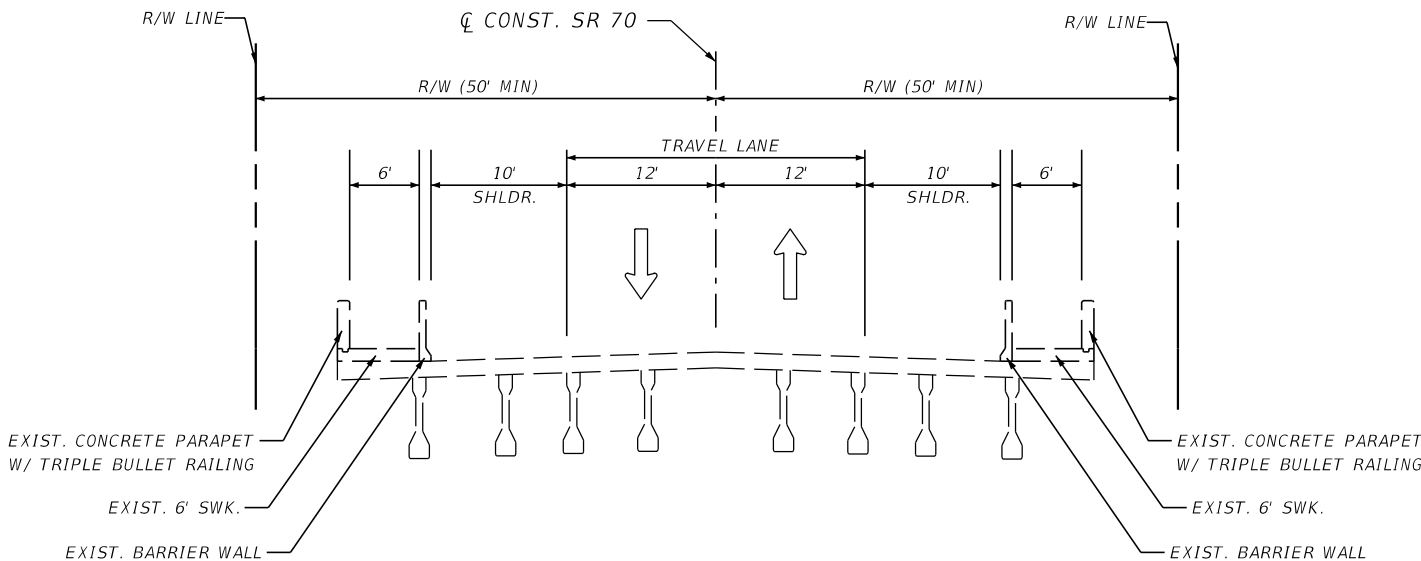
FINANCIAL PROJECT ID	SHEET NO.
443123-1-52-01	7

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PROJECT CONTROLS		TYPICAL SECTION No. 7					
CONTEXT CLASSIFICATION () C1 : NATURAL () C2 : RURAL () C2T : RURAL TOWN () C3R : SUBURBAN RES. () N/A : L.A. FACILITY () C3C : SUBURBAN COMM. () C4 : URBAN GENERAL () C5 : URBAN CENTER () C6 : URBAN CORE		 The diagram illustrates a typical cross-section of a road. On the left, a 'SHARED USE PATH' (10' wide) is shown with 2' shoulders and 1:6 slopes. A 'NATURAL GROUND' line is indicated. The main road section has a 'BORDER WIDTH VARIES (109' - 110')' and a '36' CLEAR ZONE'. It features two '12' TRAVEL LANE's with '10' SHLDR.' on each side. The road surface has a '0.02' grade, and the shoulders have a '0.06' grade. A '5' TYP.' dimension is shown for the shoulder width. The right side of the road has a 'BORDER WIDTH VARIES (46' - 47')' and a '36' CLEAR ZONE'. The 'R/W LINE' (Right of Way Line) is shown on both sides, with 'R/W VARIES (131' - 132')' on the left and 'R/W VARIES (68' - 69')' on the right. A 'CONST. SR 70' label is present.					
FUNCTIONAL CLASSIFICATION () INTERSTATE () MAJOR COLLECTOR () FREEWAY/EXPWY. () MINOR COLLECTOR (x) PRINCIPAL ARTERIAL () LOCAL () MINOR ARTERIAL							
HIGHWAY SYSTEM (x) NATIONAL HIGHWAY SYSTEM (x) STRATEGIC INTERMODAL SYSTEM (x) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM							
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads (x) 3 - RESTRICTIVE w/660 ft. Connection Spacing () 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing () 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES							
CRITERIA (x) NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) () RRR (ARTERIALS & COLLECTORS)							
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: DESIGN EXCEPTIONS NONE DESIGN VARIATIONS NONE		SR 70 MP 11.497 TO MP 11.786 NOT TO SCALE					
		SR 70 TRAFFIC DATA CURRENT YEAR = 2022 AADT = 15200 ESTIMATED OPENING YEAR = 2025 AADT = 14000 ESTIMATED DESIGN YEAR = 2045 AADT = 25600 K = 9% D = 54.1% T = 15.6% (24 HOUR) DESIGN HOUR T = 7.8% TARGET SPEED = 45 MPH DESIGN SPEED = 60 MPH POSTED SPEED = 45 MPH					
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FINANCIAL PROJECT ID	SHEET NO.						
443123-1-52-01	8						

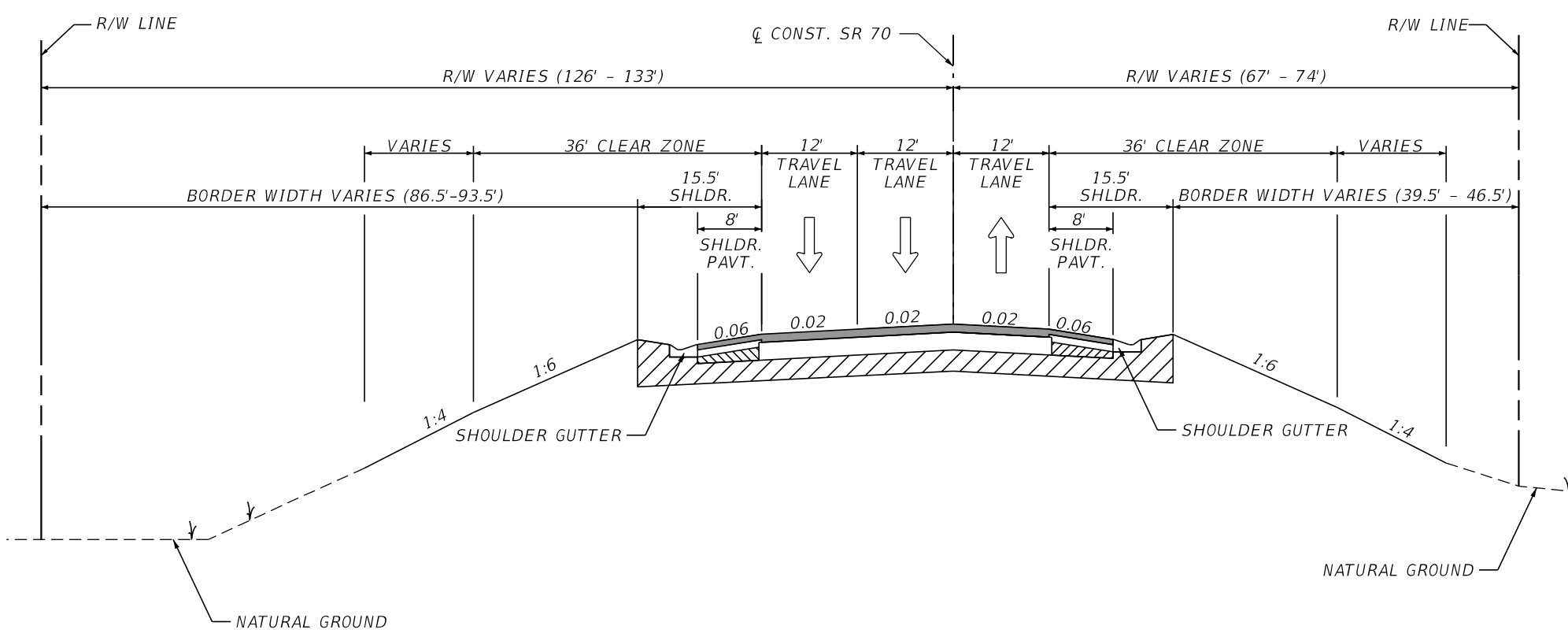
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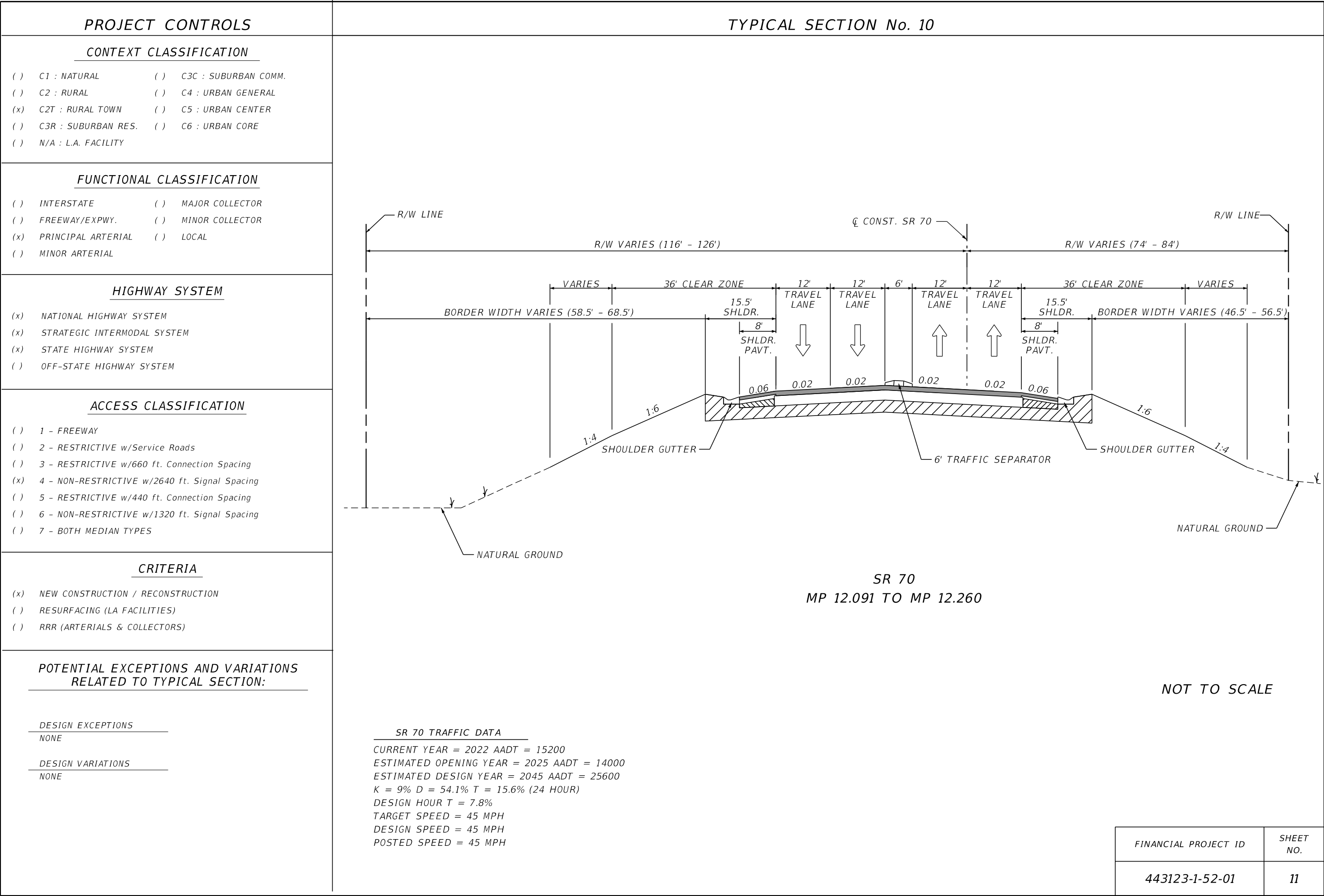
PROJECT CONTROLS	TYPICAL SECTION No. 8					
CONTEXT CLASSIFICATION C1 : NATURAL C2 : RURAL C2T : RURAL TOWN C3R : SUBURBAN RES. N/A : L.A. FACILITY C3C : SUBURBAN COMM. C4 : URBAN GENERAL C5 : URBAN CENTER C6 : URBAN CORE	 SR 70 BRIDGE #040002 MP 11.786 TO MP 11.892					
FUNCTIONAL CLASSIFICATION INTERSTATE FREEWAY/EXPWY. PRINCIPAL ARTERIAL MINOR ARTERIAL MAJOR COLLECTOR MINOR COLLECTOR LOCAL						
HIGHWAY SYSTEM NATIONAL HIGHWAY SYSTEM STRATEGIC INTERMODAL SYSTEM STATE HIGHWAY SYSTEM OFF-STATE HIGHWAY SYSTEM						
ACCESS CLASSIFICATION 1 - FREEWAY 2 - RESTRICTIVE w/Service Roads 3 - RESTRICTIVE w/660 ft. Connection Spacing 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing 5 - RESTRICTIVE w/440 ft. Connection Spacing 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing 7 - BOTH MEDIAN TYPES						
CRITERIA NEW CONSTRUCTION / RECONSTRUCTION RESURFACING (LA FACILITIES) RRR (ARTERIALS & COLLECTORS)						
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: DESIGN EXCEPTIONS NONE DESIGN VARIATIONS NONE	SR 70 TRAFFIC DATA CURRENT YEAR = 2022 AADT = 15200 ESTIMATED OPENING YEAR = 2025 AADT = 14000 ESTIMATED DESIGN YEAR = 2045 AADT = 25600 K = 9% D = 54.1% T = 15.6% (24 HOUR) DESIGN HOUR T = 7.8% TARGET SPEED = 45 MPH DESIGN SPEED = 60 MPH POSTED SPEED = 45 MPH	NOT TO SCALE <table><tr><td>FINANCIAL PROJECT ID</td><td>SHEET NO.</td></tr><tr><td>443123-1-52-01</td><td>9</td></tr></table>	FINANCIAL PROJECT ID	SHEET NO.	443123-1-52-01	9
FINANCIAL PROJECT ID	SHEET NO.					
443123-1-52-01	9					

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PROJECT CONTROLS		TYPICAL SECTION No. 9					
CONTEXT CLASSIFICATION () C1 : NATURAL () C2 : RURAL () C2T : RURAL TOWN () C3R : SUBURBAN RES. () N/A : L.A. FACILITY () C3C : SUBURBAN COMM. () C4 : URBAN GENERAL () C5 : URBAN CENTER () C6 : URBAN CORE							
FUNCTIONAL CLASSIFICATION () INTERSTATE () FREEWAY/EXPWY. (x) PRINCIPAL ARTERIAL () MINOR ARTERIAL () MAJOR COLLECTOR () MINOR COLLECTOR () LOCAL							
HIGHWAY SYSTEM (x) NATIONAL HIGHWAY SYSTEM (x) STRATEGIC INTERMODAL SYSTEM (x) STATE HIGHWAY SYSTEM () OFF-STATE HIGHWAY SYSTEM							
ACCESS CLASSIFICATION () 1 - FREEWAY () 2 - RESTRICTIVE w/Service Roads () 3 - RESTRICTIVE w/660 ft. Connection Spacing (x) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing () 5 - RESTRICTIVE w/440 ft. Connection Spacing () 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing () 7 - BOTH MEDIAN TYPES							
CRITERIA (x) NEW CONSTRUCTION / RECONSTRUCTION () RESURFACING (LA FACILITIES) () RRR (ARTERIALS & COLLECTORS)							
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION: DESIGN EXCEPTIONS NONE DESIGN VARIATIONS NONE		SR 70 MP 11.892 TO MP 12.091 NOT TO SCALE SR 70 TRAFFIC DATA CURRENT YEAR = 2022 AADT = 15200 ESTIMATED OPENING YEAR = 2025 AADT = 14000 ESTIMATED DESIGN YEAR = 2045 AADT = 25600 K = 9% D = 54.1% T = 15.6% (24 HOUR) DESIGN HOUR T = 7.8% TARGET SPEED = 45 MPH DESIGN SPEED = 60 MPH POSTED SPEED = 45 MPH <table><tr><td>FINANCIAL PROJECT ID</td><td>SHEET NO.</td></tr><tr><td>443123-1-52-01</td><td>10</td></tr></table>		FINANCIAL PROJECT ID	SHEET NO.	443123-1-52-01	10
FINANCIAL PROJECT ID	SHEET NO.						
443123-1-52-01	10						

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