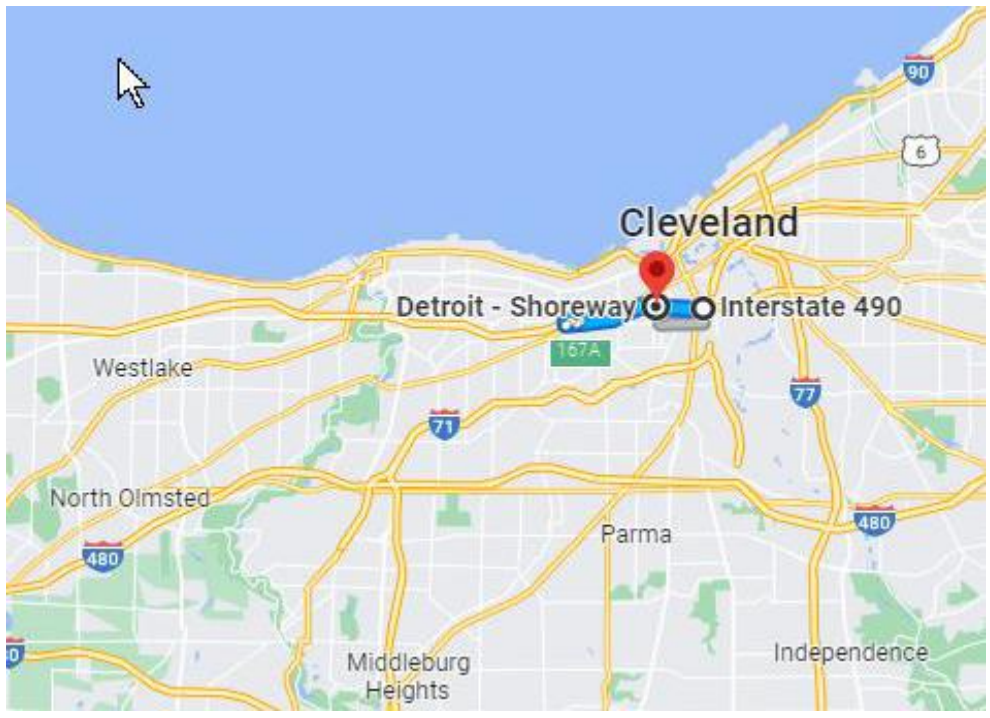
Design Exception Request

CUY-90-6.83

PID: 76779; Request 20

Letting Type: ODOT-Let

Design Designation			
I-90; 6.84-14.94			
Current ADT (2025)	163,000	Td	0
Design Year ADT (2045)	217,000	Design Speed	60
Design Hourly Volume (2045)	21,500	Legal Speed	60
Directional Distribution	58	Design Functional Class	1 - Interstates
Trucks (24hr B&C)	6	Functional Class Area Type	Urban
		NHS Project	Yes



Submitted By:

E-SIGNED by Jim Sima
on 2023-06-15 07:20:18 EST

Jim Sima
(Engineer of Record)

J.S.

Engineer of Record Seal

Approved by:

E-SIGNED by Adam Koenig
on 2023-06-15 08:57:13 EST

Adam Koenig

Approval Date: 6/17/2022

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Controlling Criteria Identification			
Section: I-90; 6.84-14.94			
Controlling Criteria	**Standard**	**Existing (a.)**	**Proposed**
Lane Width			
Shoulder Width	10 feet	6.5 feet	6.5 feet EB/5.5 feet min. WB
Horizontal Curve Radius			
Maximum Grade			
SSD (Horizontal & Crest Vertical)			
Pavement Cross Slope			
Superelevation Rate			
Vertical Clearance			
Design Loading Structural Capacity			
(a.) "Existing" may be N/A (i.e. New alignment or new ramp)			

Project Description

Full depth pavement reconstruction of Interstate 90 from the Hilliard Blvd to I-490 in the cities of Rocky River, Lakewood and Cleveland, OH. Project includes full depth ashpalt concrete pavement for mainline I-90, and full depth concrete pavement for service interchange ramps. Project also includes drainage upgrades including replacement of portions of storm sewer trunk line and laterals, signing, pavement marking and ITS upgrades.

Section Description

The required inside shoulder width per L&D Volume 1 Figure 301-4 is 10 feet.

For IR 90 EB from Sta. 924+00 to Sta. 933+23 the proposed shoulder width matches existing.

For IR 90 WB from Sta. 894+90 to Sta. 931+60.53 the proposed shoulder is 1 foot narrower than existing.

Proposed Mitigation

none

Support for Deviation (Benefit-cost, R/W, Environmental, Constructability, Coordination with Other Projects, Relationship between any crash patterns and proposed design exception, etc.):

The proposed EB shoulder width matches the existing inside shoulder width. This shoulder width was previously reduced to allow for the add lane from W. 41st St. to continue to the IR 90/IR71/IR 490 interchange as part of CUY-90-14.08.

The proposed WB shoulder width is 1 foot narrower than existing to allow for an additional WB lane to eliminate the inside merge at the IR 90 WB/IR 490 WB confluence.

Does the requested Design Exception location fall within a Safety Integrated Project (SIP) Map Location?

Yes, Red Location

Does the crash analysis (GCAT and CAM Tool) show any patterns that would be adversely impacted by the proposed Design Exception?

No