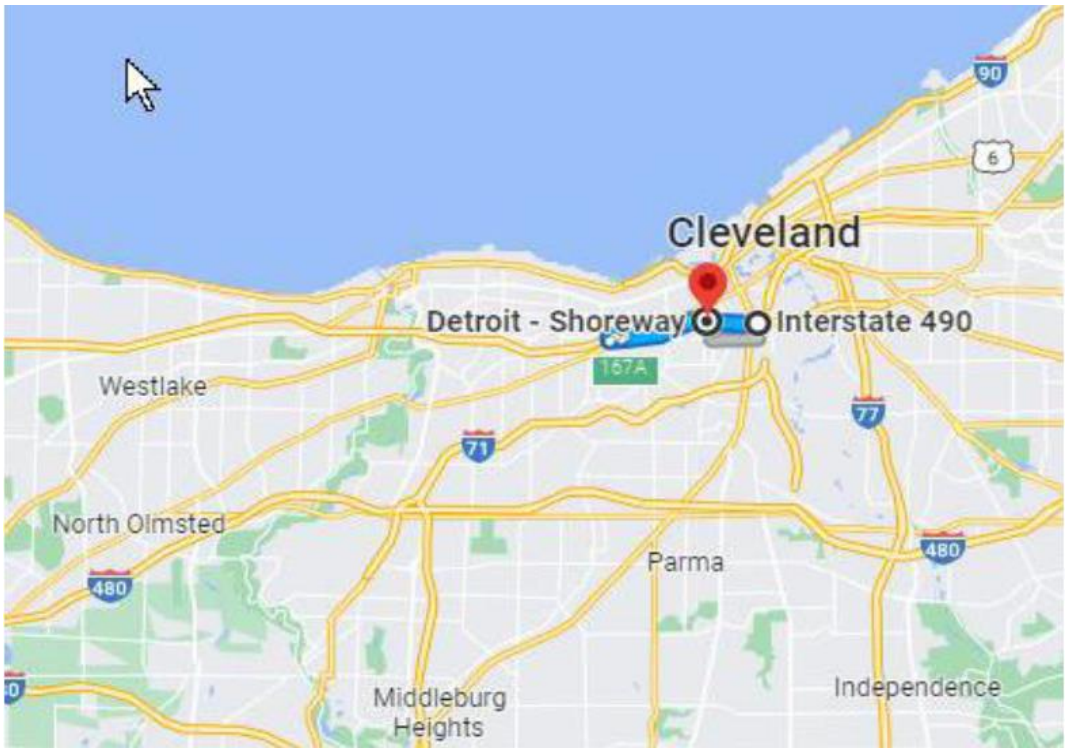
Design Exception Request

CUY-90-6.83

PID: 76779; Request 04

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 2023-06-14 08:12:52 EST

Jim Sima
(Engineer of Record)

J.S.

Engineer of Record Seal

Approved by:

E-SIGNED by Adam Koenig
on 2023-06-14 08:36:43 EST

Adam Koenig

Approval Date: 6/15/2022

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Controlling Criteria Identification			
Section: I-90; 6.84-14.94			
Controlling Criteria	**Standard**	**Existing (a.)**	**Proposed**
Lane Width			
Shoulder Width			
Horizontal Curve Radius			
Maximum Grade			
SSD (Horizontal & Crest Vertical)			
Pavement Cross Slope			
Superelevation Rate	5.5%	5.3%	5.3%
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

Curve at PI Station 903+45.96 exhibits deficient superelevation rate. Max rate for design speed and degree of curve is 5.5%, existing rate is 5.3%.

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 superelevation rate will match the existing rate. The IR 90 mainline structures CUY-90-13720 over the Norfolk Southern Railway/Train Ave. and CUY-90-13910 over Fulton Rd. fall within the limits of the this superelevated section. These bridge decks are being uniformly overlayed. No cross-slope modifcations are planned as a part of this project.

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

Yes, Blue 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