



INDIANA DEPARTMENT OF TRANSPORTATION

Design Memo No. 24-11

August 14, 2024

TO: All Design Personnel and Consultants

FROM: */s/Luis A. Laracuenta*
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Director of Highway Engineering

SUBJECT: Preliminary Geometrics Review for Non-Conventional Intersections

REVISES: *Indiana Design Manual Section 14-2.01(03)*

EFFECTIVE: As Noted

For an INDOT project that includes a non-conventional or “innovative” intersection, a Preliminary Geometrics Review submittal and review meeting are now required. Early discussion on the design approach for these types of intersections is an opportunity to identify and resolve potential design issues. Table 1 at the end of the memo provides a list of innovative intersection types.

Submittal Timing

1. The submittal will be prior to Stage 1, after the Engineer’s Report/Engineer’s Assessment is finalized. The submittal timing should allow for any revisions to be incorporated prior to Stage 1.
2. Allow at least two weeks between uploading the documents to ERMS and the actual meeting date, where practical.

Submittal Plans & Documents (Documents are submitted to ERMS)

Below is a summary of items to include. Designers should review Chapter 14 for specific information.

1. Typical sections, an overall plan sheet with intersection details, and design vehicle wheel paths.

2. Engineer's Report/Engineering Assessment, including
 - a. traffic data and analysis per the INDOT [Intersection Traffic Analysis Procedures](#),
 - b. alternatives analysis per the INDOT [Intersection Decision Guide](#),
 - c. design criteria and design vehicles, and
 - d. site constraints and expected impacts.
3. Fastest path computations and the roundabout checklist editable designer document (Roundabouts only).
4. Documents should be named using the current ERMS file naming conventions with the prefix abbreviation "PGR."

Review Meeting

After the files have been uploaded to ERMS, the designer should coordinate with the INDOT project manager to schedule a review meeting.

The following personnel should be invited to the meeting:

- (Central Office) Highway Design Review Manager
- (Central Office) Traffic Safety Manager
- District Traffic Engineer
- FHWA Transportation Engineer (NHS Routes Only)

The designer should provide meeting minutes, including action items that will be included in the design correspondence file.

Effective Date

1. This memo is effective immediately for applicable projects.
2. For applicable projects at or beyond the Stage 1 submission that have not had a review meeting, the designer should coordinate with the INDOT project manager to schedule a meeting as soon as possible.

Revisions

The referenced section of IDM [Chapter 14](#) has been revised to reflect these changes. Section 14-2.01(03) was revised to be Preliminary Geometrics Review and subsequent sections were renumbered.

The ERMS File Naming Convention document has been revised to reflect these changes. The document is available for the [Design Manual Editable Documents](#) webpage, under Design Submittal category.

Questions

For questions related to this design memo, please contact the Highway Design Review Office, Mark Orton, at MOorton@indot.in.gov.

Roundabout	Grade Separation
Displaced Left Turn <ul style="list-style-type: none"> • Continuous Flow 	Green “T”
Jug-handle or New Jersey Left	Quadrant Roadway
Median U-Turn <ul style="list-style-type: none"> • Boulevard Left or Michigan Left • Restricted Crossing U-turn • Reduced Conflict Intersection or J-turn 	Offset “T” <ul style="list-style-type: none"> • Florida “T” • Continuous Green “T”
This is not a comprehensive list but represents those intersection types having potential on the State highway system.	

Table 1: Innovative Intersection Types (Source: INDOT Intersection Decision Guide)