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DESIGN MEMORANDUM NO. 05-09

TO: Chief District Engineers
Design Engineers
Active Consultants

FROM: Jeff D. Jasper, P.E.
Director
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DATE: October 15, 2009

SUBJECT: Kentucky Single Zone
And Project Datum Factor

The State Plane Coordinate system known as Kentucky Single Zone shall now be used during the development of projects instead of Kentucky North Zone or Kentucky South Zone. The Kentucky Single Zone has been used on some design projects over the past few years without any complications. The Kentucky Single Zone provides a consistent coordinate system on a statewide basis that minimizes ground to grid distortions and convergence angles. In addition GIS applications are already in Kentucky Single Zone coordinates.

Kentucky Single Zone Definition:

- Datum = NAD83 / GRS80 Ellipsoid
- Central Meridian = 85° 45' West Longitude
- Parallel of Grid Origin (Base Parallel) = 36° 20' North Latitude
- Southern Standard Parallel = 37° 05' North Latitude
- Northern Standard Parallel = 38° 40' North Latitude
- False Northing = 1,000,000 meters (3,280,833.333 feet*)
- False Easting = 1,500,000 meters (4,921,250.000 feet*)

*The Kentucky Single Zone is to be used with the U.S. Survey Foot linear unit of measure.

The Project Datum Factor, as it related to State Plane Coordinates and Project Datum Coordinates that was a requirement for KYTC projects, is not needed when utilizing the Kentucky Single Zone system. Projects that are still in the design stage using Kentucky North Zone or Kentucky South Zone and Project Datum Factor should continue to do so. This memo supersedes Design Memorandum No. 5-05.

JDJ/DKB/JJF

