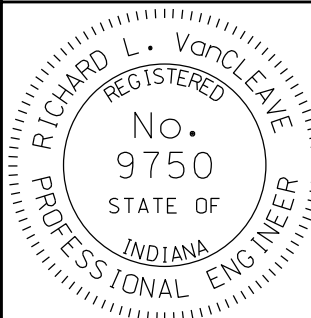


**RUNAROUND GEOMETRICS AND SURFACE AREAS**

TYPE A, ≥ 50 MPH							TYPE B, ≤ 45 MPH					
X (ft)	40	45	50	55	60	65	40	45	50	55	60	65
β	10°	10°	10°	10°	10°	10°	13°	13°	13°	13°	13°	13°
Z (ft)	230.35	259.14	287.94	316.73	345.53	374.32	177.82	200.04	222.27	244.50	266.72	288.95
R (ft)	1070	1070	1070	1070	1070	1070	720	720	720	720	720	720
T (ft)	93.61	93.61	93.61	93.61	93.61	93.61	82.03	82.03	82.03	82.03	82.03	82.03
L (ft)	43.13	71.92	100.72	129.51	158.31	187.10	13.76	35.98	58.21	80.44	102.66	124.89
Y (ft)	414.07	442.42	470.79	499.14	527.50	555.85	337.32	358.97	380.63	402.29	423.94	445.60
E.R.W. (ft)	SURFACE AREA OF RUNAROUND IN SYS. (VARIABLE DISTANCE NOT INCLUDED)											
18	1555	1751	1950	2148	2347	2545	1280	1433	1586	1739	1892	2045
20	1493	1691	1890	2088	2287	2585	1225	1378	1531	1684	1837	1990
22	1428	1627	1825	2024	2222	2420	1170	1323	1476	1629	1783	1935
24	1375	1574	1773	1971	2170	2368	1127	1280	1432	1586	1739	1892

ERW - Existing Roadway Width

<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>	
<b>TEMPORARY RUNAROUND GEOMETRICS</b>	
<b>SEPTEMBER 2011</b>	
<b>STANDARD DRAWING NO.</b>	<b>E 713-TCTR-02</b>
<small>DETAILS PLACED IN THIS FORMAT 9/1/2011</small>	
	<i>/s/ Richard L. VanCleave</i> <i>09/01/11</i> DESIGN STANDARDS ENGINEER      DATE
	<i>/s/ Mark A. Miller</i> <i>09/01/11</i> CHIEF HIGHWAY ENGINEER      DATE
<small>DESIGN STANDARDS ENGINEER</small>	<small>ORIGINALLY APPROVAL ON SEPTEMBER 9/1/06</small>