



Figure 929-2.03(A) – MSE Wall Compound Stability Search Zone Locations to Verify the Most Critical Failure Case for an MSE Wall with Level Backfill.

Where:

AB = Wall Height = h , where A is at the Bottom of the Leveling Pad and B is at the Top of the Wall

ABCD = Reinforced Soil Zone

DCEF = Retained Soil Zone

To the Right of Plane EF = Common Embankment Fill

AGH = Failure Surface for Internal Stability Design of MSE Walls with Inextensible Reinforcements

AI = Failure Surface for Internal Stability Design of MSE Walls with Extensible Reinforcements

OMNP = Search Zone 1 (Search Area At and Below the Toe of the MSE Wall).

Search Zone Limits:

Search Zone Height (OM = NP) = A Minimum of $h/2$ or 5 feet, whichever is Greater

Search Zone Width (MN = OP) = A Minimum of 10 feet Centered Around Point A

LGKD = Search Zone 2 (Search Area in Reinforced Soil Zone of the MSE Wall).

Search Zone Limits:

Search Zone Height (LG = KD) = A Minimum of $h/2$

Search Zone Width (GK = LD) = A Minimum of the Reinforcement Length within the Resistance Zone of the Reinforced Soil Zone at the Middle Elevation of the Wall Height (i.e., the Reinforcement Length Beyond the Failure Surface for Internal Stability Design at the Middle Elevation of the Wall Height)

HJ or IJ = Search Zone 3 (Search Area Near the Top of the MSE Wall). HJ is Applicable to Inextensible Reinforcements. IJ is Applicable to Extensible Reinforcements.

Search Zone Limits:

Search Zone Width (HJ or IJ) = A Minimum Distance Beyond the Reinforced Soil Zone Equivalent to the Wall Height, h