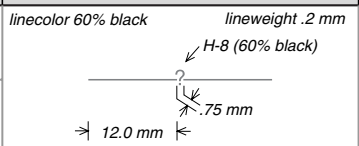
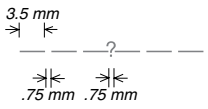
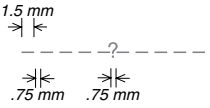
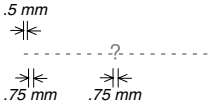
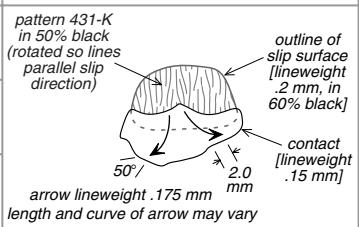
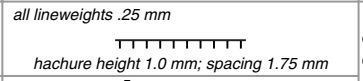
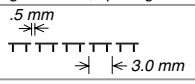
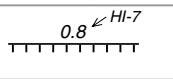
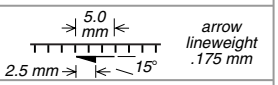
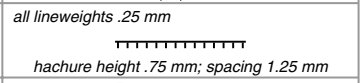
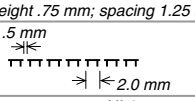
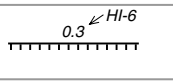
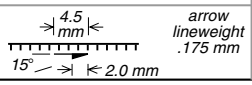
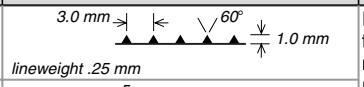
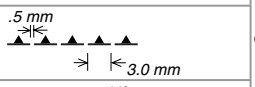
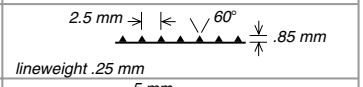
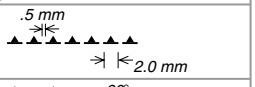
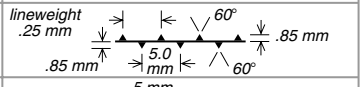
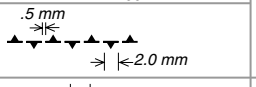
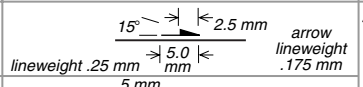
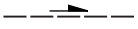
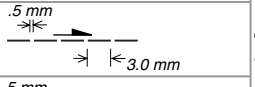
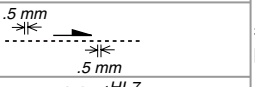
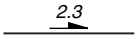
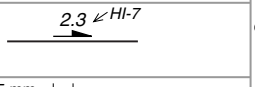
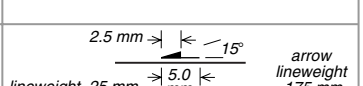
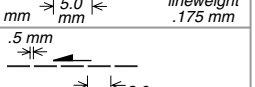
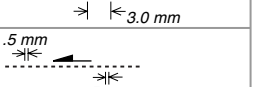
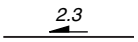
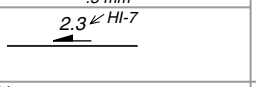
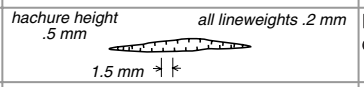
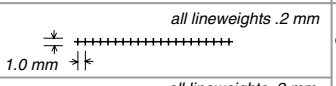
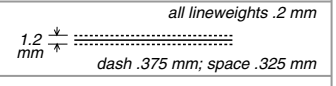
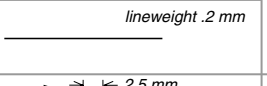
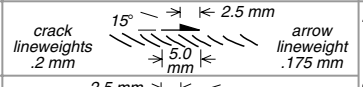
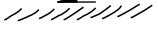
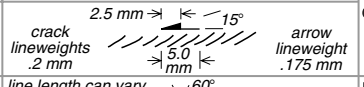
17—LANDSLIDE AND MASS-WASTING FEATURES

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
17.1	Outline of slip surface of landslide—Identity and existence certain, location accurate			May be used to outline area of slip surface of landslide if desired. Do not use to outline landslide deposits (use a map-unit-boundary contact instead).
17.2	Outline of slip surface of landslide—Identity or existence questionable, location accurate	?		
17.3	Outline of slip surface of landslide—Identity and existence certain, location approximate			
17.4	Outline of slip surface of landslide—Identity or existence questionable, location approximate	?		
17.5	Outline of slip surface of landslide—Identity and existence certain, location inferred			
17.6	Outline of slip surface of landslide—Identity or existence questionable, location inferred	?		
17.7	Outline of slip surface of landslide—Identity and existence certain, location concealed			
17.8	Outline of slip surface of landslide—Identity or existence questionable, location concealed	?		
17.9	Area of slip surface of landslide			Downslope edge of slip surface is usually concealed by landslide deposits or debris materials. Landslide arrows may be shown singly or in pairs.
17.10	Direction of downslope movement of landslide			
17.11	Landslide deposits—Arrows show direction of downslope movement			
17.12	Head or main scarp of landslide—Active, sharp, distinct, and accurately located			Place line along crown of scarp; hachures point downscarp. May be shown in red or other colors.
17.13	Head or main scarp of landslide—Inactive, subdued, indistinct, and (or) approximately located			
17.14	Head or main scarp of landslide—Showing height (in meters)	0.8		
17.15	Head or main scarp of rotated block in landslide—Arrow shows direction of oblique slip			
17.16	Internal or minor scarp in landslide—Active, sharp, distinct, and accurately located			
17.17	Internal or minor scarp in landslide—Inactive, subdued, indistinct, and (or) approximately located			
17.18	Internal or minor scarp in landslide—Showing height (in meters)	0.3		
17.19	Internal or minor scarp of rotated block in landslide—Arrow shows direction of oblique slip			

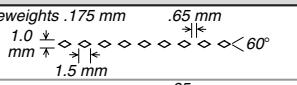
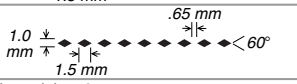
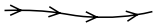
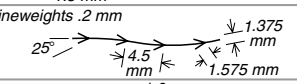
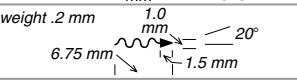
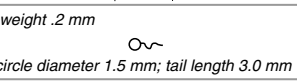
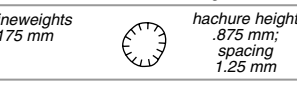
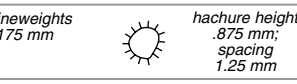
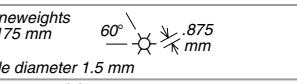
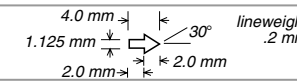
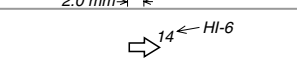
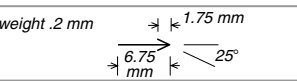
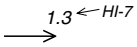
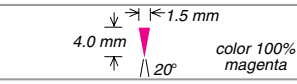
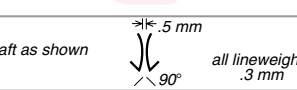
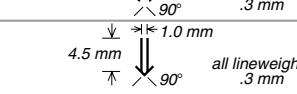
For more information, see general guidelines on pages A-i to A-v.

17—LANDSLIDE AND MASS-WASTING FEATURES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
17.20	Main toe of landslide—Active, sharp, distinct, and accurately located			Place line along base of toe; sawteeth on overriding block. May be shown in red or other colors.
17.21	Main toe of landslide—Inactive, subdued, indistinct, and (or) approximately located			
17.22	Minor toe, internal thrust fault, or pressure ridge in landslide—Active, sharp, distinct, and accurately located			
17.23	Minor toe, internal thrust fault, or pressure ridge in landslide—Inactive, subdued, indistinct, and (or) approximately located			
17.24	Minor toe, internal thrust fault, or pressure ridge in landslide, showing transport reversal—Active, sharp, distinct, and accurately located			
17.25	Minor toe, internal thrust fault, or pressure ridge in landslide, showing transport reversal—Inactive, subdued, indistinct, and (or) approximately located			
17.26	Right flank of landslide or right-lateral shear feature—Active, sharp, distinct, and accurately located			Arrow shows sense of lateral movement. Place arrow on side of moving ground or on displaced earth materials. In cross section, can also be used to show plane of slope failure. May be shown in red or other colors.
17.27	Right flank of landslide or right-lateral shear feature—Inactive, subdued, indistinct, and (or) approximately located			
17.28	Right flank of landslide or right-lateral shear feature—Concealed by landslide deposits or debris materials			
17.29	Right flank of landslide or right-lateral shear feature—Showing amount of offset (in meters)			
17.30	Left flank of landslide or left-lateral shear feature—Active, sharp, distinct, and accurately located			
17.31	Left flank of landslide or left-lateral shear feature—Inactive, subdued, indistinct, and (or) approximately located			
17.32	Left flank of landslide or left-lateral shear feature—Concealed by landslide deposits or debris materials			
17.33	Left flank of landslide or left-lateral shear feature—Showing amount of offset (in meters)			
17.34	Open tension crack or fracture on landslide			Hachures point into crack.
17.35	Tension crack or fracture on landslide (1st option)			May be shown in red or other colors.
17.36	Tension crack or fracture on landslide (2nd option)			
17.37	Tension crack or fracture on landslide (3rd option)			
17.38	En echelon cracks or fractures on landslide, indicating right-lateral shear			Arrow shows sense of lateral movement. May be shown in red or other colors.
17.39	En echelon cracks or fractures on landslide, indicating left-lateral shear			
17.40	Anticlinal soft-sediment fold, buckle fold, bulge, or linear ridge on landslide			May be shown in red or other colors.
17.41	Dome structure or bulge on landslide			
17.42	Synclinal soft-sediment fold or linear depression on landslide			
17.43	Basin structure or depression on landslide			

For more information, see general guidelines on pages A-i to A-v.

17—LANDSLIDE AND MASS-WASTING FEATURES (continued)

REF NO	DESCRIPTION	SYMBOL	CARTOGRAPHIC SPECIFICATIONS*	NOTES ON USAGE*
17.44	Crest line of lateral levee on landslide (1st option)			
17.45	Crest line of lateral levee on landslide (2nd option)			
17.46	Path of gully on landslide			
17.47	Soil creep or incipient sliding on landslide			Arrow points downhill. May be shown in red or other colors.
17.48	Spring, seep, or drainage (runoff) on landslide			Tail points downhill. May be shown in red or other colors.
17.49	Sag pond or closed depression on landslide (mapped to scale)			Hachures point into depression.
17.50	Hummock on landslide (mapped to scale)			Hachures point away from hummock.
17.51	Hummock on landslide (shown as point symbol when too small to outline at map scale)			
17.52	Tilt direction of surface of landslide			Usually shown on special-purpose landslide activity maps. May also be shown in red or other colors.
17.53	Tilt direction of surface of landslide—Showing angle of tilt			
17.54	Displacement vector—Showing bearing			
17.55	Displacement vector—Showing bearing and distance			
17.56	Active, reactivated, or historically active debris flow, showing a sharply defined morphology			Usually shown on special-purpose landslide activity maps. If necessary, alphanumeric characters may be added to help distinguish landslide areas. May also be shown in red or other colors.
17.57	Dormant-young debris flow, showing a fresh and uneroded morphology but having no evidence of historic activity			
17.58	Active, reactivated, or historically active landslide (mapped to scale), showing a sharply defined morphology			
17.59	Dormant-young landslide (mapped to scale), showing a fresh and uneroded morphology but having no evidence of historic activity			
17.60	Dormant-mature landslide (mapped to scale), showing a smoothed and eroded morphology			
17.61	Dormant-old or relict landslide (mapped to scale), showing a weak morphology			
17.62	Rock slide, slump, block-glide landslide, rotational landslide, or Toreva block, consisting of a relatively intact mass of displaced materials			Usually shown on special-purpose landslide activity maps. May also be shown in red or other colors. If necessary, symbols may be enlarged or reduced.
17.63	Earth flow, consisting of a relatively thick and jumbled mixture of displaced materials			
17.64	Debris slide, consisting of a loose and relatively shallow veneer of displaced materials			
17.65	Debris-slide slope (mapped to scale), consisting of coalesced scars of landslides and debris flows that are too small or numerous to be shown at map scale			Usually shown on special-purpose landslide activity maps.

*For more information, see general guidelines on pages A-i to A-v.