

TERRAIN INVENTORY LEGEND				TERRAIN INVENTORY LEGEND									
SYMBOL	NAME (AGE)	NATURE OF MATERIAL AND THICKNESS	DISTRIBUTION AND STRATIGRAPHY	GEOMORPHOLOGY AND DRAINAGE	PERMAFROST	OTHER ENGINEERING CHARACTERISTICS	SYMBOL	NAME (AGE)	NATURE OF MATERIAL AND THICKNESS	DISTRIBUTION AND STRATIGRAPHY	GEOMORPHOLOGY AND DRAINAGE	PERMAFROST	OTHER ENGINEERING CHARACTERISTICS
I	Ice, Valley glacier cirque	Glacier ice with veneer or thin blanket of snow and firn. Large valley glaciers are probably 150 m thick; small valley glaciers range between 90 and 100 m thick; cirque glaciers 2 to 40 m thick.	Common to Icefield Ranges; few small valley glaciers, cirque glaciers, and cliff glaciers in Klauke Range northeast of Duke River. Generally overlies range between 90 and 100 m thick; cirque glaciers 2 to 40 m thick.	Flat to steeply sloping as indicated by slope modifiers. Characterized by crevasses, moraine incised meltwater channels, ice bridges, and thaw talus. Avalanches common on cliff glaciers. Some valley glaciers periodically surge. Well drained due to surface and subglacial stream network developed by meltwater.	Glaciers may be at the pressure-melting point at their basal small glaciers, probably at freezing temperature throughout their thickness. Ablation characterizes lower parts of all glaciers during summer.	Unstable surfaces due to ablation crevasses, continued downvalley glacier movement and glacier surges on many valley glaciers. Avalanches pose hazard on cliff glaciers.	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ M ₃₃ M ₃₄ M ₃₅ M ₃₆ M ₃₇ M ₃₈ M ₃₉ M ₄₀ M ₄₁ M ₄₂ M ₄₃ M ₄₄ M ₄₅ M ₄₆ M ₄₇ M ₄₈ M ₄₉ M ₅₀ M ₅₁ M ₅₂ M ₅₃ M ₅₄ M ₅₅ M ₅₆ M ₅₇ M ₅₈ M ₅₉ M ₆₀ M ₆₁ M ₆₂ M ₆₃ M ₆₄ M ₆₅ M ₆₆ M ₆₇ M ₆₈ M ₆₉ M ₇₀ M ₇₁ M ₇₂ M ₇₃ M ₇₄ M ₇₅ M ₇₆ M ₇₇ M ₇₈ M ₇₉ M ₈₀ M ₈₁ M ₈₂ M ₈₃ M ₈₄ M ₈₅ M ₈₆ M ₈₇ M ₈₈ M ₈₉ M ₉₀ M ₉₁ M ₉₂ M ₉₃ M ₉₄ M ₉₅ M ₉₆ M ₉₇ M ₉₈ M ₉₉ M ₁₀₀	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ M ₃₃ M ₃₄ M ₃₅ M ₃₆ M ₃₇ M ₃₈ M ₃₉ M ₄₀ M ₄₁ M ₄₂ M ₄₃ M ₄₄ M ₄₅ M ₄₆ M ₄₇ M ₄₈ M ₄₉ M ₅₀ M ₅₁ M ₅₂ M ₅₃ M ₅₄ M ₅₅ M ₅₆ M ₅₇ M ₅₈ M ₅₉ M ₆₀ M ₆₁ M ₆₂ M ₆₃ M ₆₄ M ₆₅ M ₆₆ M ₆₇ M ₆₈ M ₆₉ M ₇₀ M ₇₁ M ₇₂ M ₇₃ M ₇₄ M ₇₅ M ₇₆ M ₇₇ M ₇₈ M ₇₉ M ₈₀ M ₈₁ M ₈₂ M ₈₃ M ₈₄ M ₈₅ M ₈₆ M ₈₇ M ₈₈ M ₈₉ M ₉₀ M ₉₁ M ₉₂ M ₉₃ M ₉₄ M ₉₅ M ₉₆ M ₉₇ M ₉₈ M ₉₉ M ₁₀₀	Diamictic high sand, silt, and stone contents locally contain crudely sorted material and is low in fines (M ₁). Generally 10 to 50 m thick, rarely to 100 m thick.	Groups of ridges common near upper reaches of Hazel Creek and west of Jarvis River. Individual ridge common along limit of Early(?) Wisconsinan, Late Wisconsinan, and Neoglacial. Till and colluvial blanket common upglacier from ridges. Underlain by drift, colluvium, and rarely bedrock.	Ridges(?) having moderate to steep slopes; moderately well to well drained.	Permafrost throughout unit. Thick active layers on some south-facing slopes. Negligible ice contents. Locally, ice wedges present.	Trenches will develop over ice wedges if exposed. Locally, a source of construction material, including aggregate.
A ₁ A ₂ A ₃ A ₄ A ₅ A ₆ A ₇ A ₈ A ₉ A ₁₀ A ₁₁ A ₁₂ A ₁₃ A ₁₄ A ₁₅ A ₁₆ A ₁₇ A ₁₈ A ₁₉ A ₂₀ A ₂₁ A ₂₂ A ₂₃ A ₂₄ A ₂₅ A ₂₆ A ₂₇ A ₂₈ A ₂₉ A ₃₀ A ₃₁ A ₃₂ A ₃₃ A ₃₄ A ₃₅ A ₃₆ A ₃₇ A ₃₈ A ₃₉ A ₄₀ A ₄₁ A ₄₂ A ₄₃ A ₄₄ A ₄₅ A ₄₆ A ₄₇ A ₄₈ A ₄₉ A ₅₀ A ₅₁ A ₅₂ A ₅₃ A ₅₄ A ₅₅ A ₅₆ A ₅₇ A ₅₈ A ₅₉ A ₆₀ A ₆₁ A ₆₂ A ₆₃ A ₆₄ A ₆₅ A ₆₆ A ₆₇ A ₆₈ A ₆₉ A ₇₀ A ₇₁ A ₇₂ A ₇₃ A ₇₄ A ₇₅ A ₇₆ A ₇₇ A ₇₈ A ₇₉ A ₈₀ A ₈₁ A ₈₂ A ₈₃ A ₈₄ A ₈₅ A ₈₆ A ₈₇ A ₈₈ A ₈₉ A ₉₀ A ₉₁ A ₉₂ A ₉₃ A ₉₄ A ₉₅ A ₉₆ A ₉₇ A ₉₈ A ₉₉ A ₁₀₀	Active floodplain (Modern)	Generally gravel (g), rarely sand (s), or silt (f); gravel coarse on floodplains of high-gradient alpine streams rare. Silt and clay probably averages 3 to 10 m thick, but up to 50 m thick in upper streams.	Active floodplains are broad along most major streams flowing out of St. Elias Mountains most of streams originating in mountains have terraced floodplains bordered by vegetated floodplains, or stream-cut scarps. Small floodplains are underlain by alluvium or drift; large ones probably extend to bedrock.	Channel and bars form braided patterns that are constantly shifting, small scarps to 1.5 m high with ripple marks, terraced scarps and benches; no vegetation inundated with water during spring floods, times of high precipitation, and intense glacier melt.	Flooding is a constant hazard. In places sediments are "quick" near surface. Sand and silt floodplains vulnerable to minor subsidence if disturbed. Aggregate source.	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ M ₃₃ M ₃₄ M ₃₅ M ₃₆ M ₃₇ M ₃₈ M ₃₉ M ₄₀ M ₄₁ M ₄₂ M ₄₃ M ₄₄ M ₄₅ M ₄₆ M ₄₇ M ₄₈ M ₄₉ M ₅₀ M ₅₁ M ₅₂ M ₅₃ M ₅₄ M ₅₅ M ₅₆ M ₅₇ M ₅₈ M ₅₉ M ₆₀ M ₆₁ M ₆₂ M ₆₃ M ₆₄ M ₆₅ M ₆₆ M ₆₇ M ₆₈ M ₆₉ M ₇₀ M ₇₁ M ₇₂ M ₇₃ M ₇₄ M ₇₅ M ₇₆ M ₇₇ M ₇₈ M ₇₉ M ₈₀ M ₈₁ M ₈₂ M ₈₃ M ₈₄ M ₈₅ M ₈₆ M ₈₇ M ₈₈ M ₈₉ M ₉₀ M ₉₁ M ₉₂ M ₉₃ M ₉₄ M ₉₅ M ₉₆ M ₉₇ M ₉₈ M ₉₉ M ₁₀₀	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ M ₃₃ M ₃₄ M ₃₅ M ₃₆ M ₃₇ M ₃₈ M ₃₉ M ₄₀ M ₄₁ M ₄₂ M ₄₃ M ₄₄ M ₄₅ M ₄₆ M ₄₇ M ₄₈ M ₄₉ M ₅₀ M ₅₁ M ₅₂ M ₅₃ M ₅₄ M ₅₅ M ₅₆ M ₅₇ M ₅₈ M ₅₉ M ₆₀ M ₆₁ M ₆₂ M ₆₃ M ₆₄ M ₆₅ M ₆₆ M ₆₇ M ₆₈ M ₆₉ M ₇₀ M ₇₁ M ₇₂ M ₇₃ M ₇₄ M ₇₅ M ₇₆ M ₇₇ M ₇₈ M ₇₉ M ₈₀ M ₈₁ M ₈₂ M ₈₃ M ₈₄ M ₈₅ M ₈₆ M ₈₇ M ₈₈ M ₈₉ M ₉₀ M ₉₁ M ₉₂ M ₉₃ M ₉₄ M ₉₅ M ₉₆ M ₉₇ M ₉₈ M ₉₉ M ₁₀₀	Diamictic high sand, silt and stone contents locally may be crudely sorted, low in fines, or high in rubble or boulder content (f ₁).	Common in many valleys in Klauke Ranges, Klauke Plateau, Ruby Range, and in Duke Depression. Older till plain (M ₁) also present in southern part of Klondike Plateau. Usually associated with other glacial deposits. Unit commonly contains unsorted patches of outwash and less commonly lacustrine deposits. Fine grained peat sediments and peat in many depressions. Discontinuous thin veneer of silt and peat on older disintegration moraine (M ₁) thicker than on younger moraine (M ₁). Generally underlain by drift or alluvium.	Surface generally rolling to undulating with gentle to moderate slopes. Generally well drained, but drainage moderately good to good; in swales and on broad flat areas drainage may be imperfect to poor.	Permafrost throughout unit north and west of Klauke Lake sporadic and mainly confined to swales near Klauke Lake generally absent east of Klauke Lake and in upper part of unit in swales and on broad flat areas. Ground ice contents moderate to high. Ice wedges common in areas of permafrost.	Areas with moderate to high ground ice contents vulnerable to thermokarst subsidence and erosion. Trenches will develop over ice wedges if exposed. Ponding in depressions possible. Hills and ridges generally stable surfaces. Locally a source of construction material, including aggregate.	
F ₁ F ₂ F ₃ F ₄ F ₅ F ₆ F ₇ F ₈ F ₉ F ₁₀ F ₁₁ F ₁₂ F ₁₃ F ₁₄ F ₁₅ F ₁₆ F ₁₇ F ₁₈ F ₁₉ F ₂₀ F ₂₁ F ₂₂ F ₂₃ F ₂₄ F ₂₅ F ₂₆ F ₂₇ F ₂₈ F ₂₉ F ₃₀ F ₃₁ F ₃₂ F ₃₃ F ₃₄ F ₃₅ F ₃₆ F ₃₇ F ₃₈ F ₃₉ F ₄₀ F ₄₁ F ₄₂ F ₄₃ F ₄₄ F ₄₅ F ₄₆ F ₄₇ F ₄₈ F ₄₉ F ₅₀ F ₅₁ F ₅₂ F ₅₃ F ₅₄ F ₅₅ F ₅₆ F ₅₇ F ₅₈ F ₅₉ F ₆₀ F ₆₁ F ₆₂ F ₆₃ F ₆₄ F ₆₅ F ₆₆ F ₆₇ F ₆₈ F ₆₉ F ₇₀ F ₇₁ F ₇₂ F ₇₃ F ₇₄ F ₇₅ F ₇₆ F ₇₇ F ₇₈ F ₇₉ F ₈₀ F ₈₁ F ₈₂ F ₈₃ F ₈₄ F ₈₅ F ₈₆ F ₈₇ F ₈₈ F ₈₉ F ₉₀ F ₉₁ F ₉₂ F ₉₃ F ₉₄ F ₉₅ F ₉₆ F ₉₇ F ₉₈ F ₉₉ F ₁₀₀	Floodplain	Generally gravel with veneer of sand and silt; veneer commonly has significant organic content and cap of peat; in places without fine textured and peat veneers (A ₁) probably averages 3 to 10 m thick adjacent to large streams.	Border most streams; bordered by active floodplains, low terraces, or stream-cut scarps. May include some unmaped areas of active floodplain and low terraces in small valleys. Small floodplains are underlain by alluvium or drift; large ones probably extend to bedrock.	Few channels are present on floodplains generally well drained except in channels and on the inner parts of broad floodplains where peat and silt may be present; inundated with water during high floods; shallow water table.	Permafrost absent except under small floodplains at high elevations.	Annual flooding. Veneer vulnerable to minor channeling, if disturbed. Generally stable surface. Aggregate source.	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ M ₃₃ M ₃₄ M ₃₅ M ₃₆ M ₃₇ M ₃₈ M ₃₉ M ₄₀ M ₄₁ M ₄₂ M ₄₃ M ₄₄ M ₄₅ M ₄₆ M ₄₇ M ₄₈ M ₄₉ M ₅₀ M ₅₁ M ₅₂ M ₅₃ M ₅₄ M ₅₅ M ₅₆ M ₅₇ M ₅₈ M ₅₉ M ₆₀ M ₆₁ M ₆₂ M ₆₃ M ₆₄ M ₆₅ M ₆₆ M ₆₇ M ₆₈ M ₆₉ M ₇₀ M ₇₁ M ₇₂ M ₇₃ M ₇₄ M ₇₅ M ₇₆ M ₇₇ M ₇₈ M ₇₉ M ₈₀ M ₈₁ M ₈₂ M ₈₃ M ₈₄ M ₈₅ M ₈₆ M ₈₇ M ₈₈ M ₈₉ M ₉₀ M ₉₁ M ₉₂ M ₉₃ M ₉₄ M ₉₅ M ₉₆ M ₉₇ M ₉₈ M ₉₉ M ₁₀₀	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ M ₃₃ M ₃₄ M ₃₅ M ₃₆ M ₃₇ M ₃₈ M ₃₉ M ₄₀ M ₄₁ M ₄₂ M ₄₃ M ₄₄ M ₄₅ M ₄₆ M ₄₇ M ₄₈ M ₄₉ M ₅₀ M ₅₁ M ₅₂ M ₅₃ M ₅₄ M ₅₅ M ₅₆ M ₅₇ M ₅₈ M ₅₉ M ₆₀ M ₆₁ M ₆₂ M ₆₃ M ₆₄ M ₆₅ M ₆₆ M ₆₇ M ₆₈ M ₆₉ M ₇₀ M ₇₁ M ₇₂ M ₇₃ M ₇₄ M ₇₅ M ₇₆ M ₇₇ M ₇₈ M ₇₉ M ₈₀ M ₈₁ M ₈₂ M ₈₃ M ₈₄ M ₈₅ M ₈₆ M ₈₇ M ₈₈ M ₈₉ M ₉₀ M ₉₁ M ₉₂ M ₉₃ M ₉₄ M ₉₅ M ₉₆ M ₉₇ M ₉₈ M ₉₉ M ₁₀₀	Diamictic high sand, silt, and stone contents texture of basal part reflects underlying materials. Variations between 1 and 50 m thick, averages 3 to 10 m thick.	Common in base of Shakkwak Trench, Wellesley Basin, and on flat surfaces of Duke Depression. Older till plain (M ₁) also present in southern part of Klondike Plateau. Usually associated with other glacial deposits and underlain by drift or alluvium. Discontinuous thin veneer of silt and peat overlying till on older till plain (M ₁) generally thicker than on younger till plain (M ₁).	Flat to gently sloping. In places filled or with low broad drumlins. Areas of permafrost, drainage imperfect to poor; in areas free of permafrost drainage moderately good.	Continuous permafrost north and west of Klauke Lake; permafrost absent or sporadic in Shakkwak Trench southeast of Klauke Lake. Ground ice contents locally high in upper part of unit, especially on older till plain (M ₁); ground ice in the form of ice lenses and wedges.	Local thermokarst subsidence in areas where ground ice contents are high. Ponding possible in all thermokarst areas if disturbed.
P ₁ P ₂ P ₃ P ₄ P ₅ P ₆ P ₇ P ₈ P ₉ P ₁₀ P ₁₁ P ₁₂ P ₁₃ P ₁₄ P ₁₅ P ₁₆ P ₁₇ P ₁₈ P ₁₉ P ₂₀ P ₂₁ P ₂₂ P ₂₃ P ₂₄ P ₂₅ P ₂₆ P ₂₇ P ₂₈ P ₂₉ P ₃₀ P ₃₁ P ₃₂ P ₃₃ P ₃₄ P ₃₅ P ₃₆ P ₃₇ P ₃₈ P ₃₉ P ₄₀ P ₄₁ P ₄₂ P ₄₃ P ₄₄ P ₄₅ P ₄₆ P ₄₇ P ₄₈ P ₄₉ P ₅₀ P ₅₁ P ₅₂ P ₅₃ P ₅₄ P ₅₅ P ₅₆ P ₅₇ P ₅₈ P ₅₉ P ₆₀ P ₆₁ P ₆₂ P ₆₃ P ₆₄ P ₆₅ P ₆₆ P ₆₇ P ₆₈ P ₆₉ P ₇₀ P ₇₁ P ₇₂ P ₇₃ P ₇₄ P ₇₅ P ₇₆ P ₇₇ P ₇₈ P ₇₉ P ₈₀ P ₈₁ P ₈₂ P ₈₃ P ₈₄ P ₈₅ P ₈₆ P ₈₇ P ₈₈ P ₈₉ P ₉₀ P ₉₁ P ₉₂ P ₉₃ P ₉₄ P ₉₅ P ₉₆ P ₉₇ P ₉₈ P ₉₉ P ₁₀₀	Alluvial plain, alluvial fan, alluvial apron (Undifferentiated Pleistocene, mainly Postglacial)	Interbedded sand, silt, clayey silt, contains lenses of peat and much wood; veneer or blanket of peat covers surface. Rarely contains high content of tephra (A ₁). Deposits up to 60 m thick and thin towards edges.	Common in valleys of unglaciated Yukon Plateau, but not limited to this physiographic province. May include small areas of stream terrace and floodplain. Generally underlain by colluvium or bedrock, and in some places by drift or coarse alluvium.	Flat to gently sloping. Generally imperceptibly or poorly drained, in some places moderately well drained.	Permafrost established throughout unit, taliks under thermokarst lakes. Few pingos present. High ground ice contents. Presence of ice lenses and ice wedges.	Surface vulnerable to moderate and major thermokarst subsidence and erosion and to drainage modification if disturbed.	M ₁ M ₂ M ₃ M ₄ M ₅ M ₆ M ₇ M ₈ M ₉ M ₁₀ M ₁₁ M ₁₂ M ₁₃ M ₁₄ M ₁₅ M ₁₆ M ₁₇ M ₁₈ M ₁₉ M ₂₀ M ₂₁ M ₂₂ M ₂₃ M ₂₄ M ₂₅ M ₂₆ M ₂₇ M ₂₈ M ₂₉ M ₃₀ M ₃₁ M ₃₂ 						