

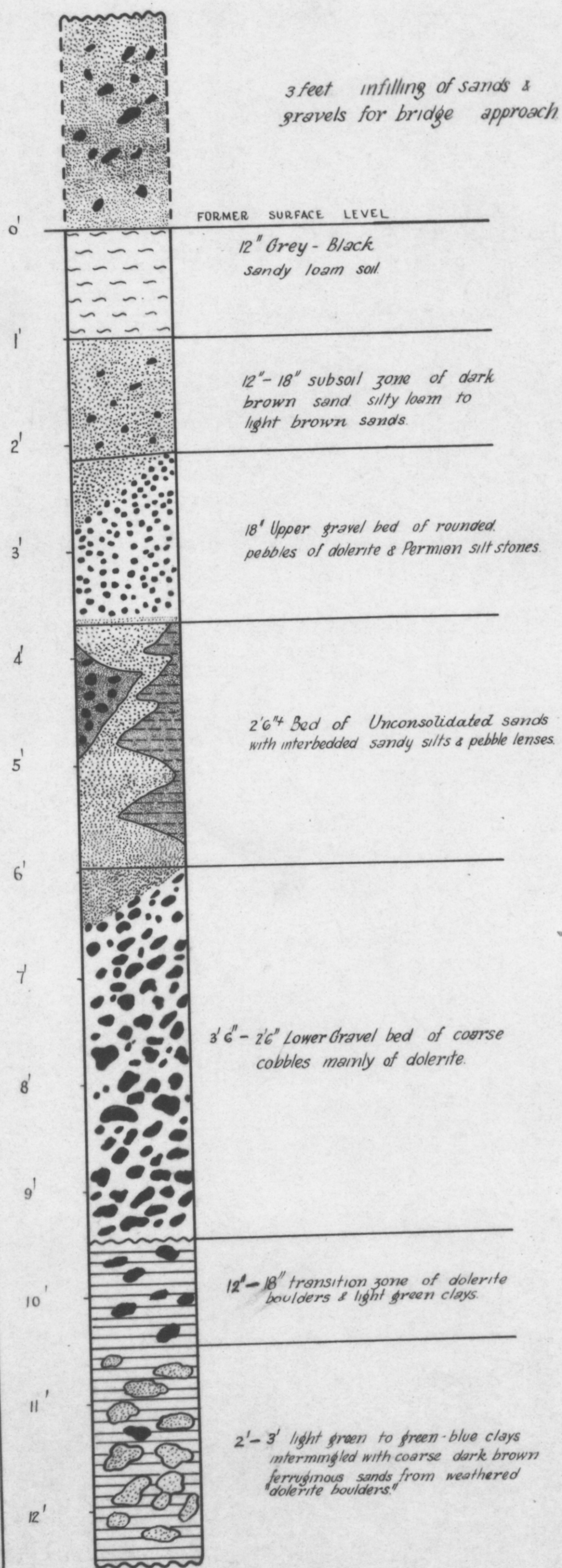
5 cm

DEPTH
IN
FEET

LOG

ZONES & BEDS

LITHOLOGY



Fine grained chocolate sandy soil which grades down to subsoil with no sharp change or boundary present.

Fine dark brown sandy loam, grades down to fine light brown massive unconsolidated sands. This change is due to decrease in organic content with increase in depth. Pebbles found scattered throughout this bed. The zone is variable in thickness and the boundary separating the subsol & underlying gravels is irregular & transitional, with a slope to the south present on the gravel-subsol contact.

Upper gravel beds formed of rounded pebbles of dolerite & Permian Siltstones. Average pebble size is $\frac{1}{2}$ ". Largest pebble measured 2". Small pebbles, granules & coarse sands as well as some lenses of clays & silts are present forming the interstices of the gravel bed. Pebbles are well rounded but irregular in shape. No size gradings of the pebbles is present in this bed. Abundant organic material throughout the bed.

Brown, soft, massive unconsolidated fine Ferruginous quartz sands. In the west wall of the trench at the top of the bed a 12" thick gravel lense occurs. On the North wall of the trench the ferruginous sands are interfingering & replaced by a massive mottled grey-rusty brown sandy silts. These mottled sandy silts lense out on the northern section of the western wall. Both the mottled sandy silts & the Ferruginous sands contain fine carbonaceous material. The contact separating these unconsolidated sands and the gravels shows a slope with a dip of 15° to the east.

Gravel bed composed of all sizes from granules to boulders, but cobble size being most abundant with average size of 2"-3" present within this bed. Pebble (size 2"-4") are abundant. Boulders (size 10") are rare. All these constituents of the gravel bed are fresh or with only slight surface weathering present. Cobbles are rounded and irregular in shape. Coarse sands and granules present in the interstices of the gravels. Dolerite pebbles forms the largest percentage of the cobbles & boulders present but Permian siltstone cobbles & pebbles also found to occur. Surface rust is present on the face of this gravel bed. Contact of the base of the gravels and the underlying clays and sand is sharp but irregular.

Transition zone of large fresh dolerite cobbles and boulders scattered within light green-blue green clays. In contrast with the dolerite boulders of the underlying bed, the boulders in the transition zone are hard, unweathered & rounded, indicating water abrasion & transportation.

Light green-green blue clays intermingled with quartz ferruginous sands. These dark brown sands typical of those formed from oxidation of dolerite. In this bed the ferruginous sands show an outline, though indefinite & vague, of dolerite boulders which have been deeply weathered. This vague outline could be interpreted as spheroidal weathering of dolerite in situ. Frequently these sands from dolerite boulders, where spheroidal weathering appears present, have cores 2"- $\frac{1}{2}$ " of deeply weathered dolerite. One large 10x7" cobble of unweathered dolerite was found at a depth of 10'6" in this zone. This cobble was surrounded by clay. The green clays are intermingled with the above dark ferruginous sands giving a patchy & interbedded appearance. The green clays form 50%+ of the total surface of trench walls. The clays contain thin white veins & small rock fragments. The green clays appear to be derived both from the dolerite sands and boulders as well as an infilling of the interstices separating the boulders. From the 3' exposure of the trench wall base, it is difficult to interpret if this green clay is derived from dolerite in a freshwater reduction environment or transported infill clay or a combination of both possible derivations. but it is now thought that both the sands & the clays are infilling rather than weathering of the parent rock.

SOUTHERN OUTLET ROAD
EXPLORATORY TRENCH No 1

Located on the N.E. bank of the Sandy Bay Rvt in Lynton Ave at the bridge.

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SURVEYOR	HOBART B2.
DRAUGHTSMAN	J.S. Pepper
Scale -	1" = 1 FT
REVISIONS	FILE No 2478