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JOB 19026 Sluicer Basin Const - Commencement

SHEET NO. Add 1 OF Add Cycle 2

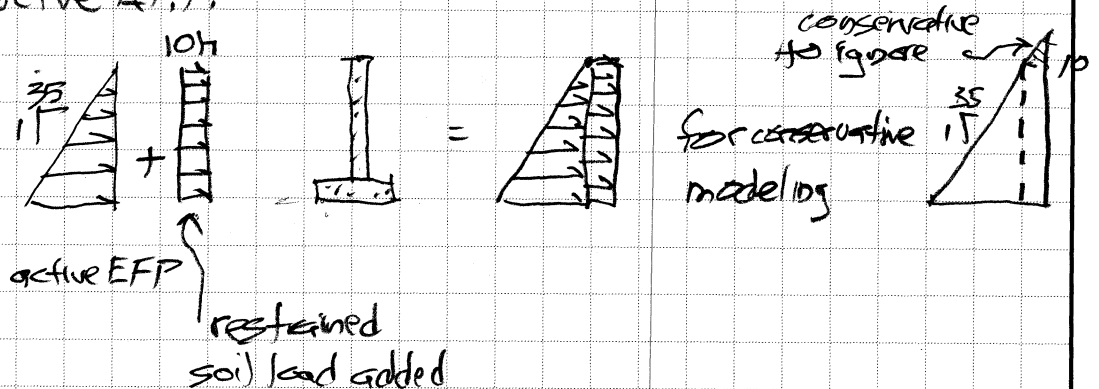
CALCULATED BY AEF DATE 12-14-20

CHECKED BY DATE

SCALE

Restrained Retaining Walls -

Reference Geotech report JN16448 page 5. As noted in report and confirmed 12-9-20 w/ Rob Ward, the previously un-restrained walls that have been designed w/ 35pcf are fine for stability but when within 1.5h of perpendicular wall additional steel may be required to reduce cracking; therefore, walls have been reviewed below to assure steel will be sufficient for an additional 10pcf x height of wall to the un-restrained active EFP.



Well height	10h	Design Wall height add	Wall design h'
4'	40	40 / 35 = 1.14	5.14
6'	60	60 / 35 = 1.71	7.71
8'	80	80 / 35 = 2.29	10.29
10'	100	100 / 35 = 2.86	12.86

Reinforcing is function of moment, Moment = wh²/6 so only variable h changes; hence, review ratio of

h'/h	Review 1.65 x Mo	Changes
$(5.14)/4^2 = 1.65$	✓	None
$(7.71)/6^2 = 1.65$	✓	None
$(10.29)/8^2 = 1.65$	✓	#5@10
$(12.86)/10^2 = 1.65$	✓	None

Also heel steel moment based on Mw / FS1 as printed, review w/ FS2