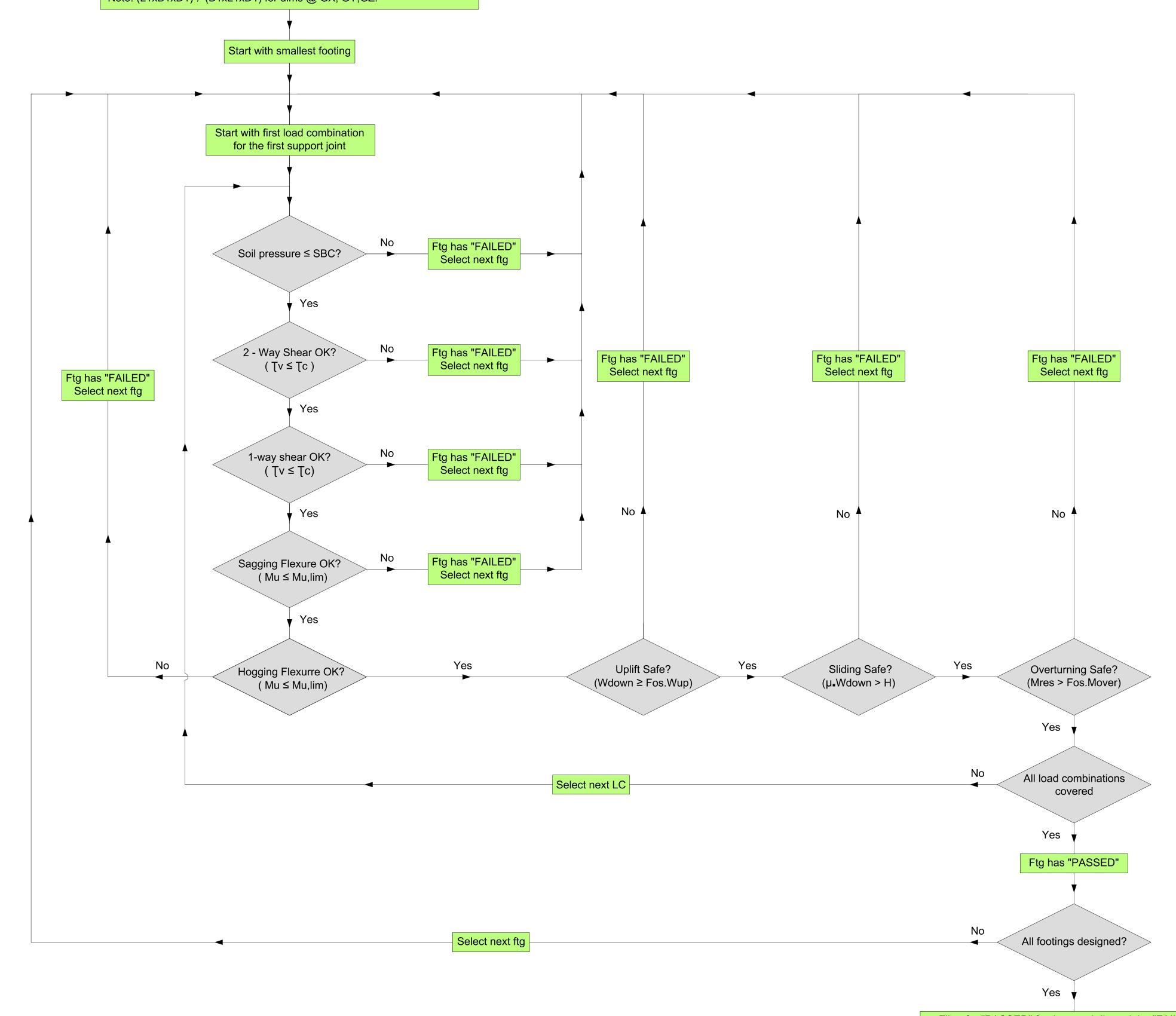


- Code: Design code to be used (LSD).
- Loads: Reactions from superstructure analysis.
- Axes: Global axes used for structure analysis.
- Reactions: Taken at pedestal or footing level. Reactions ignored: Forces taken directly by tie-beams (with reactions @ pedestal level).
- SBC increase: % increase for SBC check.
- FOS: For uplift, sliding, and overturning checks.
- Restoring moment: % value for overturning check. Loss of contact: Max % allowed by design basis.
- Backfill: % to be considered for uplift, sliding &
- overturning checks.
- Location: Corner, edge or central footing.
- Soil: SBC, density, repose angle.
- Concrete: Grade, cover, friction coefficient with soil.
- Rebar: Grade, limiting diameters & spacing. Footing size: Minimum footing dimensions to start with.
- Aspect ratios: Limiting aspect ratios viz. L/B, L/D etc.
- ROVs: For footing dimensions & rebar spacing.
- Material rates: Concrete, rebar & formwork (required for most economical footing design)
- Get all possible footing sizes, starting with the least size permitted up to the max size allowed by the software (usually 3 x respective dim). • Use the given ROVs for length, width & thickness to get the max no of ftg
- dims @ each global axis. • Let's say 'N' ftgs are arrived at by exhaustive permutations of the 3 ftg dims.

Note: $(L1xB1xD1) \neq (B1xL1xD1)$ for dims @ GX, GY,GZ.



Select the footing with the least cost