

Slope-Plot Method

LEGEND

variable

Eq. #
Equation

data plot
(if applicable)

User Inputs:

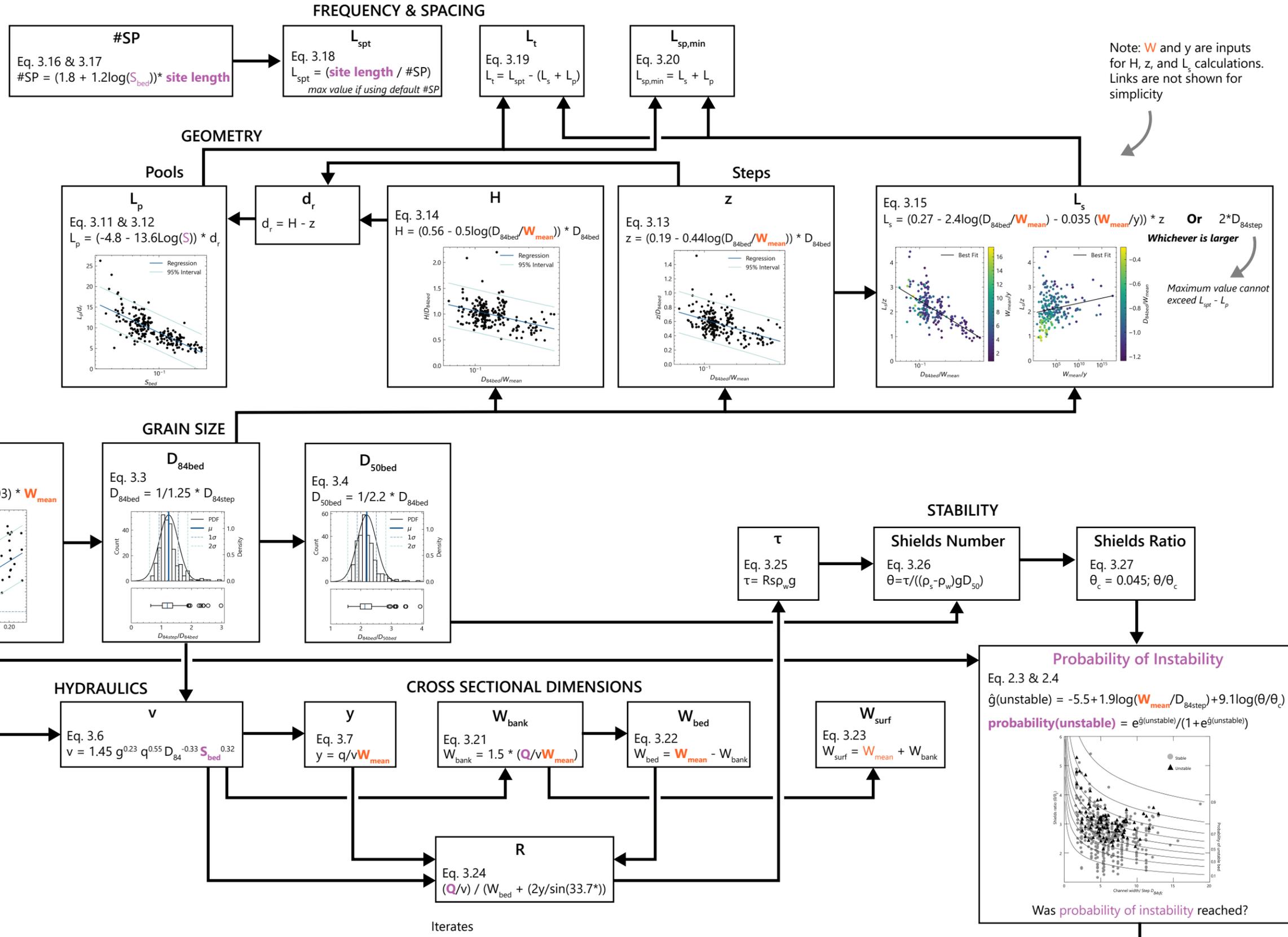
- probability of instability
- Q : design discharge
- S_{bed} : site slope
- site length

Variable Optimized:

- W_{mean} : mean width

MACRO (OPTIMIZATION)

W_{mean}
Iteratively adjusted to match user-defined probability of instability



Note: W and y are inputs for H , z , and L_s calculations. Links are not shown for simplicity



| REVISIONS | | |
|-----------|------------|-------------------|
| R0A | 07/24/2025 | Initial Concept |
| R0 | 07/28/2025 | Issued for Review |
| R1 | 11/24/2025 | Issued for Review |
| | | As Built |

| DRAWING INFORMATION | |
|---------------------|------------|
| DATE | 07/28/2025 |
| DESIGNED BY | AEZ |
| DRAWN BY | MBT |
| CHECKED BY | ALD |
| SHEET SIZE | 11 x 17 |

Steep Channel Design Methodology
Slope-Plot Method Diagram

| | |
|-----------------|------------|
| PROJECT NUMBER: | 2006593.01 |
| FIGURE NUMBER: | Appendix A |
| SHEET NUMBER: | 1 |
| REVISION | 1 |