1. General Layout

- Plain UTF-8 text, one fixed-width line per map row (~600 columns today).

- Every visible glyph is either:

    1. Terrain (the ground the player walks on), or
    2. Annotation (labels for realms, provinces, POIs, etc.—these never appear in-game).

Any ASCII printable character not listed under **Terrain Glyphs** is automatically treated as annotation.

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2. Terrain Glyph Legend

Glyph	Terrain Type	Movement Notes
(space/back-tick)	Open land / plains	Baseline cost
~	Hills & gentle uplands	Slower than plains
ˆ	Mountains / highlands	Very slow; often impassable
&	Forest	Slightly slow
%	Swamp / marsh	Much slower; dangerous
=	Deep water / sea or large lake	Impassable to foot travel
-	River (E - W flow)	Crossable only at bridges/fords
|	River (N - S flow)	as above
.	Road / paved way	Faster than plains
+	Bridge or Ford	
@	River / road annotation marker	Acts as underlying terrain (usually open land)

Direction clues: - suggests east-west flow, | suggests north-south.

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3. Annotation Language (Labels)

Annotations carry world lore but are stripped out before the game renders the map.

Syntax	Semantic Level	Example	Intended Scope
[NAME]	Realm / kingdom	[Gondor]	Large; may span rivers & mountains

Syntax	Semantic Level	Example	Intended Scope
`(NAME)`	Province / march	`(Anórien)`	Sits inside a single realm
`?Name`	Natural region (plains, waste, etc.)	`?Dead_Marshes`	Ecological / geographic zones
`!Name`	Point-of-interest (city, ruin, fort)	`!Minas_Tirith`	One tile only
Bare Name inside terrain patch	Named terrain feature	`Mirkwood` inside `&` forest	Stays within contiguous identical terrain

Placement Rules

- Each annotation is a contiguous run of characters bounded by whitespace or other terrain glyphs.
- It sits on top of whatever terrain glyph(s) it overwrites.
- For large homogeneous features (e.g., mountain ranges or great forests), the bare name is written inside that patch; it covers only that patch and nothing beyond it.

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4. Rivers, Roads & Bridges Nuances

- Rivers use `-` and `|`.
- Roads are represented by `.`; a bridge or ford is represented by `+`.

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5. Whitespace

- A literal space (0x20) represents open terrain, the same as `"`.