

## Steel 79

### *Chapter 79: Infrastructure Initiative*

Currently, Berengar was within the domain of his father's study finalizing the blueprints for the City he envisioned to be his Capital, the City of Kufstein. He had been hard at work on this project for well over a month at this point, seeing as it was something he mainly worked on in his spare time, he had yet to finish it; until now, that is.

As the Town of Kufstein became increasingly more urbanized due to Berengar's agricultural reforms, Berengar found his people suffering from a serious concern. Despite the fact that they were being paid exceptionally well and were no longer bound by the land owned by the feudal lords. The common people of Kufstein were forced to endure terrible conditions of slums and squalor. Considering Berengar was the kind of man who despised forcing people into such destitution, he had to come up with a new plan to resolve these issues.

Luckily for him, he held almost absolute power in the region and had a substantial treasury built up from the lucrative steel and textile trade. Considering he had just finished making plans for the City of Kufstein, Berengar decided to put them into action and break ground on the construction of a grand city deserving the title of capital of Kufstein.

As he labeled it, this grand Infrastructure Initiative was designed to reconstruct the region into a thriving metropolis. The first critical component of this initiative was sanitation, where he planned to have city-wide sewers and plumbing where the waste would go through a sewage treatment facility and eventually flow into the local river. There would also be cisterns that could provide fresh and clean water into the homes of every citizen.

The second critical component of this initiative was to build affordable housing in large apartment complexes; these apartment complexes would be built in the traditional half-timber style. If he was going to build a city, it was going to be an aesthetically pleasing city. Of course, each apartment would be outfitted with its own ceramic tub and toilet connected to the city's plumbing system.

The third component of this infrastructure initiative was focused on defense. With civil war looming on the horizon, Berengar needed a way to defend his

population properly. He was more than happy to introduce a complex set of city walls based on the star fortress platform of the renaissance and early modern period from his previous life. However, unlike the walls made throughout the history of Berengar's past life, his would be made out of steel-reinforced concrete, which was a much more resilient construction method than the traditional stone walls that would normally come to be.

A Star Fortress was essentially what it sounded like. It was a fortress designed in the days of the renaissance to combat cannons' effectiveness and commonality, which would prove to be the death blow to the old medieval castle designs. Essentially the city would be built out of a polygon split down the middle by the Inn river. At the edges of the wall would be a series of pointed fortifications called bastions that eliminated blind spots and allowed defenders to fire upon besiegers from all angles. Above these bastions would be cavaliers, a raised structure built entirely inside the bastion that acted as a secondary line of defense, allowing more cannons and musketeers to defend the same section of the wall.

Below the bastions would be a series of ditches filled with water, which was similar to a moat in design, which would make the city virtually impossible to lay siege to fully. The design was based upon many years of fortification knowledge that Berengar had gained from his time studying at Westpoint to be an army engineering officer. In this era, no army could successfully lay siege to such a well-fortified city.

Fourth and finally, he needed to construct a comprehensive set of roads between all the major inhabited regions of his territory and elected for the roman method of road construction. This would certainly be an expensive endeavor. However, he could afford such luxuries, and as such, Berengar had immediately begun the process of constructing his grand city.

At the moment, Berengar was walking through the town in which he currently presided over on his path to Ludwig's workshop, which was now his office space within the industrial district. He noticed the filth and squalor his people lived in and could not help but wish to speed up time, so they no longer had to endure these conditions. Luckily for him, his plans were complete, and he would soon break ground on the project. The people only had to endure these conditions for a little while longer.

Berengar boldly walked through the doors to Ludwig's office and began speaking with the old man in the steel factory about the production of galvanized steel piping to construct his plumbing system. If the steel was properly submerged in molten zinc, it could create a relatively rust-proof layer which would be essential for the construction of his plumbing system.

"What do you think Ludwig, is it possible?"

Ludwig stared at the details of Berengar's plans and felt a headache growing in the back of his skull. The old man sighed heavily as he looked at Berengar like he was a mad man.

"Is it possible? Absolutely, however, it is going to be incredibly expensive to do this."

Berengar clasped Ludwig on the shoulder and smiled before reassuring his old pal.

"Don't worry, I can cover the costs; this is not some venture that will be completed in a matter of months but will be an ongoing effort over the coming years. As long as it is possible, then I don't care about the cost."

Ludwig could not help but admire the effort and expense Berengar was willing to go to to ensure better housing and sanitary conditions for his people. Truly there has never been a more benevolent Lord, or so the old man thought. Ludwig could only imagine how hard Berengar had worked on the budget to ensure his vision of a grand city would become a reality.

Ludwig sighed and accepted Berengar's enthusiasm for the project.

"Alright, I'll get it done; after all, we currently have a surplus of steel that is sitting in a bunch of warehouses waiting for such a grand project. It would be a shame to let it all go to waste."

Berengar smiled as he thanked Ludwig for his assistance

"Good, if you will excuse me, I have many different people to contact to begin the construction of this project of mine."

With that, Berengar left Ludwig behind and contacted the remaining subordinates on his list to begin constructing the grand infrastructure initiative, which would later become the basis for how all German Cities would be designed.