

TECHNOLOGY 94

I'M THE KING OF TECHNOLOGY

Chapter 94 Road Construction Continues

On the previous day that Landon had supervised the military exam, the construction workers had continued on marking the roads, and had also marked each residential home on the blocks.

Today was dedicated towards excavating the marked roads, digging up space for rainwater drainage, water supply, central heating, and sewage pipes.

If rainwater or melted snow wasn't drained, the roads and sidewalk pavements would become flooded.

When that happened, the pavement grade would definitely decrease. As well as the lifespan of the pavement.

The central heating pipeline on the other hand, ensured that all buildings and houses were properly heated during the winter. It would also provide ventilation and air conditioning, to all buildings within Baymard.

All 4 pipelines: Rain, sewage, clean water, and Central heating, would be placed under the roads.

Underneath the left lane of the road would be the sewer pipeline, as well as the water supply pipeline.

And below the right lane of the road would be the rainwater drainage pipeline.

As for the central heating pipeline, it would be placed underneath the center of the road.

Just like how it was done back on earth, all 4 pipelines were placed underneath the road and buried at different depths.

In the case of a single lane road, all pipelines would still be placed underground... But their pipe sizes would be much smaller compared to that of a 2, or even a 6 lane road.

For rainwater drainage, the sidewalks along the roads would have what was usually called a 'catch basin'.

These basins would be placed periodically on both sides of the road, underneath the sidewalks.

Every after a certain distance, a catch basin would be seen draining the water away from the roads.

Their job was to gather all the water on the sides of the road, and pipe it to the main pipeline directly underneath the roads.

All street rainwater pipelines, would lead to all highway pipelines, and travel down towards the coastal region.... particularly District K.

At this point, Landon had realised that he needed to build a mini-estate that would focus on filtering out dirt from the water before it went to the ocean.

Roadside water drains could sometimes catch cans, plastic wraps, banana peelings, oil spills from cars, coins and so on.

With all this happening, the ecosystem and marine life had to be protected..... Plus he didn't want all those bottles, plastic wraps and cans to wash up the shores of Baymard.

It was just not beach sexy.

Hence before the water went into the ocean, it needed to pass through a filtering plant.

District K was a great location for the filtration plant. It was between District J (Beach resorts), and District L (Navy and other armed forces).

Who would like to turn up to a beach resort that had bottles and cans floating in the ocean?

On the other hand, the Sewage pipelines would also be directly underneath the left lane of all roads.

Sewage was a tricky one.

90% of sewage systems worked with the help of gravity.

Meaning that the pipes had to slope downwards from their source (sinks, toilets.. etc), to the wastewater treatment plant.

Luckily for Baymard, the treatment plant was in the lower region.

The upper region generally had a high elevation point to the central region... And the central region in turn had a slightly higher elevation point than the coastal region.

But the lower region had the lowest elevation point in Baymard, which was what Landon needed... In this way, all the waste would flow downhill with ease.

Gravity was needed because waste water generally had a lot of solids in it, which made pumping a pain in the butt.

There was tissue paper, bones from the sink, seeds from fruits, that would end up in the pipes... Making it very hard to pump.

But although pumping was stressful for sewage, it was still very much possible.

If there were areas that needed poop to travel over hills, grinded pumps or lift stations would be used to pressurize the poop.

The lift stations literally pushed the sewage up the hills, to a needed height where they could gravity-flow downwards again.

So in the ideal situation, pipes from each house would connect to a main sewer pipe underneath the road, and flow downhill by gravity.

And now that the men had marked out each residential unit around the blocks, they now knew how many residential sewage pipelines would branch out from the main sewage pipeline underneath the road.

There would also be manholes placed periodically along the pipes.

These manholes would act as access points, should incase a problem arises in the sewer pipeline.

For example if a toddler had a bad habit of frequently flushing down his toys in the toilet, there might be a clog over time with the sewer pipelines.

When that happened, the workers would have to use these manholes and unclog the area.

And aside from sewers, rainwater pipelines would also have manholes as well.

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Once Landon and the men arrived at the road site, they immediately got on the heavy machines and began work.

When they had their driving classes months ago, they had been thoroughly taught how to install all these piping units... And had also done so when they were constructing the other 3 industrial sites.

With months of experience under their belt, they immediately knew what to do when they looked at the piping plan.

And for the next 3 days, some people used excavators to dig up the ground, others placed the pipes with the hell of Draglines and other heavy machines.

Some leveled the ground with bulldozers, while others compacted the ground with compactors, rollers .

And since there were not enough machines for 5000 people, those that weren't driving, either jumped down into the trench and guided those who were on the machines placing the pipes, screwed the pipes together, continued marking the land, and so on...

At the end of the day, there was a job for everyone on site.

On the 6th and 7th day of the week, they completely tarred the roads using the pavers, spreaders, and other heavy machines.

Finally, they were done... well, almost done.

Although training week was over, Landon still added 2 more days for teaching.

The tar on the road would only take a day at most to dry, so while it was drying... the men did the sidewalks.

And once it was finally dried, road marking heavy machines were used to paint the roads.

The white painted lines usually differentiated each lane, bicycle paths, traffic lines, pedestrian crossing lines, and so on.

When everything was done, Landon could finally close his lessons on road construction.

Of course he had made up his mind that at least 2 days a week, he would come over to assist them..... As well as check up on their work.

Before Landon left, he divided the men into 2 main groups.

The 1st group would continue working on the residential roads within District E.... While group 2 would start installing the main highway pipelines, and connecting them to the coastal or lower regions.

Unlike the others, the main highway pipelines were not going to be placed beneath any highway road.

They would be placed at the sides, hence the men didn't need to necessarily touch the roads.

They just had to place the pipes alongside all highway roads, and connect them to the coastal region, or the plants in the lower region.... depending on what pipeline it was.

On the city plan, there were 3 main highway roads within the district..... Two had 3 lanes, while the last one had 6 lanes.

Landon needed the men to start working on those pipelines now....

At the end of the day... even if house or road construction within the District was done, if these pipelines weren't connected to the coastal or lower regions yet, then nothing would be supplied or drained.

No clean water, no heating, no sewage drainage, no rainwater drainage....nothing!!

Landon really wanted to get things done before it started snowing.

In Baymard... Snow usually started in the early days of December, and sometimes in the later days of November.

Landon's plan was to get the original Baymard citizens all housed up before then.

And at that time, all these features needed to be fully installed and working within in their homes.

Right now, Landon really wanted to finish this housing mission... but he also knew that Baymard's housing plans couldn't be rushed either.

For the system's mission to be completed, he needed to successfully house all the original Citizens of Baymard..... sigh.....

Long story short... Time was money, and he needed the citizens to be safe for the winter.

Hence, those pipelines needed to be installed A.S.A.P.

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While Landon jumped from one industry to the other, the royals and nobles in the Capital were perplexed over the lateness of one particular noble.

Everyone just had one question in mind.....

Where the hell was City lord Shannon?