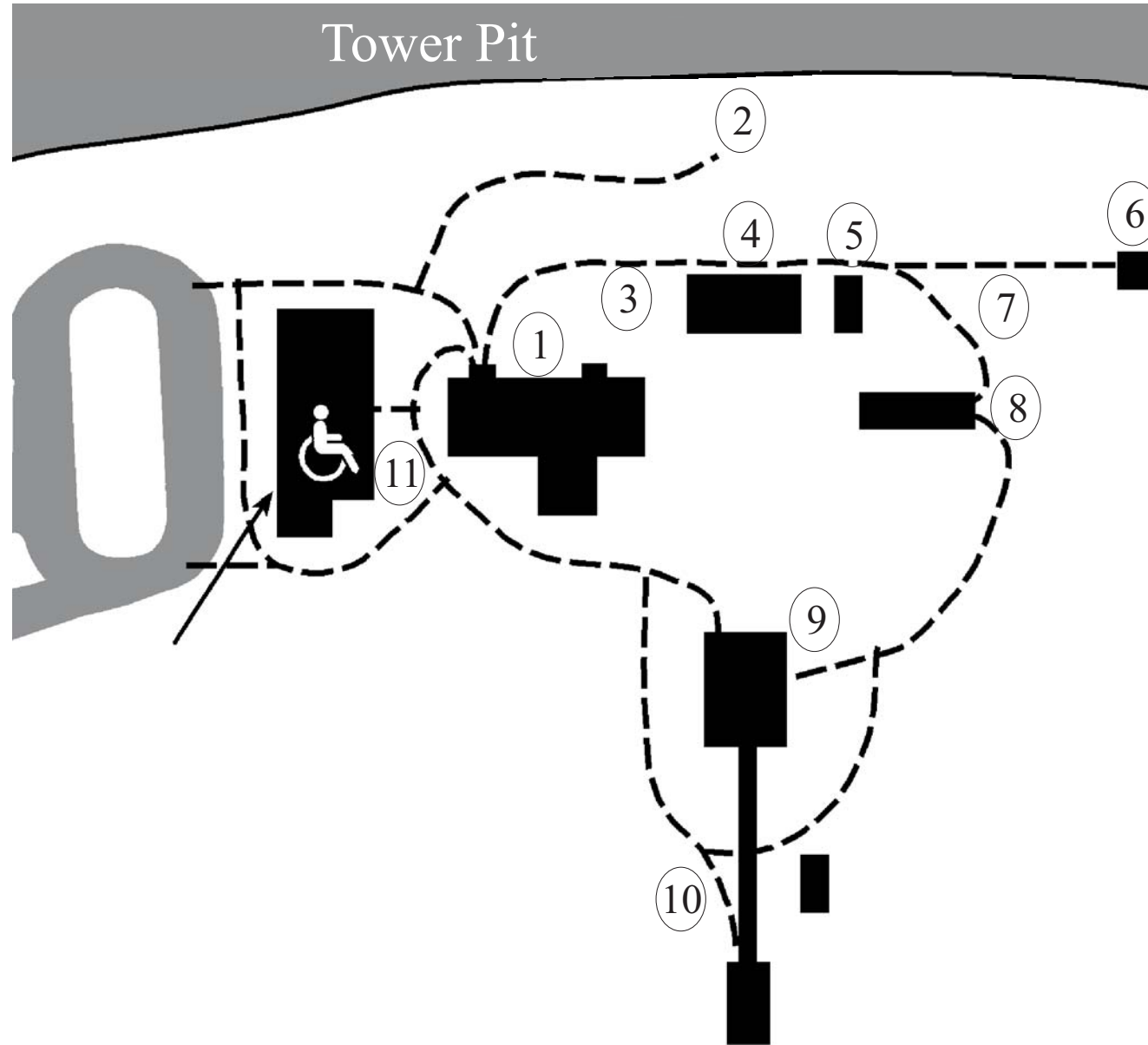


# Map of the Surface Facilities



Hike from number to number and learn about the surface facilities. You can check out an MP3 player and speaker at the front ticket counter, which will have audio files containing more information about each stop. A driver's license or state ID is required to check out the equipment. Each numbered stop has an individually named chapter on the MP3 player. Select the proper chapter and press play.

## 3 Man Cage and Ore Skip

This piece of equipment held the men and carried the ore. The top level where the men rode was called the "man cage" and the basket that carried the ore was called the "ore skip". The mine never shipped ore and men at the same time, as it was considered unsafe. The ore skip can hold 6 ton of iron ore.



## 4 Headframe

The ninety-foot high steel tower or "headframe" stands over the No.8 shaft, which was the only shaft used for ore production in the final years of the mine's operation. The purpose of the headframe is to position the large bicycle type "sheave wheels" at the height and angle needed for "high speed" hoisting from the slightly inclined shaft.

## 5 Rescue Room

The front half of the building housed the mine rescue equipment. This included "stoke" stretchers and breathing apparatus used in the event of an underground fire. The back housed a spare "Larry" car for hauling ore to the crusher.

## 1 Dry House

This building is known as the Dry House. It contained lockers, drying hooks for wet mining clothes, and shower facilities. Miners changed clothes in the Dry House and they hung their wet mining clothes to dry at the end of each shift by raising the clothes on hooks to the ceiling. In addition to the locker rooms, miners picked up their charged battery lamps for their hardhats in the Dry House. The office of the Mine Superintendent was also located here.

## 2 Tower Mine Pit

The Tower Mine pit is one of the original pits on the property. It was first mined by Elisha Morcum and his crew in 1884, and is named after Charlemange Tower, the first owner of the Soudan Mine site. The ore was drilled by hand and blasted, so that it could be removed from ground. As the hole continued to get deeper, the miners realized that underground mining would be safer. Look at the loose rock laying on the top of the pit walls and you can understand their reasoning. By 1892 the mine was totally underground.

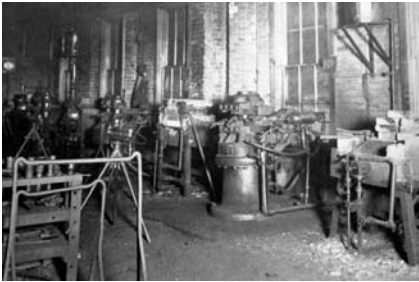


## 6 Security Shack

There was a guard on duty 24 hours a day. The security of the site was especially important during the World Wars. Since the mining operation played such a huge role in supplying our country's need for iron ore for military equipment, the security and safety of the mine was paramount.

## 7 Underground Implements

The equipment seen here is a sampling of the equipment used in the underground operations. The equipment includes a "Grandby" car and a "Soudan" car – used to haul ore; drills – used to prepare the rock for blasting; Eimco loader – used to load the ore cars; and a tugger – used to move the ore after it was blasted.



## 8 Drill House

The rock material – iron ore and jasper – found at Soudan are incredible hard substances. The only way for miners to remove the ore was to drill holes into the deposit and blast the formation to pieces with an explosive. This took its toll on the drill bits. They needed to be sharpened and tempered daily, so the miners had effective equipment with which to work. This process took place in the Drill House.

## 9 Crusher House

The ore from Soudan was of exceptional quality. It did not need any processing, other than crushing it into seven inch lumps. The crushing took place in the Crusher House. There are two crushers, one manufactured in 1893 and the other in 1937 by Allis Chalmers that performed this task. After being crushed the ore was sent to the trestle.



## 10 Trestle and Stockpile

Once the ore left the crusher, it went to the trestle to be loaded into awaiting ore cars or placed in the stockpile for future shipment. The ore was stockpiled in the winter due to shipping closures on Lake Superior. The area beneath the trestle is where ore was stockpiled.

## 11 Engine House

The Engine House is the backbone of the mine. Miners and ore did not move without the aid of the Engine House. It is one of the oldest structures on the property. The hoist system for various shafts was located in this building. The No.8 shaft hoist is still operational, dating back to 1924, which is what we use today.



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Photos courtesy of George Wells

Text created by James Pointer

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# Soudan Underground Mine – The Rest of the Story

(An audio surface tour)



The majority of the workings of Soudan Mine lie underground, however; the surface facilities played a vital role in iron ore production. Hike from location to location and learn the rest of the story.

When you are finished with the brochure, please return it to the rack if you do not want to keep it. This will help save on costs and help protect our environment. Thank you!

*Funding for this project was provided by Nature Store Sales.*