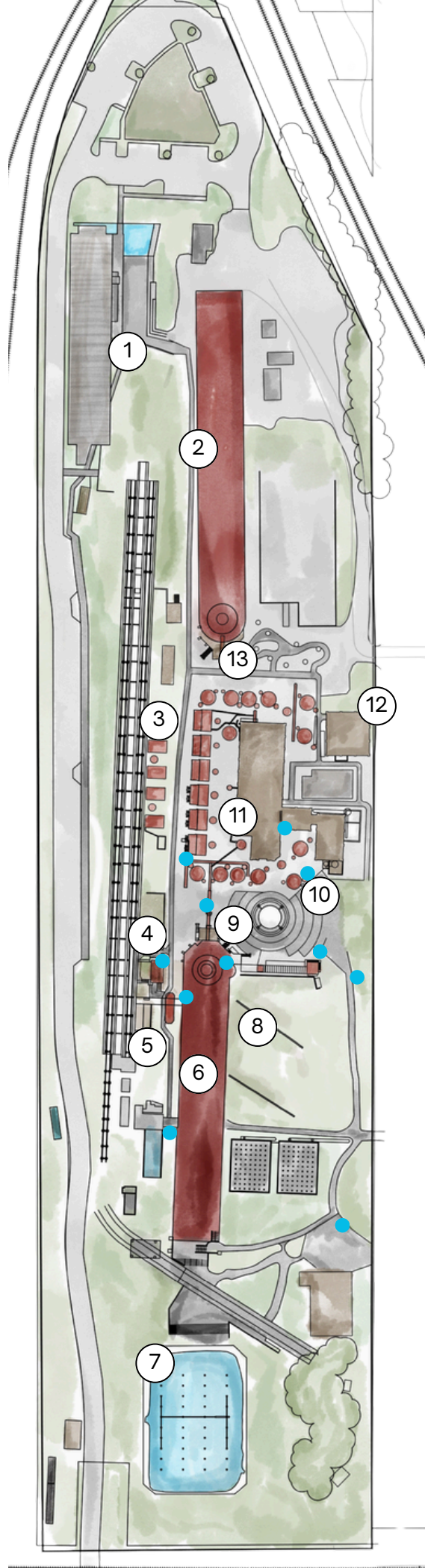




Your donation supports the preservation of Sloss and sustains our arts and education programs.

slossfurnaces.org

205-254-2025
20 32nd Street North
Birmingham, AL 35222

Tuesday-Saturday, 10:00AM-4:00PM
Sunday, 12:00PM-4:00PM

SLOSS

Self-Guided Tour



- 1 Visitor Center
Self-Guided Tour Starting point
- 2 No. 2 Casting Shed
Sloss Metal Arts
- 3 Boilers
- 4 Stock Tunnel
- 5 Ladle Car &
Pig Casting Machine
- 6 No. 1 Casting Shed
Ramp access to Furnace
- 7 Spray Pond
- 8 Slag Pit
- 9 Pyrometer House
- 10 Hot Blast Stoves
- 11 Blowing Engine Room
- 12 Power House
- 13 Sculpture Garden
- Informational Sign

Help us preserve Sloss

No climbing on any structures
No climbing over fences/handrails
No writing in dust, making marks, or graffiti
Do not take items from the site including
rocks, metal, artifacts or other found
objects.

1

This tour begins at the Visitor Center. This building houses exhibits, an education room, gift shop, event space, offices, and restrooms. Storyboards in the education room tell the history of the site.

Exit the Visitor Center through the door next to the stairs. Walk towards the No. 2 Casting Shed. You'll see the Historic Black Bath House on your left towards the end of the shed. A sign on this building tells its history and story.

2

The No. 2 Casting Shed once covered where iron was poured from the furnace. It now houses our world-renowned Metal Arts Program. Artists teach classes, demonstrate the iron-pouring process, create artwork, and host public events. Sloss Metal Arts also hosts the National Cast Iron Conference every 2 years, bringing 600+ artists from all over the world to Sloss to share their knowledge.

The No. 2 Cast Shed is CLOSED to the public.

Turn right and follow the sidewalk until you reach the boilers.

4

This tunnel system moved raw materials—iron ore, limestone, and coke—into the blast furnaces. Trains arriving from mines and quarries would unload these materials into large storage bins located above the tunnel. Workers inside the 250-yard-long tunnel would open chutes to release the materials onto a scale car below. The car weighed out the ingredients, then loaded it into buckets on the skip hoist. The skip hoist carried the materials up the furnace ramp, where they were dumped into the top of the furnace for smelting.

Walk down the two flights of stairs into the Stock Tunnel. The Scale Car is on your right as you enter. Look up the Skip Hoist and down the tunnel to see the buckets and chutes.

Retrace your steps out of the tunnel and up the stairs. Turn right to continue down the sidewalk.

5

The large steel Ladle Car on your left, lined with heat-resistant firebrick, was used to transport molten iron from the furnaces to the Pig Caster. Both the Ladle Car and Pig Caster were brought to Sloss in 1931, modernizing the iron-casting process.

In front of you are the remains of the Pig Caster. At its center was a moving conveyor belt made of linked ingot molds. The Ladle Car would be pulled into position and tilted to pour molten iron into the molds. The molds were then sprayed with water to cool the iron before being flipped to release the solid “pigs” into waiting railcars.

This automated system replaced the older, more labor-intensive floor casting method.

Turn to your left to head inside the No. 1 Casting Shed.

6

You are standing inside the No. 1 Casting Shed. Above you on the left is No. 1 Furnace—one of two furnaces installed in 1927 and 1929 to replace the original 1882 Furnaces. These blast furnaces were fed a continuous mix of iron ore, limestone, coke, and hot air, reaching temperatures up to 3,800°F. As materials melted inside, molten iron and slag collected at the base, or hearth. Every four hours, workers would open the iron notch, allowing the iron to flow out of the furnace. Until 1931, Sloss used the floor-casting method to shape the iron into bars (or ingots). The shed floor was filled with sand, and workers carved mold patterns directly into it. A central trench—called a runner—carried molten iron from the furnace, branching off into ingots. Workers thought the ingots looked like piglets, and this is how they came to be called ‘pig iron’. This process was phased out in 1931 when the Pig Caster was installed, mechanizing the casting process.

Head up the ramp to on your left to get up close to the No. 1 Furnace. The stairs behind the furnace will take you to stop 9.

Or, head back down the ramp towards the front of the shed to see the Spray Pond (stop 7), and take the scenic route past the Slag Pit (stop 8).

8

Slag—a waste product from the ironmaking process—was drained from the furnace every 2-4 hrs into this pit. Similar to lava, the glowing slag was either left to cool in the pit or sent through the slag granulator, where it was sprayed with water, cooled, and then crushed.

Although a by-product, slag was still valuable. It was used in products like concrete, insulation, and drywall. Sloss’s slag pits even impacted the city—during the 1920s, overflowing slag occasionally spilled onto 1st Avenue North, halting traffic. The road was eventually raised to prevent further disruptions.

Continue down the sidewalk towards the Water Tower Plaza.

7

Sloss used 5 million gallons of water every day. This was used to cool the furnaces, create steam, power machinery, and cool the molten iron and slag. After it was used, the hot water was then piped to the spray ponds, cooled, and then recycled back through the plant.

Turn to your left and follow the sidewalk until you reach the Bath House, then continue down the sidewalk that runs parallel to the No. 1 Cast Shed.

9

This two-story brick building below No. 1 Furnace is the Pyrometer House, named for the temperature-measuring instruments that were in the upstairs room.

Downstairs, it served as a millwright shop where repairmen maintained and fixed furnace equipment.

Built to be the strongest structure on site, it served as a shelter for workers during dangerous situations. Because of this, workers nicknamed it “the dog house,” joking that if the furnace got mad, it sent them here. Today, the Pyrometer house is used as studio space for artists in the Metal Arts program.

Turn towards the base of the water tower and look at the red silos on your left.

10

These six tall, cylindrical structures—five in a row and one around the corner—are Hot Blast Stoves. They preheated the air before it was sent into the furnace.

Each stove has a steel shell lined with heat-resistant bricks and filled with a lattice of firebrick called “checkers.”

To operate, waste gas from the furnace was burned inside the stove to heat the checkers. Then the gas was shut off, and air was blown through the hot checkers, raising its temperature to about 1,400°F. This superheated air traveled through large, brick-lined pipes into the furnace, making the ironmaking process more efficient.

Walk through the Water Tower Plaza and continue through the door on your left into the Blowing Engine Building.

11

In the first two rooms of this building are two Ingersoll-Rand Turbo-Blowers, installed in 1949 and 1951. These steam-powered centrifugal compressors replaced all eight of the original blowing engines behind them. Compact but powerful, the Turbo-Blowers forced high-pressure air into the furnace and generated intense heat—indoor temperatures sometimes reached 120°F in the summer.

Continue past the Turbo-Blowers and down the steps into the original Blowing-Engine Building.

Built in 1902, this is the oldest building on site. These steam-powered engines stand over 30-ft tall and drove massive 20-ft flywheels at about 30 revolutions per minute. Though built in the 20th century, they represent the peak of 19th-century technology that powered the Industrial Revolution.

Each blowing engine had two cylinders: one for steam and one for air. Steam moved the pistons in the first cylinder, which powered a second piston to compress air and send it to the furnace. These engines were incredibly loud—comparable to standing front row at a rock concert.

Follow the path immediately to the right of the steps. Exit through the door on the right at the end of the building, continuing up the stairs, to the right, and into the Power House.

12

Built in 1922, the Power House supplied electricity to the Sloss plant and to the nearby worker housing known as the Sloss Quarters. Steam from the boilers powered a turbine upstairs, which spun a generator to create electricity.

The electricity produced was alternating current (AC), which then passed through machines on the ground floor that converted it into direct current (DC) needed to run the plant’s equipment at the time.

Exit the Power House and continue down the sidewalk on your right towards the Sculpture Garden.

13

The Sculpture Garden was established in 2023 and exhibits large-scale sculptures by artists from around the world.

This concludes the tour! Continue down the sidewalk past the base of the No.2 Furnace, and turn right to return to the Visitor’s Center.

**Learn more
about the
history of Sloss**

