11.307 Beijing Urban Design Studio
Summer 2008

Long Narrow Strip

Engine for Reclamation

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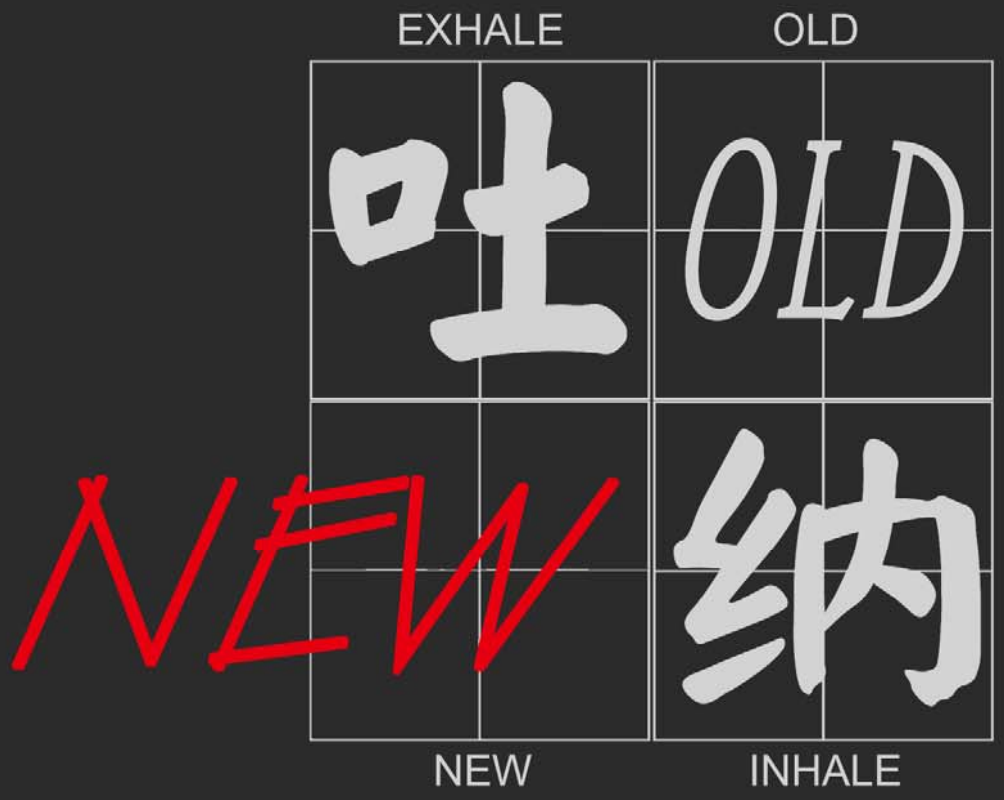
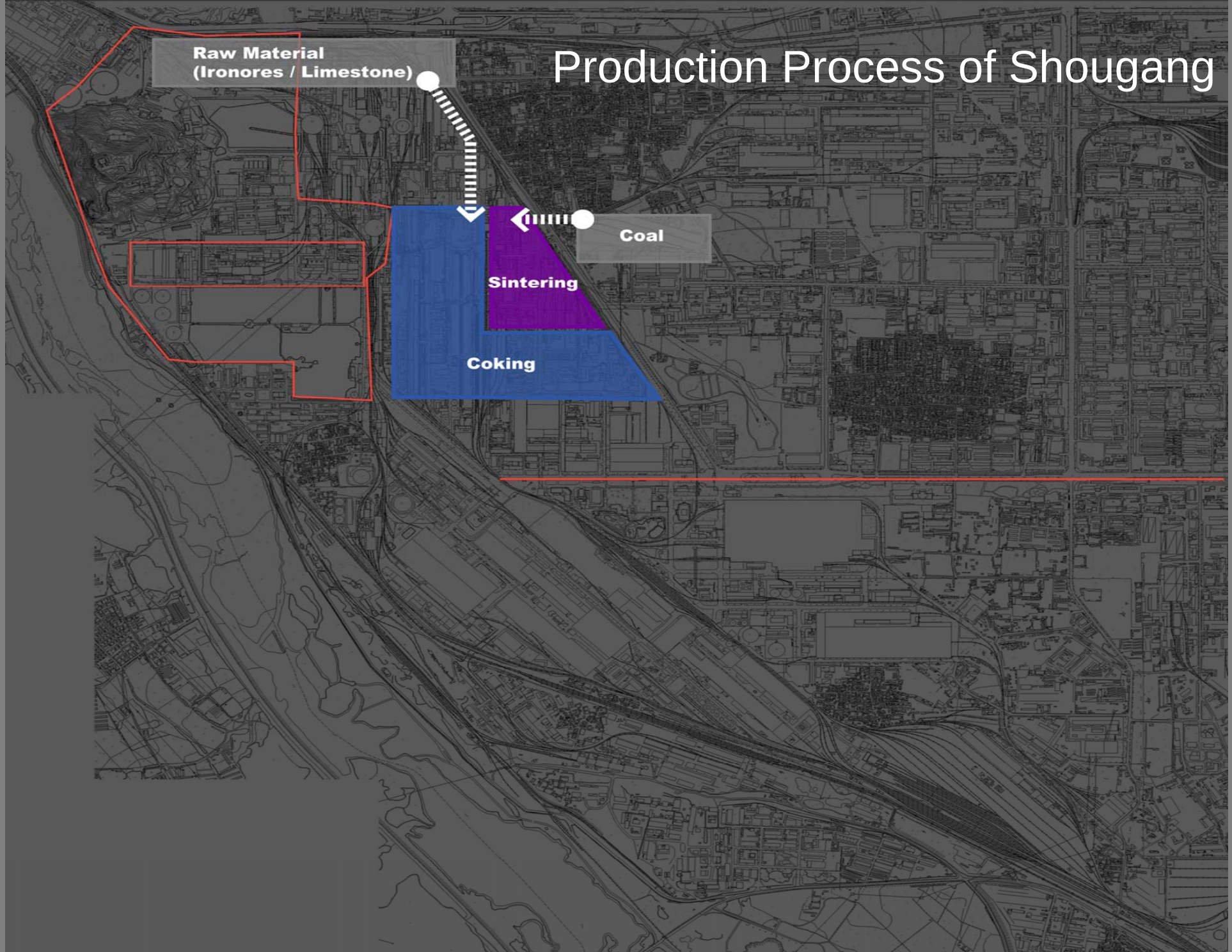
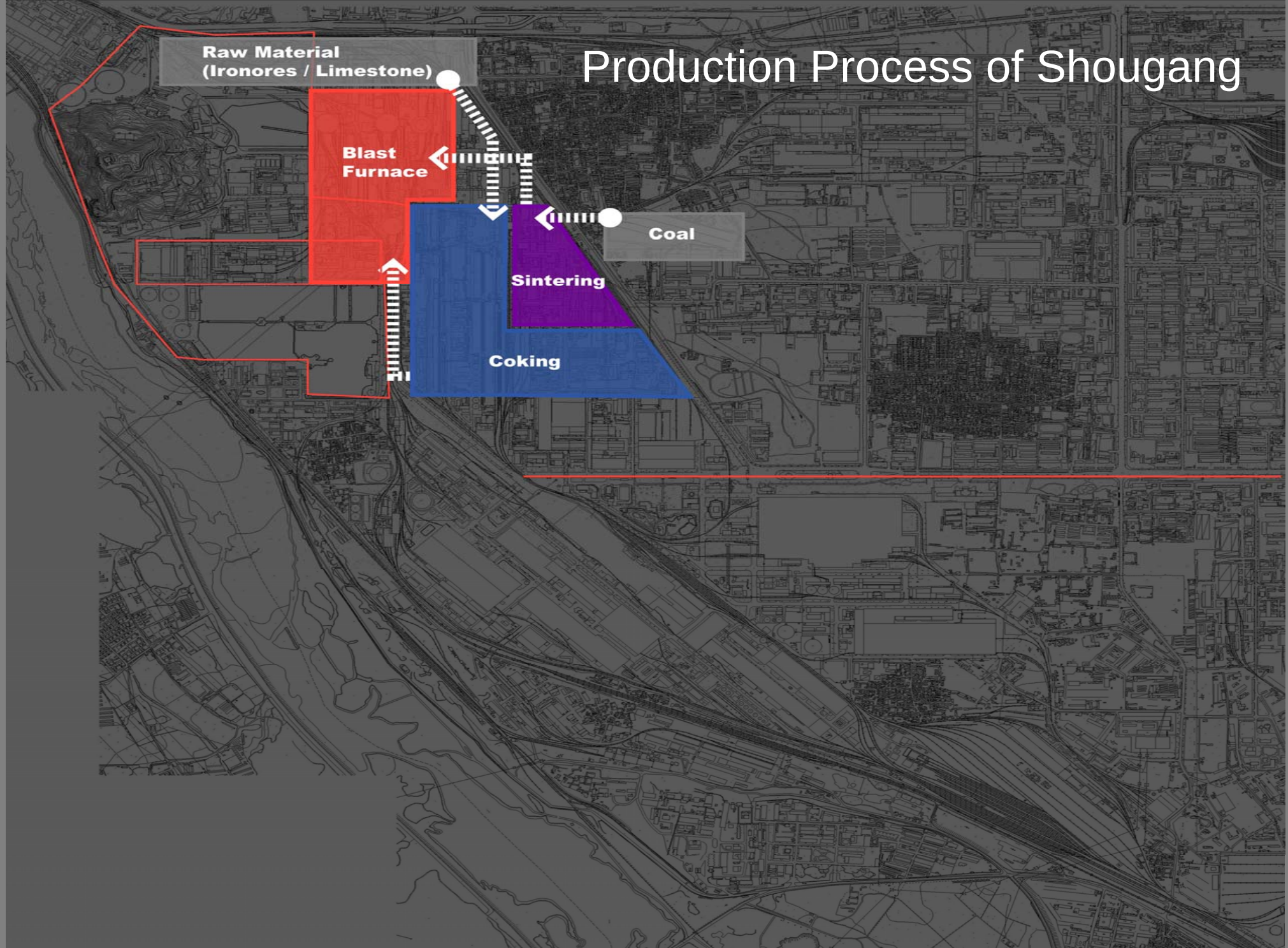

EXHALE
OLD
吐
OLD
NEW
纳
NEW
INHALE

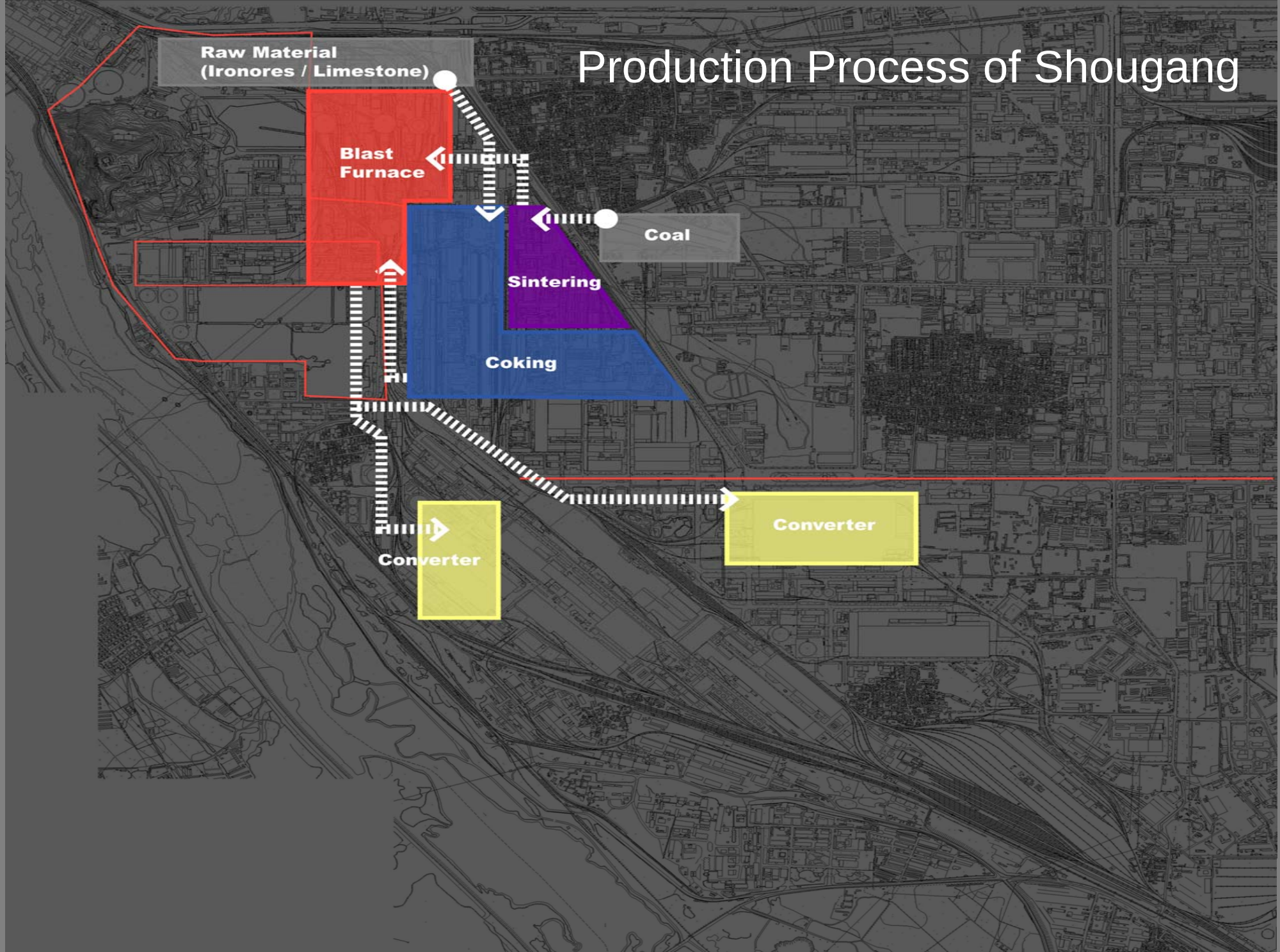
Production Process of Shougang



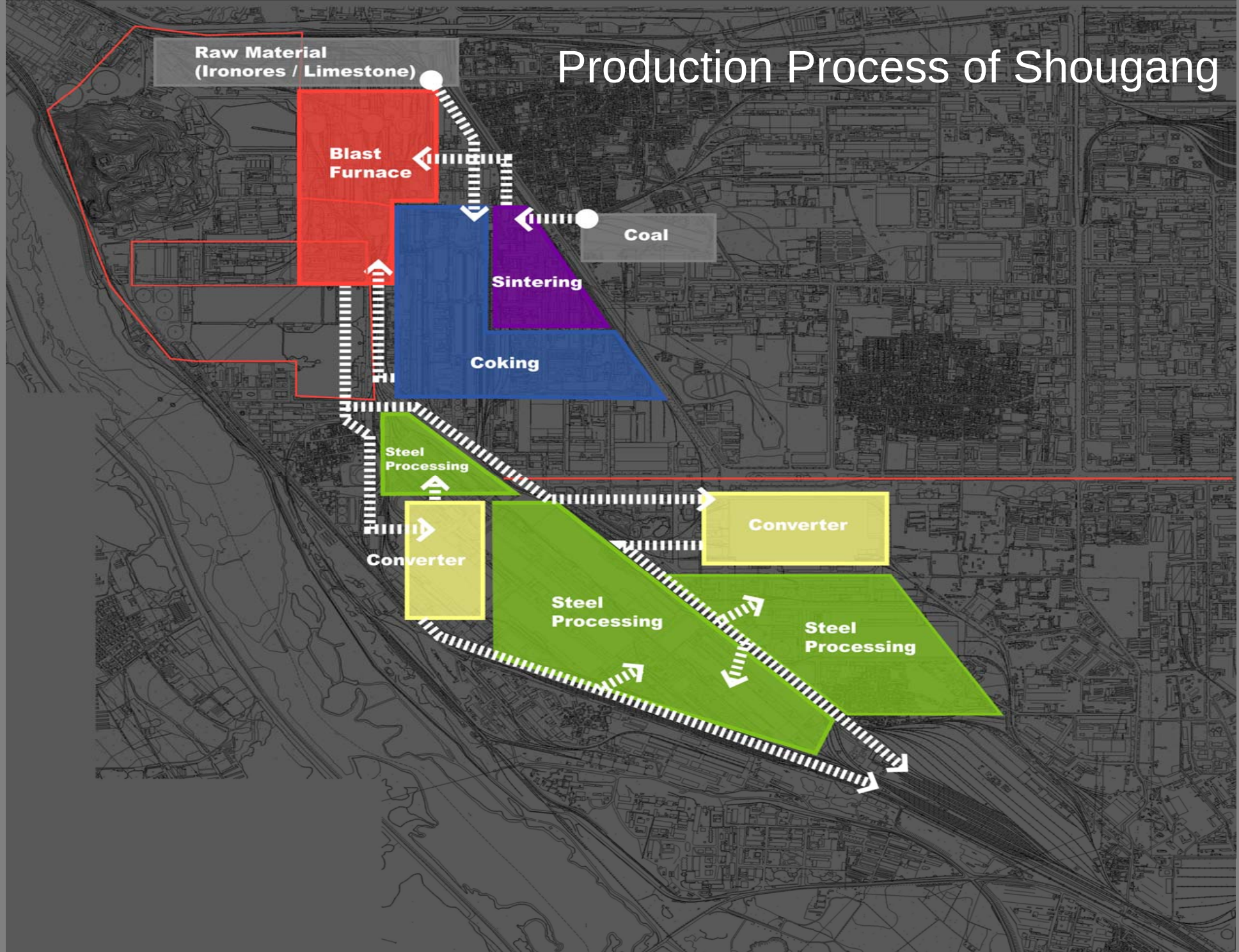
Production Process of Shougang



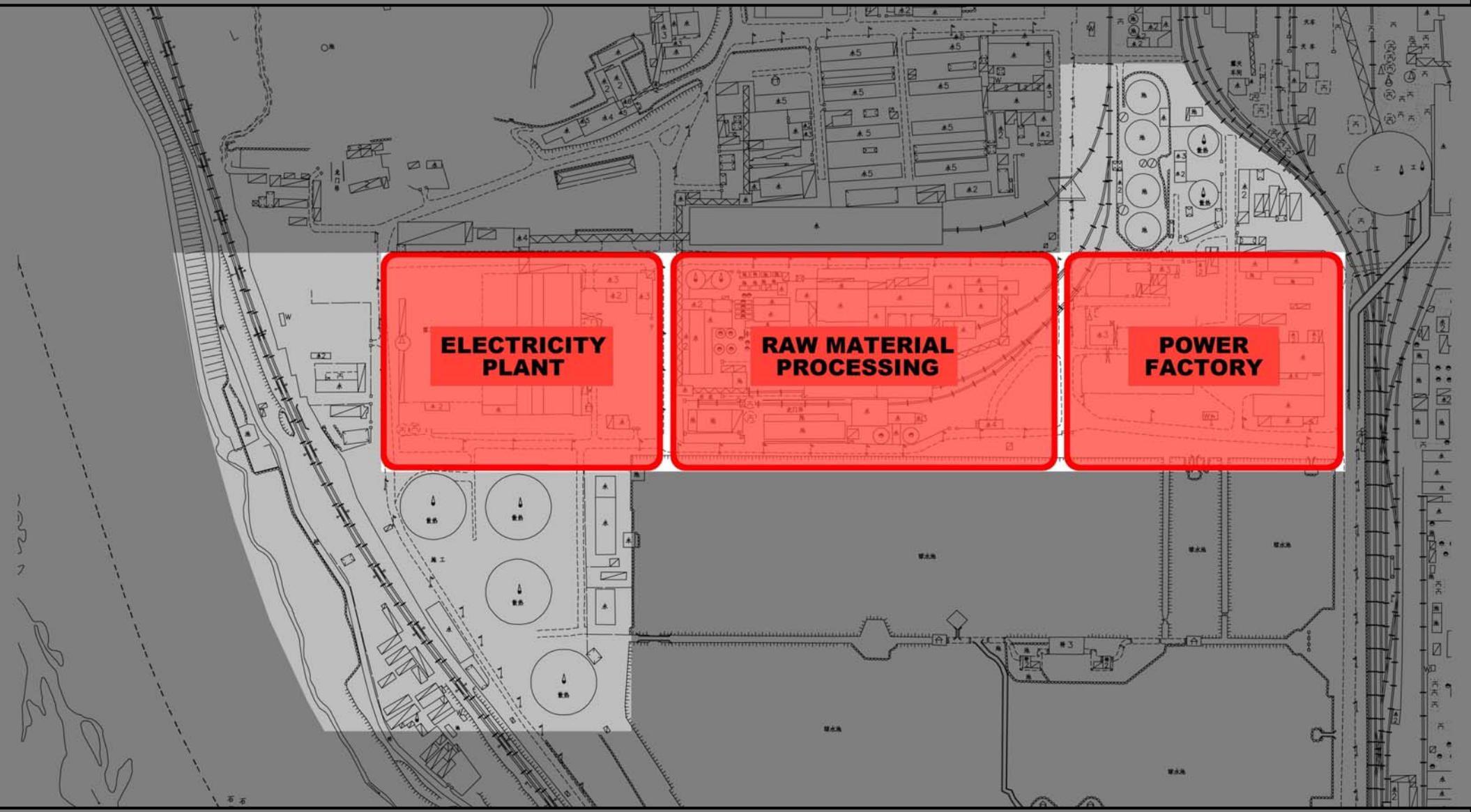
Production Process of Shougang



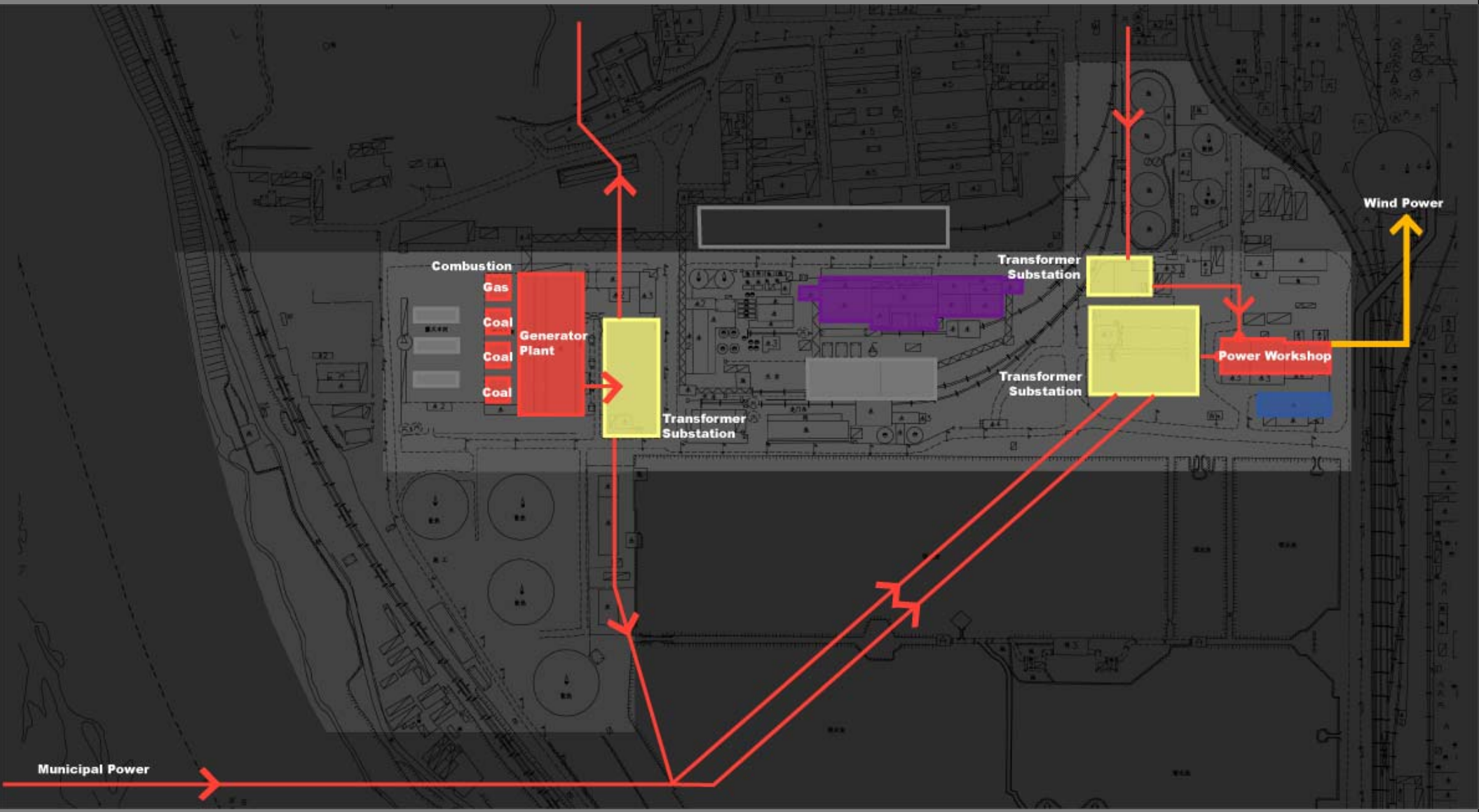
Production Process of Shougang



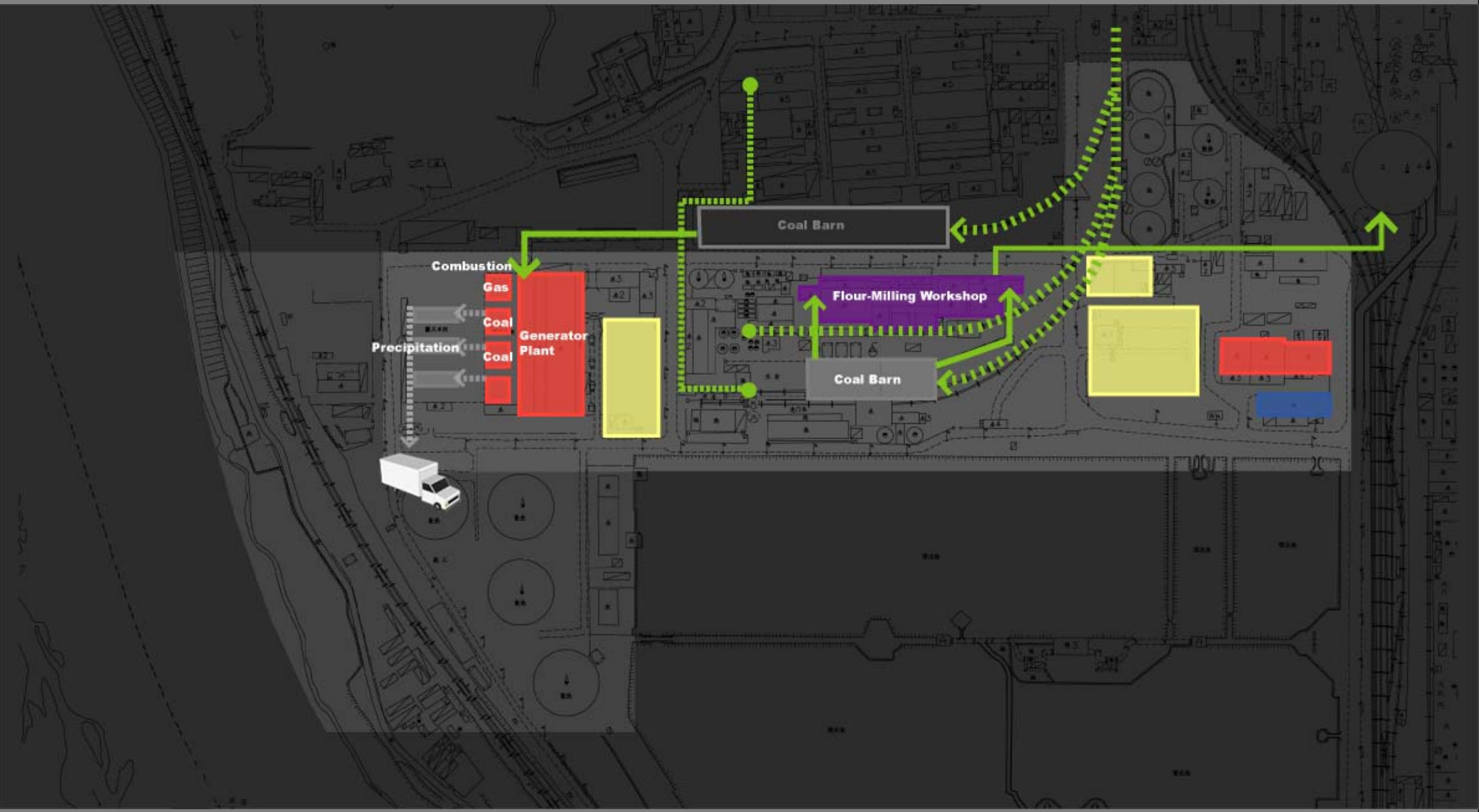
Different Zone

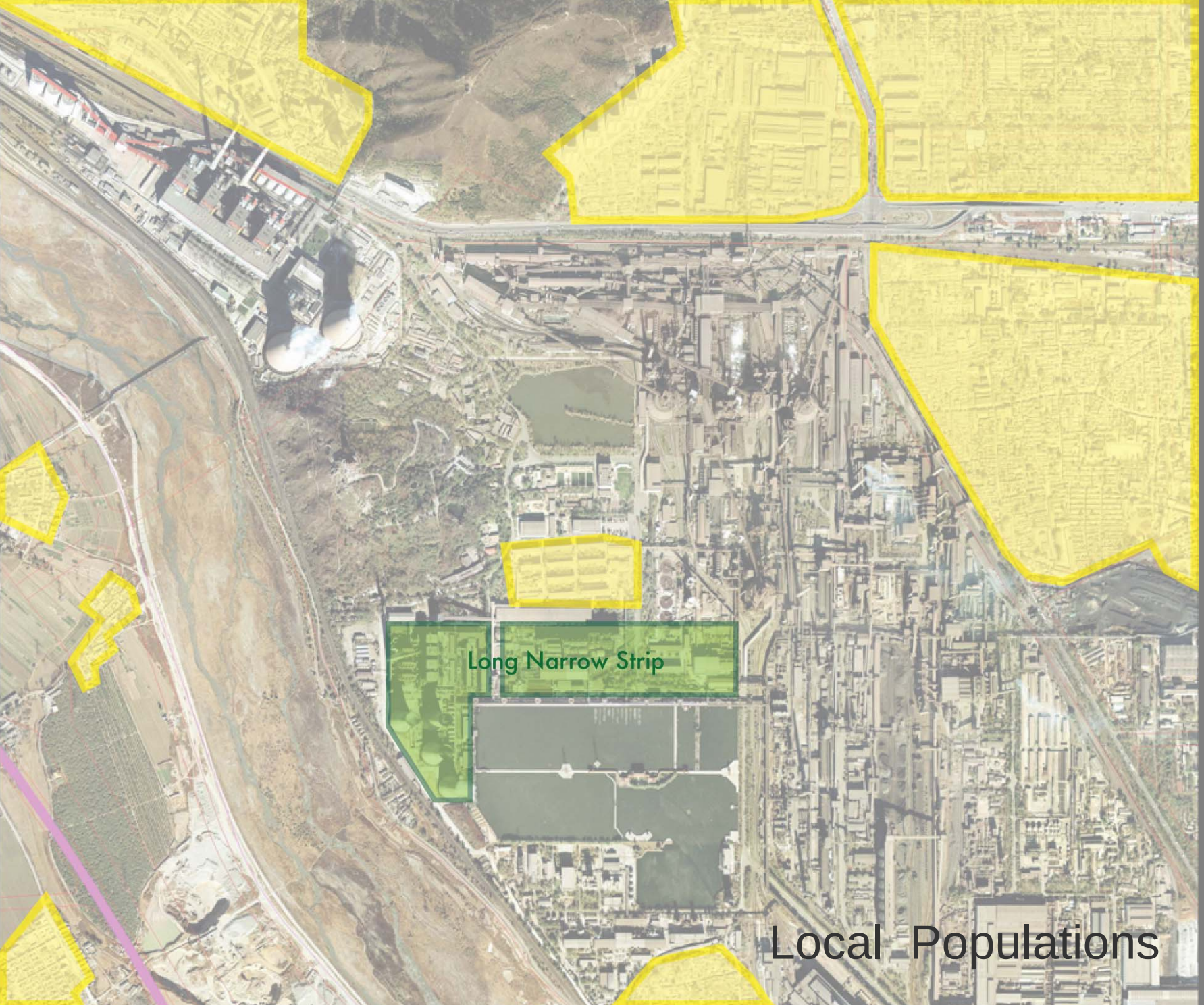


Power Flow Within Site

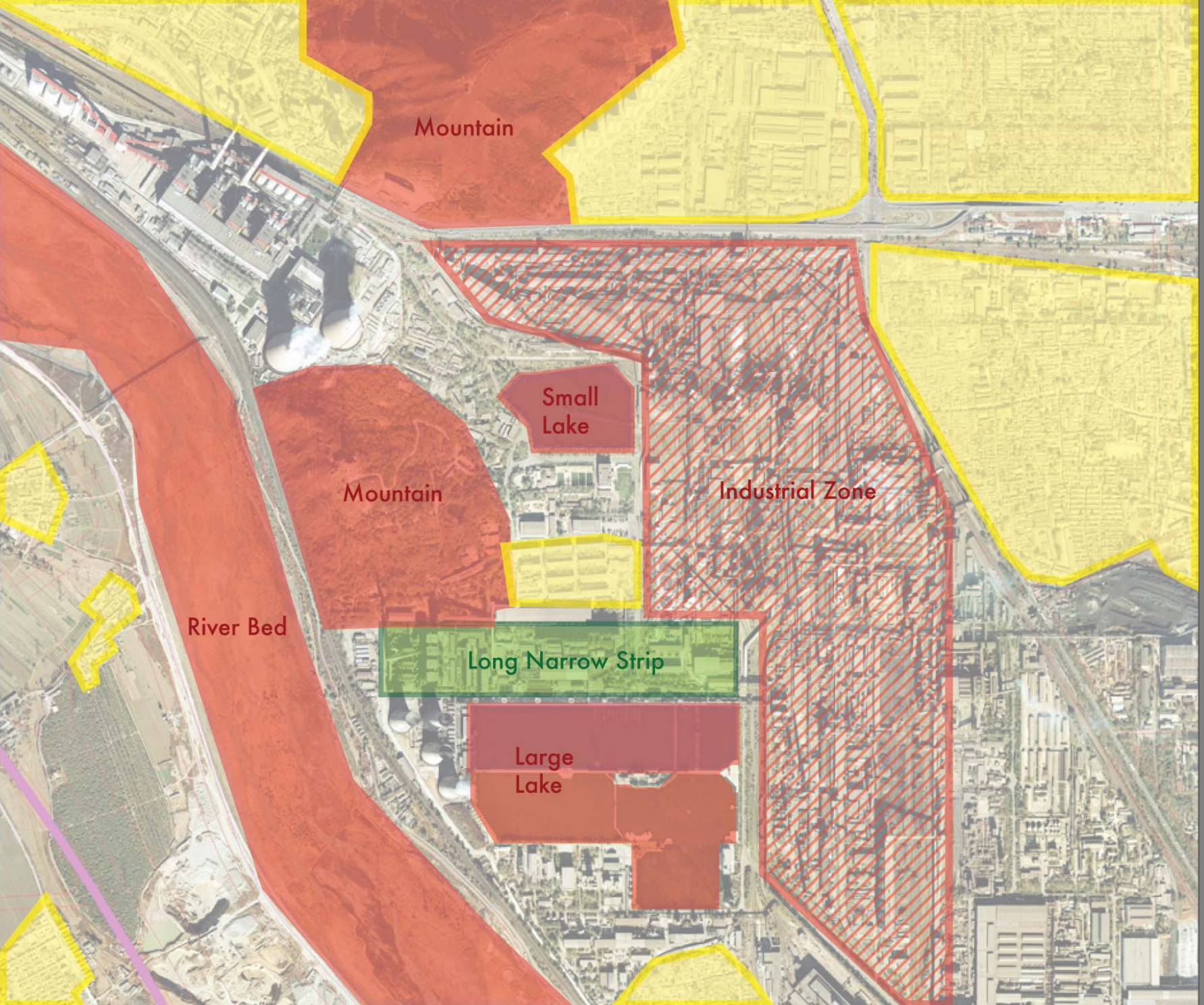


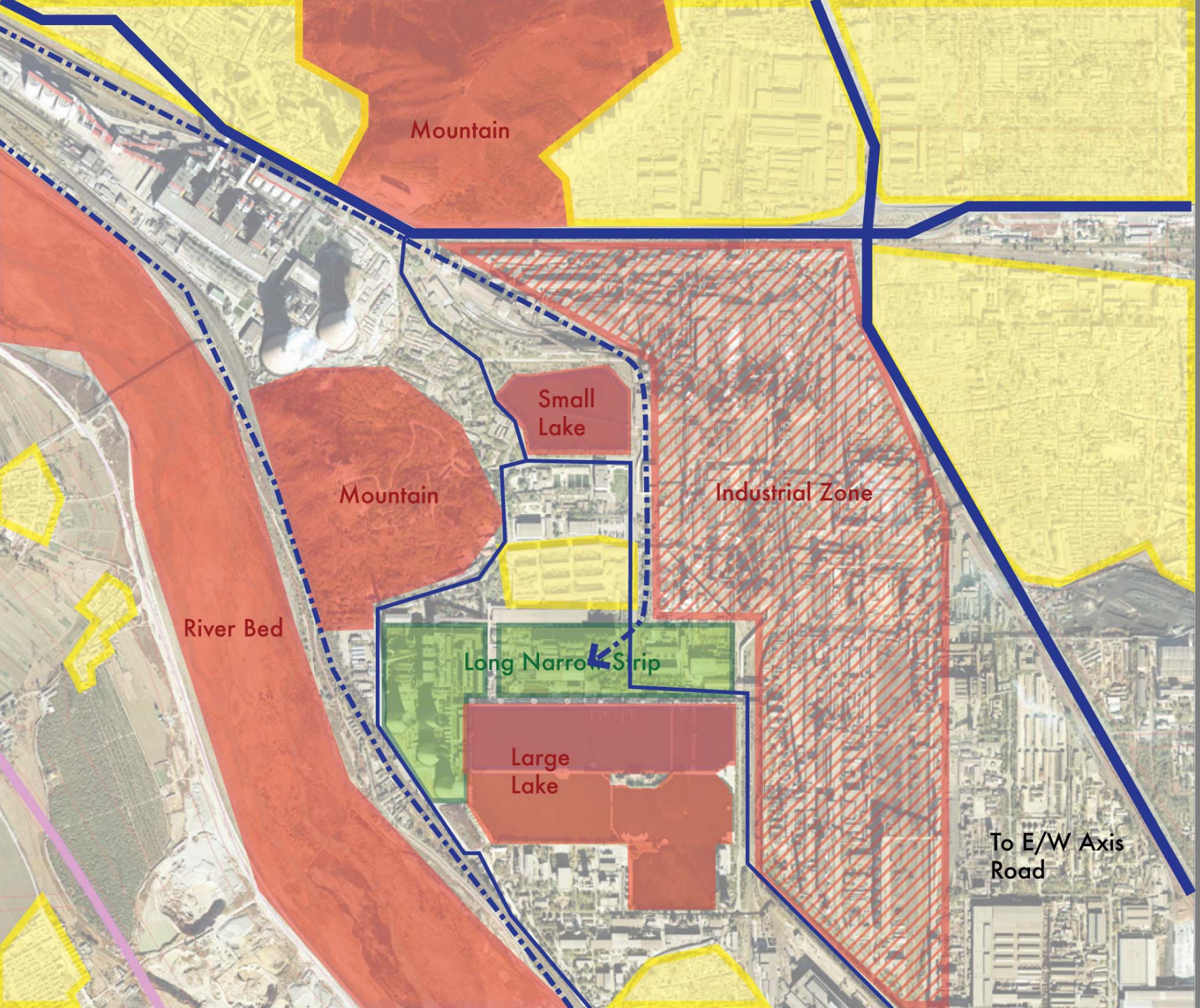
Material Processes Within Site

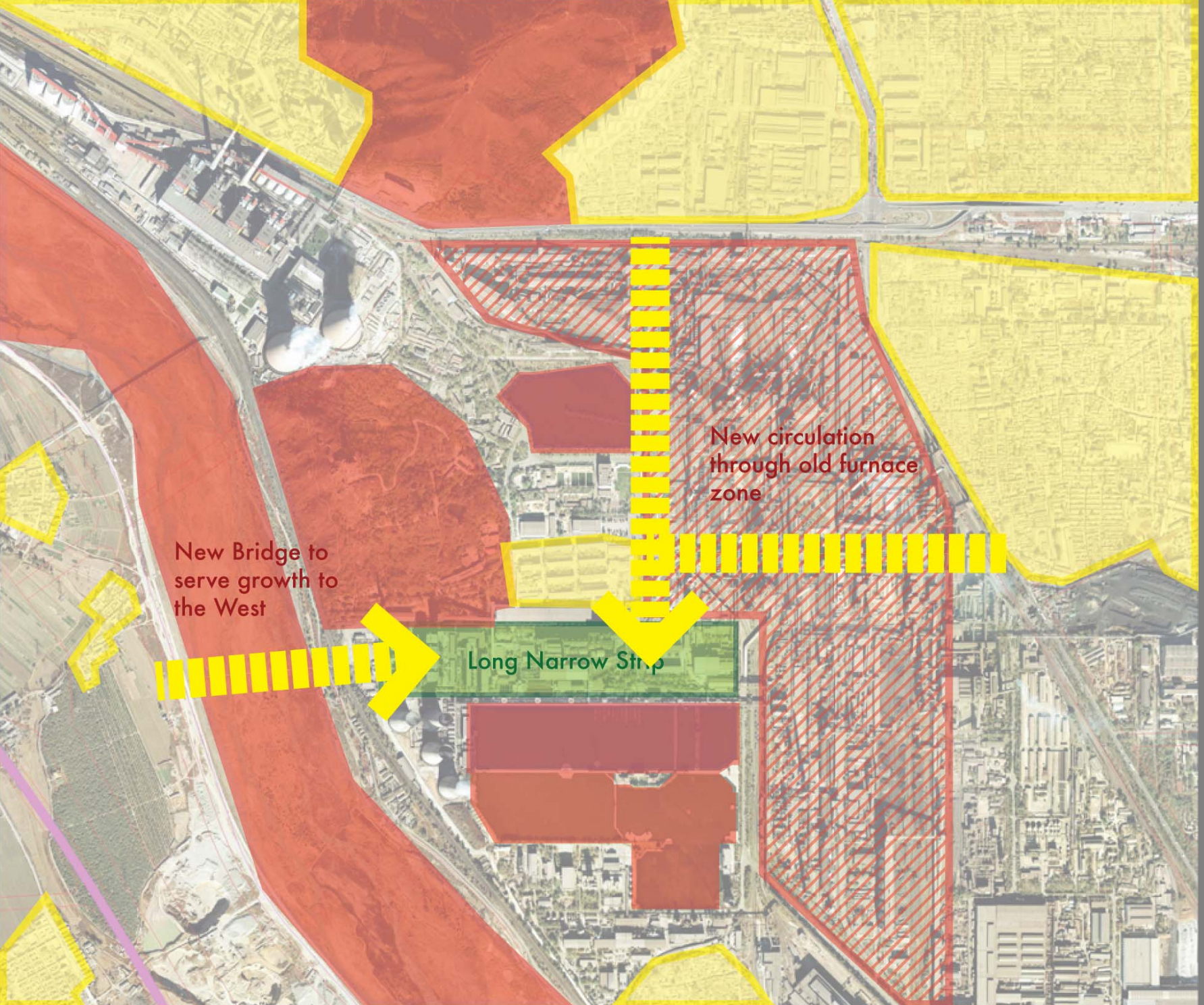


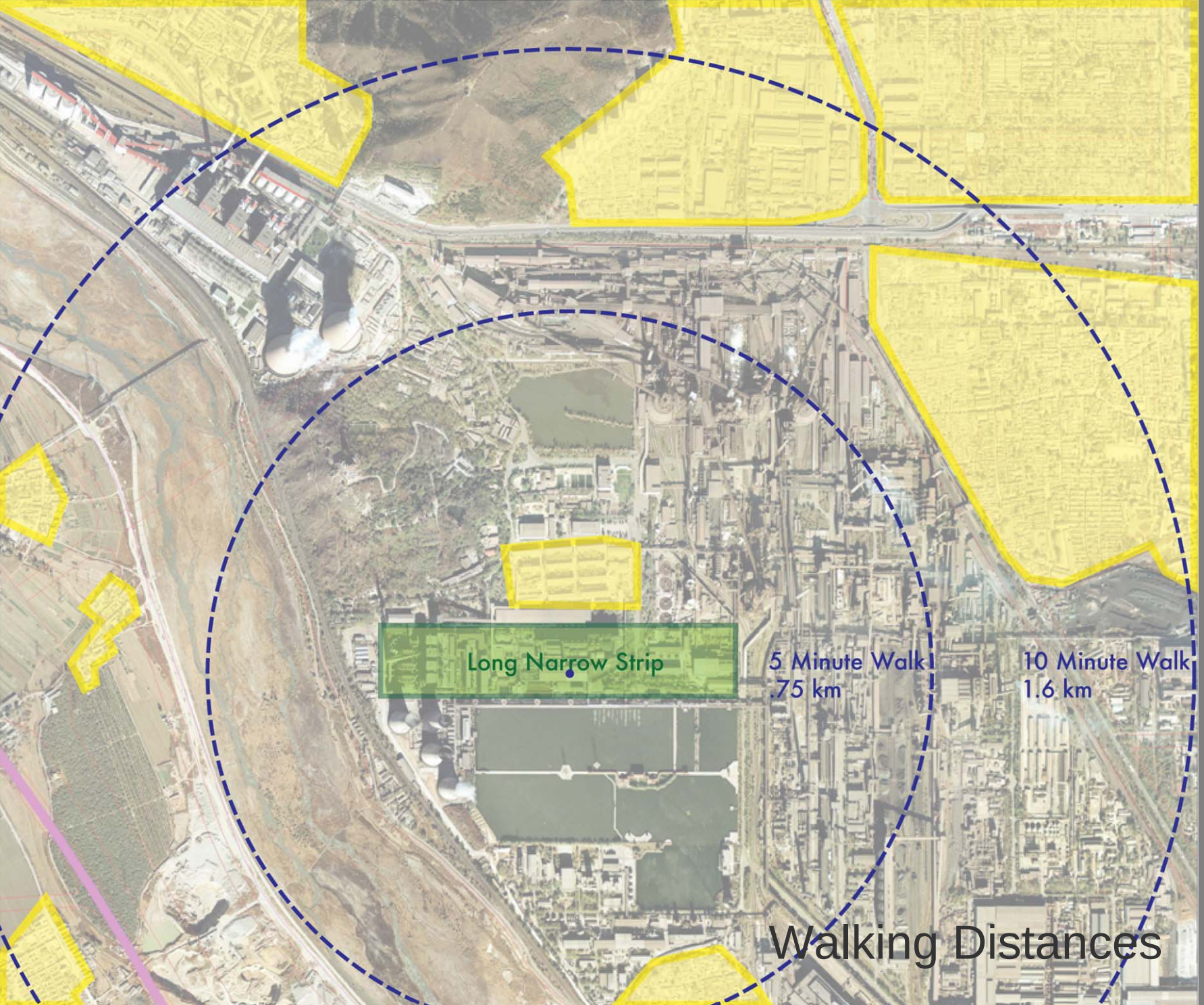


Local Populations

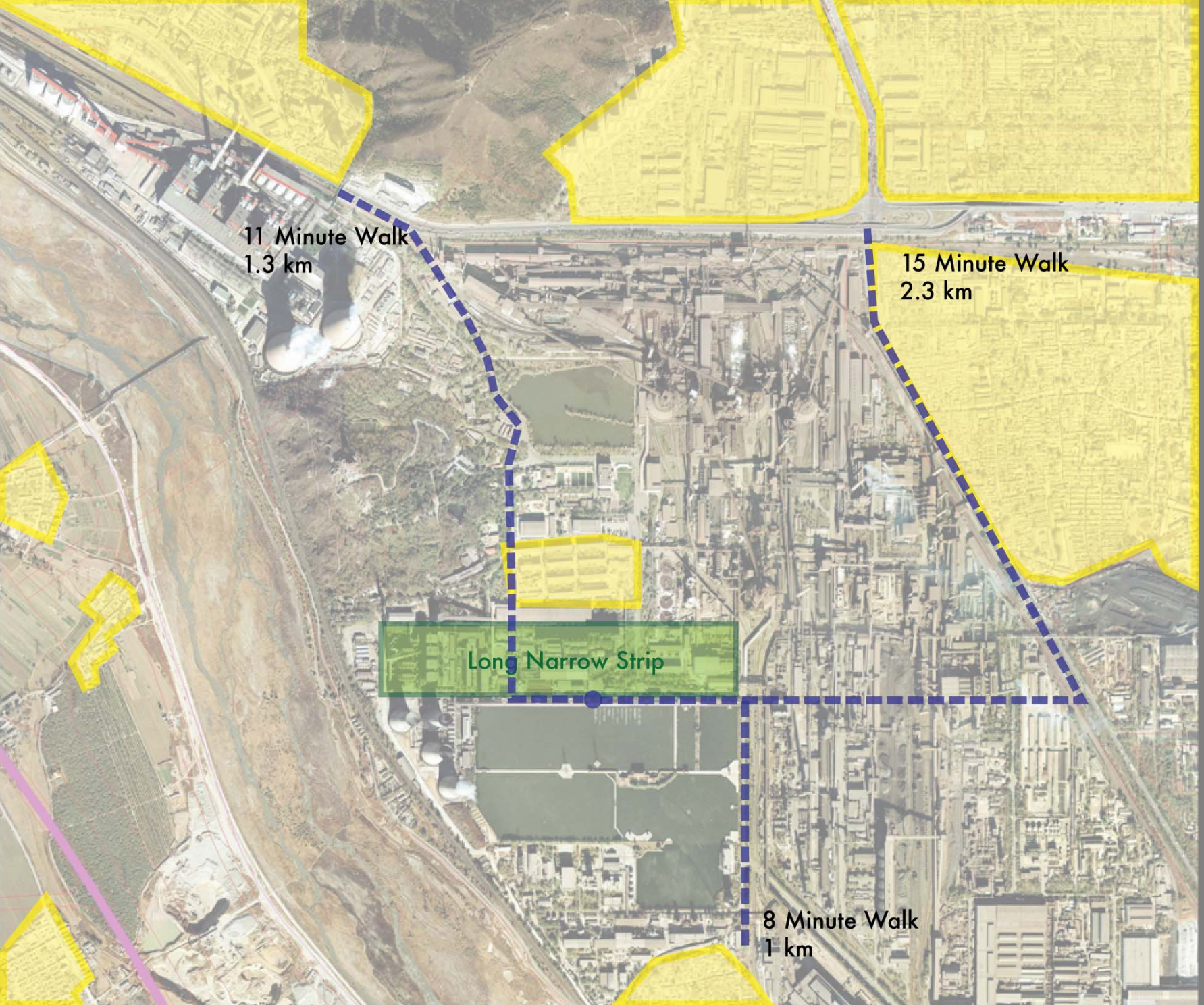

Mountain
Small Lake
Mountain
Industrial Zone
River Bed
Long Narrow Strip
Large Lake

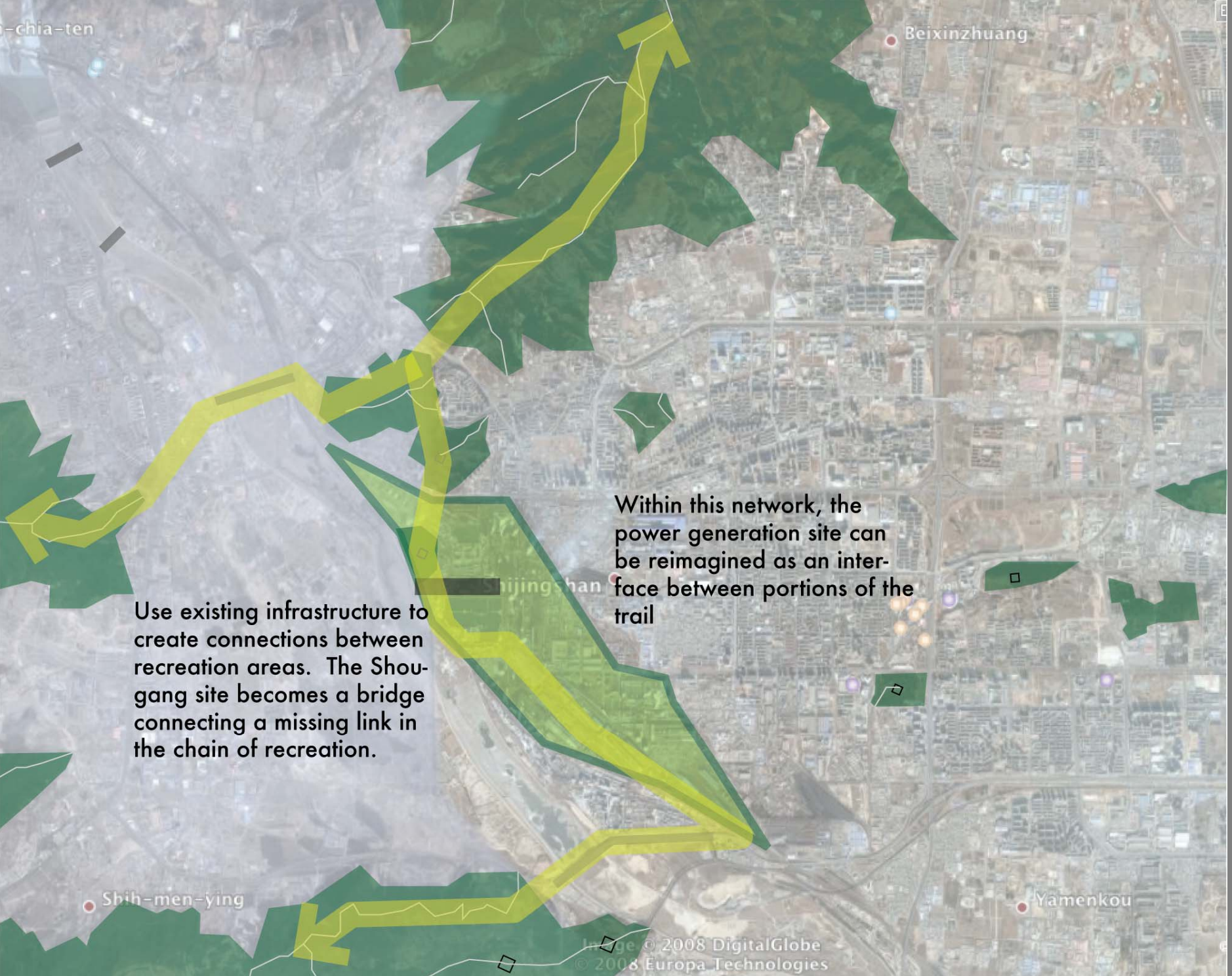

Mountain
Small Lake
Mountain
Industrial Zone
River Bed
Long Narrow Strip
Large Lake
To E/W Axis Road


New circulation through old furnace zone
New Bridge to serve growth to the West
Long Narrow Strip



Walking Distances


11 Minute Walk
1.3 km
15 Minute Walk
2.3 km
Long Narrow Strip
8 Minute Walk
1 km


Beixinzhuang
Within this network, the power generation site can be reimagined as an interface between portions of the trail
Use existing infrastructure to create connections between recreation areas. The Shougang site becomes a bridge connecting a missing link in the chain of recreation.
Shih-men-ying
Yamenkou
Image © 2008 DigitalGlobe
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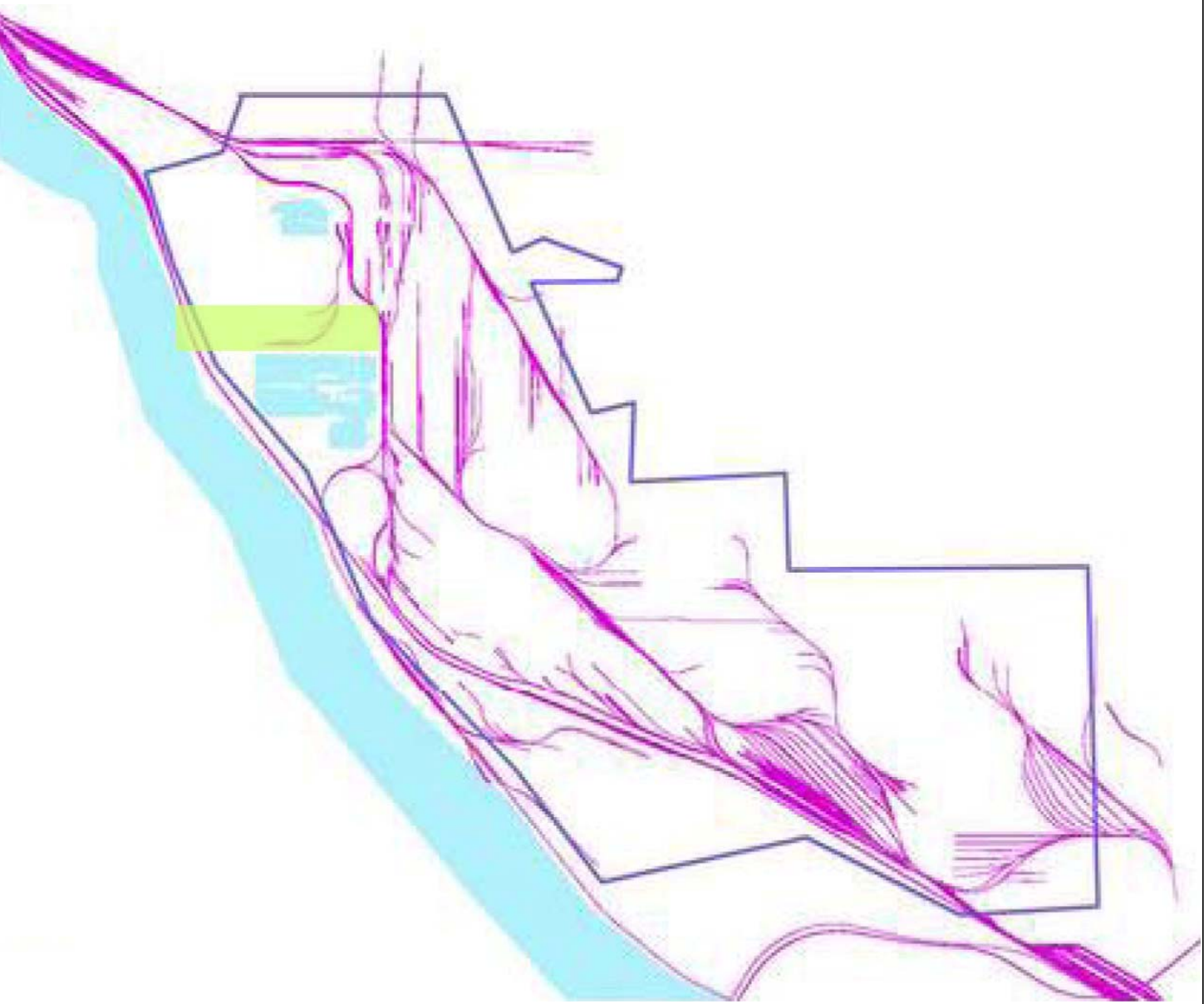
Existing Woody Paths

Paths along railroad tracks and paths between buildings could knit into a larger network of trails throughout the area


Potential new station off of regional or local rail
Potential new station off of regional and local railroad
Potential ferry terminal
To E/W Axis Road
Potential Transit



Existing Transportation Infrastructure

Existing railroad tracks and track beds can be reused as either light rail, bike or foot traffic through the site, tying into transportation systems from outside the site

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Existing Water Sources

Potential Water Uses

Water Sources

In Site

Yongding River Water Transfer Project

Mother river of Beijing

Decreased flow because of upstream challenges :

Guanting Resevoir - 1954
High Sediment
Irrigation
Decrease in Precipitation
Lowered water table

South-North Water Transfer Project: $62.5 billion plan to move 50 billion cubic meters of water via three new diversion projects from the Yangtze River to the North China Plain

	EASTERN	**MIDDLE**	WESTERN
Areas benefiting	Jiangsu Shandong Hebei Tianjin	**Henan** **Hebei** **Beijing** **Tianjin**	Gansu Ningxia Inner Mongolia Shaanxi
Vol. of Water Taken	19bn m3	**n/g**	n/g
Volume delivered	14bn m3	**14bn m3**	20bn m3
Length (km)	1,130 km	**1,236 km**	320 km
Capital Cost (1995)	Yn20bn	**Yn40bn**	n/g
Cost per M3 Water (1998)	< Yn5	**Yn5**	Yn10

Long Narrow Strip

As an Integrated System

Characteristics

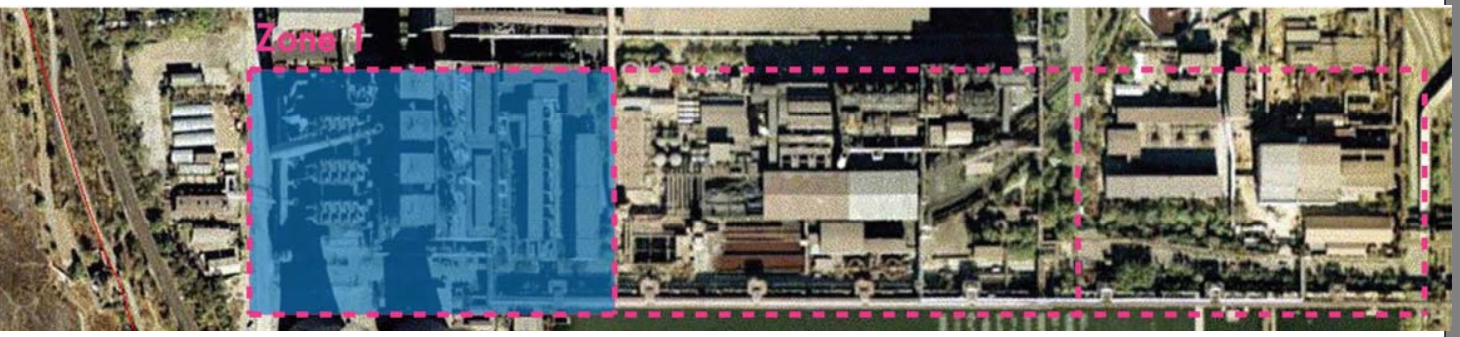
High density system comprised of large scale structures with sheltered interior spaces.

Multiple scales of pipe create elevated material circulation systems.

Pipes create a second ground unifying the entire site.

Structured vegetation used to reinforce edges

Ground transportation systems vary in scale and purpose: Vehicular, train, pedestrian paths



Zone 1

Co-generation Plant

Characteristics:

Series of steel and concrete structures and elevated conveyers devoted to energy generation

Tallest structure in zone, smoke stack, creates a connection between adjacent cooling towers and mountain

Small amount of structured green space

Large interior courtyards

Vehicular transportation forms 3 edges, while train transportation and river form the western edge

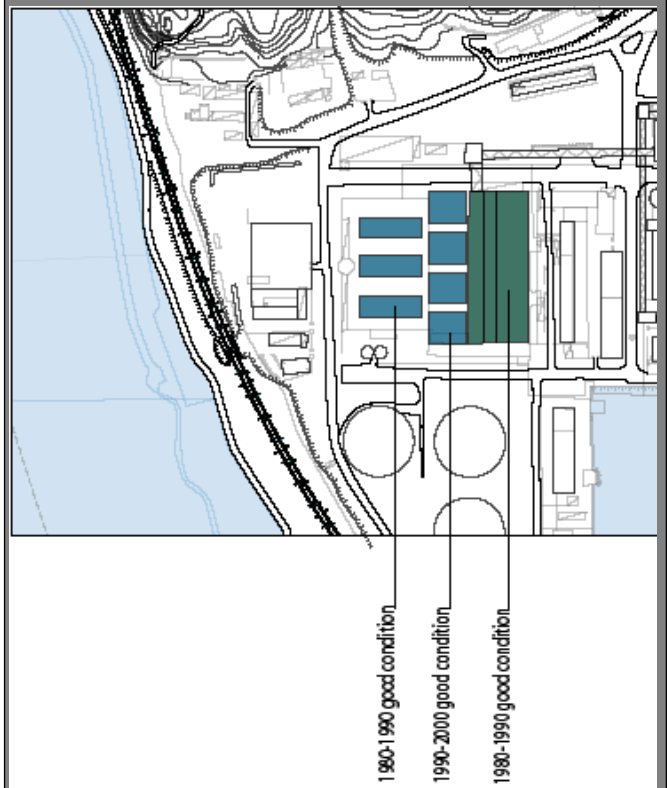
Zone 1

Co-generation Plant

Seven steel structures

Larger structure with concrete frame and steel roof

Most in good condition



Zone 1

Co-generation Plant

Views of mountain and cooling towers