首鋼再整合
Re-integrating the Shougang Industrial Site
Site Context

- Important Location at the end of the East West Axis
- Part of a larger planned recreation area
- Decision to notionally end the East West axis at the Shougang Site but also divert the traffic across the river and connect with the 6th ring road
- Notionally stopping the axis complements the current bookending of the north south axis
工作框架 Framework

现状 status

问题1 problems

问题2

问题3

问题4

态度1 attitude

态度2

态度3

态度4

态度1'

态度2'

态度3'

态度4'

策略1 strategies

策略2

策略3

策略4

概念 concept

一阶段

二阶段

三阶段

四阶段

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**问题 Problems**

- **Economic Issue 经济问题**
  - 石景山区发展定位
  - 税收（产业转型）

- **Social Issue 社会问题**
  - 下岗职工再就业与安置
  - 外来人口就业与安置
  - 公共活动空间改善

- **Culture Issue 文化问题**
  - 工业遗产利用

- **Environment Issue 环境问题**
  - 棕地环境治理
  - 保护绿头鸭的迁徙场所

**现状 Status quo**

**经济问题 Economic Development of SJS District**
- 税收 (Commercial & Services)

**社会问题 Reemployment & Resettlement of Unemployed**
- 外来人口就业与安置
- 公共活动空间改善

**文化问题 Improvement of Public Space and creation of civic structure**
- 工业遗产利用

**环境问题 Preservation and Utility of Historical Industry**
- 棕地环境治理
- 保护绿头鸭的迁徙场所

**TsinghuaMIT Beijing Urban Design Studio**
我们的态度——在动态过程中实现综合利益最大化
Our Attitude——Maximize the comprehensive profits in a dynamic process

- 综合利益最大化
- Maximize Profits
- 逐步复兴
- Regenerate the area

- 提高地区的社会层次
- Enhance social capital
- 维护遗留者的居住尊严
- maintain the dignity of workers

- 保持地区的文化特质
- Maintain a culture identity
- 文化品牌化
- Begin to create a Cultural Brand

一般开发模式——追求现世价值
Attitude of Common Development---Pursuit myopia value

- 一次性开发→利益瓜分
  Over-night Development = Divided interest
- 终极决定论→适应力差
  Blueprint Plan→ Poor Adaptation
- 开发商获益
  Developers benefit most
- 工人失业→失落感
  Unemployment → Despair
- →社会问题
  → Social Problems

- 单纯的保护
  Simple maintainence & preservation
- →维护成为负担
  → Financial Burden
- 被动环境规划
  Passive Environmental Planning

Economic Issue 经济问题
Social Issue 社会问题
Culture Issue 文化问题
Environment Issue 环境问题
### 策略 Strategies

#### 态度 Attitude
- 综合利益最大化
- 逐步复兴
- 提高地区的社会层次
- 维护遗留者的居住尊严
- 保持地区的文化特质
- 文化品牌化
- 市民可以使用的自然环境
- 永定河复兴

#### 策略 strategies

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<td>控制地块开发时序</td>
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<td>触媒效益—激发地区活力/发展</td>
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<td>逐步提供工作机会：</td>
<td>Provide opportunities gradually：</td>
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<tr>
<td>1.控制人口的迁入；</td>
<td>1.Control migrants；</td>
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<tr>
<td>2.从工业过渡到商业&amp;服务业</td>
<td>2.Transmision from 2\textsuperscript{nd} industrial to 3\textsuperscript{rd}</td>
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<tr>
<td>3.逐步建立与城市的相互依存联系</td>
<td>3.Co-habitation with peri-urban</td>
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<td>发展高端产业增长点，</td>
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<td>吸引高端人群，向高端过渡</td>
<td>Attract upper class, raise the site profile</td>
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<tr>
<td>棕地耕种—改善土壤</td>
<td>Remediate the land</td>
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策略 Strategies

目标 The goals

- 综合利益最大化
  逐步复兴

- 提高地区的社会层次
  维护遗留给者的居住尊严

- 保持地区的文化特质
  文化品牌化

- 市民可以使用的自然环境
  永定河复兴

策略 strategies

- 轮垦式分步开发
  控制地块开发时序
  “Rotational farming” and remediation
  Development of layering control

- 触媒效益—激发地区活力/发展
  逐步提供工作机会:
  1. 控制人口的迁入;
  2. 从工业过渡到商业&服务业
  3. 逐步建立与城市的相互依存联系
  Catalyst: World innovation expo
  Provide opportunities gradually:
  1. Control migrants;
  2. Transmition from 2nd industrial to 3rd
  3. Co-habitation with peri-urban

- 发展高端产业增长点，
  吸引高端人群，向高端过渡
  Hot spots of high industry
  Attract upper class, raise the site profile

- 棕地耕种—改善土壤
  Remediate the land

Civic Layering
公共空间衍生

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<th>阶段1 世博会 LAYER1--EXPO</th>
<th>阶段2 职业技术培训中心 LAYER2--SKILL EMBASSIES</th>
<th>阶段3 混合社区 LAYER3--MIX COMMUNITY</th>
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<tr>
<td>阶段性目标 PHASE TARGET</td>
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<td>吸引中高端人才</td>
<td>人口/就业等进入稳定发展阶段</td>
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<tr>
<td>吸引注意力和投资</td>
<td>提升地区商业层次</td>
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<tr>
<td>提升地区商业层次</td>
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<th>阶段1 世博会 LAYER1--EXPO</th>
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<td>功能齐全的社区形成</td>
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<td>Temporary jobs suitable for the shougang workers</td>
<td>skill embassies &amp; companies's trainning centre</td>
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<td>居住 RESIDENCE</td>
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<td>周边中高端商业</td>
<td>商业环境业已成熟</td>
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<td>semi-high-end commercial environment</td>
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<td>文化教育设施 CULTURAL&amp;EDUCATION</td>
<td>新建文化设施</td>
<td>新建教育设施</td>
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<td>new cultural facilities</td>
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<td>公园与绿地 parks &amp; open spaces</td>
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<td></td>
<td>风景河岸与湖滨整治 river bank &amp; lake bank space</td>
<td>公共环境优美 beautiful environment</td>
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<td>产业利用 INDUSTRIAL BUILDING</td>
<td>厂房改造利用为展馆</td>
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<td>共享文化及艺术氛围良好 a good public, cultural and art environment</td>
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<td>re-use the industrial buildings as pavillions</td>
<td>re-use the pavillons as public museum and skill embassies</td>
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<tr>
<td>开发主体 DEVELOPER</td>
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<td>二级开发商进入</td>
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<tr>
<td>土地出售 LAND SALE&amp;DELIVERY</td>
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<td>土地复垦 land remediation</td>
<td>土地复垦 land remediation</td>
<td>土地质量全部得到改善</td>
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<tr>
<td>土地复垦 land remediation</td>
<td>基础设施改造 build and improve infrastructure</td>
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<td>周边地价上涨 surrounding land prices rise</td>
<td>区域地价整体上涨 district land prices rise</td>
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<td>周边地价 SURROUNDING LAND PRICE</td>
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In order to maximize social and economic value, a site of this size needs to grow gradually in layers over a number of years.
In response to the dynamism of the location of the site our design concept revolves around the following ideas:

- Examining the city as a dynamic socio-spatial, economic and political network rather than a static conception of built form.
- Questioning the determinism of large scale master planning and exploring how urban design can become an adaptable process that responds to a rapidly changing urban context.
- Developing a new conception of value in real estate development through iterative planning.
- Re-imaging industrial processes and providing a dynamic program structure that supports this.
The city is an ever-changing interrelated network. Until now, the Shougang site has been a closed system whose boundaries divide it from the complex network that surrounds it.

Through this project, we are interested in how we can strategically re-thread the Shougang site back into its surrounding dynamic network over a number of years.
Time in Urban Design & Dynamic Staging

- Develop the site in a number of stages - each move is created only once the impact of the previous stages and their relationship with the surrounding urban networks is understood.
公共空间衍生 - 概念图示  Civic Layering: Layers

1期  2期  3期  4期

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Restructuring the idea of ‘value’ in Real Estate Development – the ‘both/and’ condition

- **Value** in real estate development has often been focused on quick monetary gain. However, through approaching this project through layering and incorporating feedback mechanisms to guide design over time, we can begin to develop value in many more areas including: the building of social capital, ensuring public amenity and the continued rehabilitation of the site.

- We also hope to prove that through working in this way, the long-term monetary gains will be greater than short-term profits.

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Layer 0
new blank sites between green belt and urban

Layer 1
a "dynamo" to initialize the reaction

Layer 2
feedback from the urban

Layer 3
continuous feedback loops and interlocking reaction

Layer n
dynamic balance

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<tr>
<td>Northern Remediation</td>
<td>Southern Remediation</td>
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</table>
Civic Layering:

Civic Layering: 世博会：创新工业
- 时序
- 策略
- 行动
  - 组织交通
  - 公共中心
  - 社区+场所历史节点
  - 可读性：地标
  - 新地铁线路+内部轨道交通
  - 创建长安街轴线新端点
  - 保护历史工业遗产：4号高炉
  - 保留烟囱+冷却塔

Civic Layering: 职业培训社区
- 社区工作节点
- 社区休闲
- 购物节点
- 保育区工业建筑+世博展馆
- 强化永定河滨水空间
- 商业与生活区的混合

Civic Layering: 社区联系
- 规划休闲空间
- 社区教育与卫生
- 社区休闲
- 地段南部炼钢工业遗址变绿
- 地段南部炼钢工业遗址变绿
- 绿带–地段东北部+南部入口区域

Civic Layering: 社区联系
Civic Layering: Outline

Civic Layers

- Civic Layer: World Innovation Industrial Expo
  - Providing Transportation
  - Civic Centre
  - Community + Site History Node
  - Legibility through Landmarks

- Civic Layer: Skills Embassies
  - Community Work Nodes
  - Community Recreation
  - Shopping Node

- Civic Layer: Community Connections
  - Programmed Recreation Areas
  - Schools and Health
  - Community Recreation

- Civic Layer: Community Connections
  - Commercial Street

Civic Moves

- Providing Transportation
- Civic Centre
- Community + Site History Node
- Legibility through Landmarks
- Community Work Nodes
- Community Recreation
- Shopping Node
- Programmed Recreation Areas
- Schools and Health
- Community Recreation
- Commercial Street

Translation into Physical Moves

- New Subway + internal train stations
- Creating an end point to the east west axis
- Preserving historic industry: Furnace No. 4
- Preserving Smoke Stacks + Water Coolers
- Industrial buildings in remediation area + expo pavilions
- Strengthening of the River Belt
- Mixed Use Shopping and Living Area
- The footprints of the steel works in the south become green
- The footprints of the steel works in the south become green
- Green Belt – North East of the Site + beginning in the south

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Site Integration over time–layer 3
Site Integration over time—layer n

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一期：创新工业世博  layer 1: EXPO of Industrial Innovation

具体空间形态  physical design

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一期：创新工业世博  layer 1: SWOT

Strength 优势
- 工业构造物与铁轨遗址将是世博会的亮点
- 自然环境优美，有湖有山有河，将成为良好的休憩场所
- 长安街尽端，位置显赫
- 地铁延长线与新线经过地段

Weak 劣势
- 大量的前期投资，需要较长时间才能看到回报
- 前期准备阶段，首钢工人的就业与安置问题需要解决

Opportunity 机会
- 政府与市民对首钢地区的极大关注
- 石景山区的发展，二产向三产的转变
- 长安街向西延伸，地段升值

Threat 威胁
- 房地产开发带来短期利益的诱惑

• 由政府支持的一级土地开发商统一开发
• 设置基金向社会集资
• 世博场馆建设以及相关服务业将提供大量就业岗位

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Layer 1: EXPO SWOT

**Strength 优势**
- Industrial structure and railway could be used as SHOT in EXPO
- Beautiful natural environment (hill, lakes & river) which could make the site an attractive recreational area
- Located at the end of the East-West axis, which is significant in the city structure
- New subway station will be built

**Weak 劣势**
- Mass investment in the preparation period, and a comparatively long time to gain profits
- The resettlement of employment of Shougang workers in the preparation period

**Opportunity 机会**
- Great interest/concern of the site from the government and civilians
- Development of SHS district
- Transformation from industry to Commercial and Services
- Extension of the East-West Axis which would enhance the value of the area

**Threat 威胁**
- The lure of the immediate great profits of the real estate development

- Establish a fund to get public offering
- The construction of EXPO building and service work would provide a lot of job opportunities
- Great interest/concern of the site from the government and civilians
- Development of SHS district
- Transformation from industry to Commercial and Services
- Extension of the East-West Axis which would enhance the value of the area

- Government supported Developer
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一期：创新工业世博  layer 1: EXPO of Industrial Innovation

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Layer 1: Innovation Expo

Northern Master Plan:
- Existing and proposed open space infrastructure
- Proposed greenway corridor across the river
- High-level remediation required
- Medium-level remediation required
- Low-level remediation required
- Water basins

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Civic Layer - Expo Site
Northern Master Plan.

Chinese Pavilions
Civic Layer - Expo Site
Northern Master Plan.

International Pavilions
Civic Layer - Expo Site
Northern Master Plan.

Institutional and Commercial Exhibitions
Civic Layer - Expo Site
Northern Master Plan.

Small Scale Commercial

Larger Scale Commercial/Mixed Use
Civic Layer - Expo Site
Northern Master Plan.

Expo Village and Residential

Larger Scale Residential around new subway

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Civic Centre:
1. Street level commercial
2. Office/hotel above street
3. Welcome/orientation centre
4. Auditorium
5. Station
6. Parking/administrative
7. Chinese exhibition
8. Re-purposed steel lattice screening
9. Reed run-off filtration beds
10. Digital landmark/information node
Connection to the River
1. Auditorium
2. Turf Roof
3. Central Courtyard
4. Chinese Industrial Archive No.1
5. Responsive Digital Archive
6. Furnace No.4
利益 Benefits

•吸引世界各国关注首钢地区的发展
  Bring international attention to the site

•保留地段特质——文化感与历史感
  Retain the underlying DNA of the area as a site of industrial process

•重新定义工业在21世纪国际大都市中的角色
  Foregrounding the need to redefine the role of industry in the 21\textsuperscript{st} Century global urban centre

•持续发挥大首钢地区工业构造物、系统以及周边社区的价值
  Realizing the continuing value of the structures, systems and communities that encompass the larger industrial site

•开始公共基础设施的初步建设
  Build the first stages of public infrastructure
谢谢！ Thank you!