Loan from Asian Infrastructure Investment Bank

Hubei Global Air Cargo Logistics Hub Project Environmental and Social Impact Assessment Report

Presented to

Asian Infrastructure Investment Bank

Ezhou Linkong Group Co., Ltd.

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Abbreviations

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
BOD	Biochemical Oxygen Demand
CCAR	China Civil Aviation Regulation
CFU	Colony Forming Unit
COD	Chemical Oxygen Demand
DDR	Due Diligence Report
EHS	Environment, Health and Safety
ESEL	Environmental and Social Exclusion List
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Monitoring Report
ESP	Environmental and Social Policy
ESS	Environmental and Social Standard
FAA	Federal Aviation Administration
GBV	Gender-Based Violence
GRM	Grievance Redress Mechanism
GWP	Global Warming Potential
ICAO	International Civil Aviation Organization
LAeq	A-Weighted Equivalent Continuous Sound Level
LAmax	Maximum A-weighted Sound Level in One Flight Incident
Ld	Day-time Equivalent Sound Level
Lden	Day-Evening Equivalent Sound Level
Ldn	Day-Night Equivalent Sound Level
LEED	Leadership in Energy and Environmental Design
LEPN	Level of Effective Perceived Noise
LID	Low-Impact Development
Ln	Night-time Equivalent Sound Level
LWC	Labor Working Conditions
Lwecpn	Weighted Equivalent Continuous Perceived Noise Level
NH3	Ammonia

NMF	Noise Management Framework
NOx	Nitrogen Oxide
NTU	Nephelometric Turbidity Unit
ODP	Ozone Depletion Potential
pH	Power of Hydrogen
PIU	Project Implementing Unit
PPM	Project-affected People's Mechanism
RAP/RP	Resettlement Action Plan/Resettlement Plan
SAR	Sodium Absorption Ratio
SEP	Stakeholder Engagement Plan
SIA	Social Impact Assessment
SS	Suspended Solids
Td	Noise Duration
TSP	Total Suspended Particulates
VOCs	Volatile Organic Compounds
WHO	World Health Organization

Weights and Measures

µg	microgram
mg	milligram
g	gram
kg	kilogram
t	ton
cm	centimeter
dm	decimeter
m	meter
km	kilometer
m^2	square meter
m^3	cubic meter
h	hour
d	day
a	year
°C	degree centigrade
dB(A)	A-weighted sound level in decibels
pcu	passenger car unit

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Executive Summary

I. Project Overview

To promote the development of Ezhou Airport as an international air logistics hub, enhance cross-border interconnectivity and collaborative innovation, and support the growth of the international logistics and trade system under the Belt and Road Initiative, the Asian Infrastructure Investment Bank (AIIB) is providing a USD 400 million loan to the People's Republic of China. The loan will be used for the construction of the Hubei Global Air Cargo Logistics Hub Project, with an implementation period from 2024 to 2028.

The project is located within the Ezhou Airport Comprehensive Bonded Zone in Ezhou City, Hubei Province, China. It covers an area of approximately 1.349 km^2 and is planned to be constructed in two phases. Among them, Phase I occupies an area of 0.727 km^2 and has been partially completed. The Type-B Bonded Logistics Center in Phase-I passed on-site acceptance on April 9, 2024. The remaining works are expected to be further expanded in 2024, with the main civil works to be funded by the Client's own funds and scheduled for completion by November 30, 2024. The AIIB project will be built in Phase II, covering an area of 0.622 km^2. It will incorporate green and smart elements throughout the project to support low-carbon and digitalized operations.

The main construction contents of the AIIB project include customs infrastructure, bonded warehousing and processing facilities, trade and cargo service facilities, low-carbon smart facilities, earthworks, supporting facilities, and capacity building. The photovoltaic system in the self-constructed area of Phase I is also included in this project. The specific construction contents are as follows:

1. Customs Infrastructure

The main construction contents include: T01 Customs Inspection Warehouse (10,911.00 m^2), 2# Customs Kiosk (949.00 km^2), and Customs Perimeter Fencing (7,730.00 m).

2. Bonded Warehousing and Processing

E01-04 Bonded Processing Warehouse (individual building area: 14,296 m^2), E05 Logistics Warehouse (individual building area: 27,798.00 m^2), M01 Logistics Warehouse (individual building area: 25,396.00 m^2), H01-04 Logistics Warehouse (individual building area: 31,974.00 m^2), L01 Logistics Warehouse (individual building area: 36,150.00 m^2), J01 Logistics Warehouse (individual building area: 22,866.00 m^2), K01 Logistics Warehouse (individual building area: 19,914.00 m^2), Container Truck Ramp 3 (individual building area: 1,589.34 m^2), Container Truck Ramps 4-5 (individual building area: 2,111.37 m^2). Overhead Platform 2 (building area: 30,059.00 m^2), Overhead Platform (building area: 13,058.59 m^2), Gatehouse (building area: 113.00 m^2), and Equipment Room (building area: 762.00 m^2).

3. Trade and Cargo Service Facilities

It mainly includes S01 Duty Free Service Center (10,450.00 m^2), W01 Comprehensive Office Building (39,432.16 m^2), and the Greening Project for the Business Logistics Center

within the self-built area.

4. Low-carbon Smart Facilities

It mainly includes the photovoltaic facilities, intelligent operation system, and comprehensive information platform for the self-built area and the Project.

5. Earthworks

6. Supporting Facilities

1# Elevated Connecting Road with a total length of 430.00 m, 2# Elevated Connecting Bridge with a total length of 511.00 m, Planned Road No.2 with a total length of 518.60 m, Planned Road No.3 with a total length of 990.00 m, Planned Road 4# with a total length of 1075.00 m, Planned Road No. 5 with a total length of 354.00m, and outdoor works.

7. Capacity Building

It mainly includes: LEED certification consulting, green building three-star certification consulting, project management, project monitoring and evaluation, and other capacity building services.

Based on the identification results of associated facilities, Phase I and Wuchu Avenue (Bonded Zone to S203) are considered associated facilities of the AIIB project.

Phase I is located on the south side of the AIIB project. The main construction contents include an International Cargo Terminal, International Express Center, Type-B Bonded Logistics Center, Customs Inspection Center, Quarantine Treatment Center, Business Logistics Center, Bonded Processing Plant, Bonded Logistics Warehouse, Dangerous Goods Warehouse, Garbage Disposal Station, 1# Customs Kiosk, and 3# Customs Kiosk. Phase I commenced construction in September 2023. As of April 9, 2024, the Type-B Bonded Logistics Center in Phase I has passed on-site acceptance. The remaining works are expected to be completed by November 2024.

Wuchu Avenue (Bonded Zone to S203) is located within the Ezhou Linkong Economic Zone. It connects to Huamahu Bridge in the west and extends to S203 (under construction) in the east. The road has a red line width of 55 m and features six lanes in both directions, with a total length of 1940 m and a design speed of 60 km/h. The primary construction contents include road works, water supply and drainage, cable tunnel, traffic, lighting, landscaping, and ancillary works. The construction of Wuchu Avenue (Bonded Zone to S203) was commenced in June 2023 and completed at the end of June 2024.

See the following table for details of the Project and its associated facilities.

Table 1 List of Construction Contents of the Project and Associated Facilities

Project Name	Project Components	Construction Content	Construction Progress	Implementation of Environmental and Social Impact Assessment	Remarks

Project Name	Project Components	Construction Content	Construction Progress	Implementation of Environmental and Social Impact Assessment	Remarks
Hubei Global Air Cargo Logistics Hub Project	Phase-I Project	Type-B Bonded Logistics Center	Completed and passed on-site acceptance on April 9, 2024	The construction phase environmental and social management plan has been incorporated into the construction contract, and due diligence has been conducted	Belongs to the associated facilities of the AIIB project, hereinafter referred to as "Associated Facilities - Phase I".
		International Cargo Terminal	Under construction, expected to be completed on November 30, 2024		
		Quarantine Treatment Center			
		Customs Inspection Center			
		1# and 3# Customs Kiosks			
		Garbage Disposal Station			
		Business Logistics Center	Tendering has not been started yet	Conduct environmental and social impact assessment and propose an environmental and social management plan	
		International Express Center			
		Bonded Processing Plant			
		Bonded Logistics Warehouse			
		Dangerous Goods Warehouse			
		Photovoltaic system	Tendering has not been started yet	Conduct environmental and social impact assessment and propose an environmental and social management plan	AIIB Project
	Phase-II Project	Customs Infrastructure			
		Bonded Warehousing and Processing			
		Trade and Cargo Service Facilities			
		Low-carbon Smart Facilities			
		Earthworks			
		Supporting Facilities			
		Capacity Building			
Wuchu Avenue (Bonded Zone to S203)		Water supply and drainage, cable tunnel, traffic, lighting, landscaping, and ancillary works	Construction was commenced in June 2023 and completed at the end of June 2024.	The construction phase environmental and social management plan has been incorporated into the construction contract, and due diligence has	Belongs to the associated facilities of the AIIB project, hereinafter referred to as "Associated Facility - Wuchu Avenue".

Project Name	Project Components	Construction Content	Construction Progress	Implementation of Environmental and Social Impact Assessment	Remarks
				been conducted	

II. Categories of Environmental and Social Risks

Given that the project involves large-scale civil works, and in accordance with the AIIB's Environmental and Social Policy requirements, the Hubei Global Air Cargo Logistics Hub Project is classified as an environmental and social Category-A project. This requires the preparation of an Environmental and Social Impact Assessment (ESIA) report, including an Environmental and Social Management Plan (ESMP).

This report is the *Environmental and Social Impact Assessment (ESIA) Report of Hubei Global Air Cargo Logistics Hub Project* (including the Environmental and Social Management Plan) prepared in accordance with the requirements of AIIB environmental and social policies, as well as laws and regulations on environment and society of the People's Republic of China. Based on the results of the ESIA, the *Noise Management Framework for Hubei Global Air Cargo Logistics Hub Project*, the *Resettlement Action Plan for Hubei Global Air Cargo Logistics Hub Project*, and the *Stakeholder Engagement Plan for Hubei Global Air Cargo Logistics Hub Project* were prepared.

III. Assessment Method

The ESIA report is prepared to assess the potential environmental and social impacts and risks of the Project, assess alternatives, and design appropriate mitigation, management, and monitoring measures to eliminate, offset, or reduce adverse environmental and social impacts, and enhance and expand positive benefits of the Project. Ezhou Linkong Group Co., Ltd. entrusted Central-Southern Safety & Environmental Technology Institute Co., Ltd., (hereinafter referred to as the ESIA preparation unit) to assess documents related to the environmental and social impacts of the Project.

The ESIA is carried out according to the following steps:

(1) Collect and review project-related data, conduct preliminary engineering analysis, and identify key environmental and social impacts.

Clarify the key points of assessment and environmental and social protection objectives. The technical documents reviewed mainly include:

① Feasibility Study Report on Port Operation Area of the Hubei Global Air Cargo Logistics Hub Project at Ezhou Airport Comprehensive Bonded Area (Phase I) (July 2023);

② Feasibility Study Report for the AIIB-funded Hubei Global Air Cargo Logistics Hub

Project (May 2024);

③ *Environmental Impact Report of Port Operation Area at Ezhou Airport Comprehensive Bonded Zone*;

④ *Environmental Impact Report of Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone*.

(2) Between July and December 2023, the ESIA preparation unit conducted an extensive field survey at the proposed construction site linked to the development of the Project. The aim was to thoroughly assess the on-going early start-up construction activities, alongside understanding the rationale behind site selection, the site's environmental conditions, land use considerations, as well as identifying any environmentally and socially sensitive issues. The survey also encompassed factors that could potentially influence the project, the demographic structure and requirements of the local residents, and the socio-economic circumstances of the communities impacted by the project's execution.

(3) From December 4, 2023 to December 8, 2023, field surveys were carried out at the Project site within the scope of project implementation. From April 8 to 12, 2024, the environmental and social impact assessment investigation team (including the environmental assessment investigation team and the social investigation team) carried out a supplementary investigation. The investigation contents mainly include:

- Institutional interviews and data collection. Discussions or interviews were conducted with seven relevant institutions and departments involved in the project area, including the Planning Headquarters of Ezhou Linkong Group Co., Ltd., Operation Department of Huahu Airport and internal organizations of Management Committee of Linkong Economic Zone, including Organization and Human Resources Bureau, Social Affairs Bureau, Rural Revitalization Bureau, Urban Construction Bureau (Housing Acquisition and Demolition Compensation Office), Natural Resources and Planning Branch. Information and data closely related to the Project were collected.

- Field investigation. Field investigations were conducted for the townships, villages and the vicinity of the airport, road conditions and infrastructure conditions, as well as the construction site of the project stations, etc., affected by the project construction.

- Focus group discussion. A total of 14 resident focus group discussions were held in different townships and villages in the counties and districts involved in the Project, with a total of 157 participants. Among them, 68 were women, accounting for 43.31%, and 42 were elderly, accounting for 26.75%.

- Key stakeholder interviews. Thirty-eight key stakeholders in the project area, townships and villages were interviewed, respectively.

- Questionnaire survey. During the field investigation, a total of 250 one-to-one face-to-face questionnaires were completed in the project area. After statistical inspection and screening, 220 valid questionnaires were found, and the effective rate of the questionnaires was 88%.

(4) The *Environmental and Social Impact Assessment for Hubei Global Air Cargo Logistics Hub Project* (revised) was completed.

IV. Main Environmental Impacts and Mitigation Measures

The main environmental impacts of the Project and proposed mitigation measures are as follows. See Chapter XI Environmental and Social Management Plan for detailed mitigation measures and monitoring and reporting requirements.

(1) Construction Period

Considering that the construction of associated facilities—part of Phase I Project has been started in September 2023, and the work is expected to be completed in November 2024; the construction of associated facilities—Wuchu Avenue was commenced in June 2023 and completed at the end of June 2024. The environmental and social management requirements for the construction period of the above contents have been included in the construction contract, and due diligence has been carried out on the implementation of the environmental and social management requirements.

This environmental impact during the construction period is mainly analyzed for the construction contents of AIIB Project and Associated Facilities - Phase-I Project that have not yet commenced bidding. Since the two parts only involve civil engineering during the construction period and have basically the same impact on the environment, their impacts during the construction period will be jointly analyzed.

1) Atmospheric Environmental Impact and Mitigation Measures

The atmospheric environmental impact during the construction period of the Project mainly comes from construction dust and tail gas of vehicles and construction machinery.

After the following mitigation measures are taken for the above waste gas, the construction of the Project and associated facilities will have a reduced impact on the atmospheric environment.

A. Mitigation measures for the impact of construction dust

The Construction Contractor will strictly abide by the *Management Measures for Prevention and Control of Dust Pollution in Ezhou City* (EZZF [2008] No. 21) and other relevant regulations during construction. Transport vehicles will drive at low speeds on the construction site and daily maintenance of vehicles will be strengthened.

B. Mitigation measures for the impact of construction waste gas

The repair and maintenance of construction vehicles and machinery will be strengthened; using vehicles with overdue service life and excessive tail gas will be prohibited; electric equipment or high-quality fuel oil will be used as much as possible to reduce the emission of harmful gases from equipment and vehicles; management of personnel of the Construction Contractor will be improved to achieve HSE-compliant construction.

2) Surface Water Environmental Impact and Mitigation Measures

The wastewater generated during the construction of the Project mainly includes construction wastewater, rainwater containing silt from surface runoff on the construction site, water gushing in the foundation pit, and domestic sewage from construction personnel.

A. A sedimentation tank will be set up for the treatment of construction wastewater. The construction wastewater will be reused for site dust reduction and washing of machinery and vehicles after being treated by the three-stage sedimentation tank.

B. Efforts will be made to cover topsoil stockpiles, material storage yards, and other sites, set up intercepting ditches around the site, and set up grit chambers at low-lying areas. Surface runoff during the rainy season will be reused after sedimentation treatment, and the portion that cannot be reused will be discharged after obtaining permission from relevant departments. It is prohibited to discharge water containing large amounts of silt or untreated wastewater into municipal pipe networks or water bodies.

C. Dewatering wells will be set to deal with water gushing in foundation pits, or water will be pumped to the grit chamber and then reused for dust reduction or greening after sedimentation in the grit chamber.

D. For domestic sewage, temporary septic tanks, oil separation tanks, and other domestic sewage treatment facilities will be set up for the treatment of the sewage, which will then be discharged into the surrounding municipal pipe network.

The above effective measures taken can reduce the impacts of the wastewater during the construction period on the surrounding water environment.

3) Acoustic Environmental Impact and Mitigation Measures

During the construction of the Project, the noise mainly comes from construction equipment and transportation vehicles. The construction noise sources are mainly loaders, excavators, bulldozers, and other construction machinery and equipment; the transportation noise source is transportation vehicles.

Strict measures will be taken in the Project to control construction noise and reduce its impact. Specific measures are as follows:

A. Reasonable arrangement of construction time

B. Reasonable layout of construction site

C. Reasonable arrangement of operation time for transport vehicles

D. Selecting low-noise equipment and strengthening equipment maintenance

E. Reduction of man-made noise

F. Strengthening construction management

By taking the above measures, the Construction Contractor can minimize the impact of noise on the surrounding acoustic environment during the construction period.

4) Impact on Groundwater and Soil Environment and Mitigation Measures

The pollutants generated during the construction period mainly include waste gas, wastewater, and noise. By implementing various waste gas mitigation measures and hardening areas prone to leakage, such as the construction wastewater treatment area and collection pools, the risk of soil and groundwater contamination will be minimal.

5) Solid Waste Impact and Mitigation Measures

Solid waste pollution sources during the construction period mainly include domestic waste from construction workers, and construction waste consisting of building debris, excavated earth and rock, as well as oily waste materials.

Domestic waste from construction personnel is mainly generated in the construction camp, which will not have an obvious impact on the surrounding environment. Construction waste will be sorted out by special personnel and useful steel bars, wood, cables, etc. will be recycled. Unusable construction waste will be disposed of at designated places in Ezhou City;

A designated temporary storage area will be established to temporarily store the hazardous wastes before the wastes are transferred to certified facilities for proper treatment.

The waste earth and stone of the Project will be transported to the adjacent backfilling areas of Bajiao Village and Woertang for disposal.

6) Impact on Ecological Environment and Mitigation Measures

① Vegetation

The assessment has not identified the distribution of nationally protected wild plants, ancient trees, and renowned trees. The project construction will not significantly impact the integrity of the regional ecosystem or the habitats of important species. Therefore, the impact on plant diversity in the assessment area is considered to be insignificant.

② Mammals

During the construction period, the impact on mammals mainly pertains to the destruction of habitats where animals forage. The most affected species are rodents that thrive in cultivated land, shrubs, and forests. However, the populations of some rodent species that coexist with humans, such as house mice and brown rats, may increase. Once the construction is completed, with reduced human disturbance, many migrated mammals will gradually return to their original habitats.

③ Impacts on amphibious animals

Construction machinery noise and human activities disrupt the original habitats of amphibians and reptiles, forcing them to move to non-construction areas, leading to habitat compression. This may result in a slight decrease in the number of individuals and

populations of amphibians in the construction area. However, it is not expected to cause significant losses in numbers or species extinction. The Project does not occupy water bodies or wetlands, and the construction area is not the primary habitat for amphibians. Therefore, the construction activities will not pose a threat to the survival of amphibians in the area. After the construction activities are completed, the habitats and population of amphibians will also be restored.

④ Impact on water and soil loss

The excavation during the construction of the Project will disrupt or disturb the original surface vegetation, ground material composition, and topography, leading to water and soil loss in the area. The temporary land for the Project is controlled within the scope of land acquisition, and no temporary land will be arranged outside the boundary line. The following water and soil loss prevention measures are proposed to be taken:

a. Topsoil stripping will be carried out in the construction area, and the exposed surface formed in the excavation will be covered with dust screens.

b. The loosely-stacked construction materials will be covered with dust screens to protect them against rainfall scouring and reduce water and soil loss.

c. Enclosures and temporary drainage ditches will be designed around the construction site and construction camp, and a grit chamber will be designed at the outlet of the drainage ditch.

d. Vegetation will be restored in time after construction.

Billboards and warning signs: Water and soil conservation billboards and warning signs will be set up at the entrance and exit of the construction camp.

Generally, through the above measures, the impact of water and soil loss during the construction period will be reduced.

7) Occupational Health and Safety

① Main impact factors

A large number of heavy construction machinery is used; there are operations on steel frames and around foundation pits in the construction site, which pose a risk of accidental falling; fire hazards exist in construction materials and construction camps.

② Management measures for occupational health and safety

a. A water supply system will be established in the construction camp to ensure a clean and sufficient fresh water supply; a sufficient number of portable toilets will be set up and kept clean and sanitary; waste bins will be set up and cleaned regularly to prevent disease outbreaks.

b. Personal protective equipment that meets domestic requirements will be provided, such as safety boots, helmets, gloves, protective clothing, goggles, and earplugs;

c. Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish an emergency hotline with Ezhou Central Hospital (Linkong Branch) in the project area, and provide each construction camp with a fully-equipped first aid station.

d. A professional safety management team will be established, a construction safety system will be formulated, and adequate funding for safety measures will be guaranteed.

e. Safety and health management plans (including emergency plans for safety accidents) will be formulated and submitted to the Supervisor/Employer for approval;

f. A full-time safety and health department will be established and full-time personnel will be assigned to be responsible for the occupational health, work safety, and working and living environment inspections for laborers;

g. The equipment will be regularly maintained and inspected to ensure its normal operation, and the maintenance and inspection records will be kept and signed by relevant personnel. A system for the identification and rectification of potential safety hazards will be formulated and improved. Any identification and rectification will be truthfully documented, and a report will be immediately made to the on-site work safety management personnel. The recipient of the report will promptly address the issue.

h. Nationally regulated safety signs, danger warning signs and other signs and slogans will be hung in the construction area to prevent residents from entering the building protection scope and dangerous areas.

8) Cultural relics protection

According to the Investigation Report on Cultural Relics in Comprehensive Bonded Zone at Ezhou Linkong Economic Zone of Hubei Province and site visit, no known cultural heritage or archaeological sites were found at the project site. However, construction activities may disturb unknown underground cultural relics. To address this issue, corresponding chance find procedures will be established to protect material cultural resources discovered during the construction phase. The following handling procedures will be initiated as soon as material cultural resources are discovered.

① If any material cultural resources are found, the construction activities will be stopped immediately and corresponding protective measures will be taken;

② In accordance with the laws of China, it is strictly prohibited to destroy, damage, deface, or conceal material cultural resources;

③ The Cultural Relics Protection Bureau will be informed and consulted in time;

④ Construction activities can only continue after a thorough investigation and permission from the local Cultural Relics Bureau.

(2) Operation Period

1) Atmospheric Environmental Impact and Mitigation Measures

Hubei Global Air Cargo Logistics Hub Project (including the AIIB Project and associated facilities — Phase I, hereinafter the same): The main sources of impact include laboratory exhaust from the Customs Inspection Center, animal house exhaust from the International Cargo Terminal, quarantine treatment exhaust, bonded processing exhaust, kitchen fumes, vehicle exhaust, odors from the sewage treatment plant and the waste transfer station. The experimental waste gas of the Customs Inspection Center can cause health hazards and environmental pollution, mainly including volatile organic waste gas, acid gas, and biological aerosol. The corresponding waste gas is disposed of through activated carbon adsorption, high-efficiency filtration, and other measures. The emission of treated experimental waste gas can meet the requirements of the *Integrated Emission Standard of Air Pollutants* (GB 16297-1996) and *Laboratories - General Requirements for Biosafety* (GB19489-2008). The waste gas from the animal house is mainly odorous gas, which has an impact on the surrounding staff and ambient air. The waste gas is collected and deodorized by independent ventilation and exhaust system and UV photolysis facilities before emission. After treatment, H2S, NH3, and odor concentrations in the waste gas can meet the limit requirements of the *Emission Standards for Odor Pollutants* (GB14554-93). Quarantine treatment exhaust includes methyl bromide waste gas from the fumigation chamber and harmless incinerator, of which methyl bromide waste gas is highly toxic. Ventilation and multi-stage activated carbon treatment measures are taken to ensure that the emission of methyl bromide waste gas meets the emission limit (20mg/m^3) in the *Integrated Emission Standard of Air Pollutants in Shangha*i (DB31/933-2015). Waste gas from harmless incinerator mainly includes particulate matter and nitrogen oxides generated by waste and fuel incineration and can meet the special emission concentration limit of air pollutants in *Emission Standard of Air Pollutants for Coal-burning Oil-burning Gas-fired Boiler* (GB13271-2014) after deacidification by water bath curtain, cooling and dust removal + bag dust removal and activated carbon treatment. The waste gas from bonded processing mainly includes particulate matter and volatile organic compounds that may be generated during the production and processing processes of the Project. To collect this kind of waste gas, closed operation rooms and gas collection hoods are adopted, and then the waste gas is discharged after being adsorbed by activated carbon. Cooking fume purifiers are installed in the canteen according to regulations, and the treated cooking fume can meet the requirements of the *Emission Standard of Cooking Fume (Trial)* (GB18483-2001); The environmental impact caused by vehicle exhaust is reduced through measures such as up-to-standard emission certification, parking lot ventilation and road greening; The impact of odor from sewage treatment and waste transfer station on the vicinity is primarily addressed by selecting sites away from densely populated areas and enhancing surrounding greening.

Associated facility—Wuchu Avenue: During the operation period, the main environmental impact is attributed to air pollution caused by exhaust emissions from passing vehicles. Due to favorable atmospheric dispersion conditions around the project site and the absence of sensitive residential areas, implementing measures such as strengthening road operation management, restricting the use of poorly maintained or overloaded vehicles, and reducing instances of slow-moving vehicles will further minimize the impact of vehicle exhaust emissions on the surrounding area.

2) Surface Water Environmental Impact and Mitigation Measures

Hubei Global Air Cargo Logistics Hub Project: The main sources of impact include domestic sewage, catering wastewater, animal house wastewater, laboratory wastewater, bonded

processing wastewater, and leachate from the waste transfer station. Domestic and catering wastewater is discharged into the municipal sewage pipe network after being pretreated by septic tanks and oil-water separators in the structure where the wastewater is generated to meet the Class III requirements in the *Integrated Wastewater Discharge Standard* (GB8978-1996). Integrated sewage treatment equipment is built for wastewater from animal house and laboratory wastewater in corresponding structures, respectively, and the wastewater will be discharged into the sewage system of the structures after disinfection and sedimentation treatment. Once the pretreatment in the septic tanks of the structures meets the Class III requirements in the *Integrated Wastewater Discharge Standard* (GB8978-1996), the wastewater will be discharged into the municipal sewage pipe network. Bonded processing wastewater is mainly oily wastewater that may be generated during processing and maintenance. An oil separation sedimentation tank is set up in the Bonded Processing Center for oil separation and precipitation treatment of oily wastewater generated during processing and maintenance. The wastewater will be discharged into the municipal sewage pipe network after meeting the Class III requirements in the *Integrated Wastewater Discharge Standard* (GB8978-1996). The waste transfer station is equipped with integrated sewage pretreatment facilities, and the treatment process of "oil removal + sedimentation + anaerobic + biochemical treatment" is adopted to pretreat landfill leachate and cleaning wastewater from the transfer station. After meeting the Class III requirements in the *Integrated Wastewater Discharge Standard* (GB8978-1996), the wastewater will be discharged into the municipal sewage pipe network. All sewage of the Project is discharged into the reclaimed water plant in the aviation metropolitan area through the municipal sewage pipe network, and then discharged into the Yangtze River (Ezhou section) after meeting the Class I A requirements in the *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB 18918-2002). The wastewater discharge amount of the Project is within the treatment capacity range of the reclaimed water plant in the aviation metropolitan area. Therefore, the wastewater discharged will not have a significant impact on the water quality of the Yangtze River.

Associated Facility — Wuchu Avenue: The impact on the water environment during the operation period is mainly the scouring of pavement pollutants by rainwater, resulting in pollutants entering surrounding water bodies along with runoff. A new rainwater pipe network will be built for the road. Rainwater is discharged into the canal of Yafan Port and Huama Lake through the rainwater pipe network, and finally into the Yangtze River (Ezhou section). After sedimentation or degradation of suspended solids and silt in water, the concentration of pollutants will gradually decrease. During the operation period, the runoff from the roads makes a minor contribution to various pollutants in nearby water bodies. With the elapse of rainfall time, the impact of rain will gradually diminish, and the Huama Lake, where rainwater ultimately drains, will not be significantly impacted.

3) Acoustic Environmental Impact and Mitigation Measures

Ground noise of the Hubei Global Air Cargo Logistics Hub Project: The noise mainly comes from public equipment such as transport vehicles, loading and unloading equipment, processing machinery, heating and cooling equipment, and water pumps. For vehicle noise control, measures will include prohibiting loud horns, implementing speed limits, and ensuring smooth traffic flow. As for equipment noise, low-noise equipment will be used, vibration-absorbing foundations will be installed, and if necessary, soundproofing measures such as silencers and soundproof covers will be employed. Noise-generating equipment will be located indoors whenever possible. Strengthening greening around roads and buildings

within the project area will also be implemented to ensure compliance with noise emission standards at the project boundary.

Aircraft noise: ① In the areas where aircraft noise generated by the cargo flights of the Project exceeds 75 dB (Lwecpn), there are still a total of 826 households in five villages - Xinwan Village, Jiajiang Village, Duwan Village, Chehu Village, and Bajiao Village - that have not been relocated. ② The areas where aircraft noise exceeds 75 dB (Lwecpn) generated by cargo flights of the Project are all included in the area where cumulative aircraft noise exceeds 75 dB (Lwecpn) at Huahu Airport. The aircraft noise impact area at Huahu Airport will not increase due to the operation of this project. Consequently, the number of resettled residential areas due to noise exceeding the standard will not increase as a result of the project's operation. Relocation due to noise impact will be carried out with reference to the relevant procedures in Appendix H *Noise Management Framework*.

Associated facility - Wuchu Avenue: Vehicle noise is the most important environmental impact factor. According to the prediction and analysis, the primary impact range of noise lies within a 30.7-meter area on both sides of the road. To further reduce the noise impact on the surrounding area, measures will include the selection of proper road surface materials, enhancing green zones, improving road traffic management, and increasing the maintenance of road operations.

4) Solid waste impact and mitigation measures

Hubei Global Air Cargo Logistics Hub Project: The main types of waste include domestic waste, kitchen waste, general solid waste, and hazardous waste generated during production operations. The domestic waste is regularly cleared and transported by the sanitation department in the district to the Ecological Disposal Project for Domestic Wastes of Ezhou City of Huaxin Environmental Engineering (Ezhou) Co., Ltd. in Baihong Village, Yanji Town for harmless disposal. According to the Notice of the Municipal People's Government on Printing and Distributing Management Measures for Kitchen Waste in Ezhou City (EZZG [2023] No.1), kitchen waste is collected, transferred, and disposed of by qualified units; The grease in the oil-water separator and the sludge in the septic tank are regularly pumped and disposed of by Ezhou municipal sanitation department, and the sludge from the integrated sewage treatment facilities of each unit belongs to general industrial solid waste and is regularly cleared and transported by the operation unit before being buried in the domestic waste landfill; Except that generated in the sewage treatment station, the general solid waste generated in the Project is mainly waste packaging materials, waste laboratory samples and waste packaging materials that do not contain toxic and harmful substances, incinerator slags, waste battery panels, etc. Waste packaging materials and battery panels are recycled by the manufacturer, incinerator slag is proposed to be sold for comprehensive utilization, and general solid waste is preferentially recycled. Hazardous wastes mainly include waste activated carbon (hazardous waste category HW49), laboratory wastes (liquid wastes, waste packaging materials, and waste reagents) (hazardous waste category HW49), oily waste materials (solid waste from inspection, solid waste from maintenance, and oily sludge) (hazardous waste category HW08), waste electric melting, and waste reactors (hazardous waste category HW10). They are temporarily stored in the generation unit. The temporary storage place will meet the requirements in the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597—2023). Since there is no relevant disposal unit in Ezhou City that can handle the hazardous wastes generated by the Project, units with corresponding categories of disposal qualifications will be entrusted for the disposal of hazardous wastes

according to the *List of Units with Hubei Hazardous Waste Business License* published by Department of Ecology and Environment of Hubei Province.

Associated facility — Wuchu Avenue: Solid waste primarily originates from street sweeping debris. The volume of waste is low, and waste collection containers are set on both sides of the street. After collection, the waste is routinely transported away by the sanitation department. Therefore, there are no adverse effects on the surrounding environment.

5) Environmental risk impact and mitigation measures

The primary sources of environmental risks in the Hubei Global Air Cargo Logistics Hub Project are from: the fumigation chamber, laboratories and special cargo transport warehouses in the customs inspection center, and dangerous materials warehouses where the hazardous substances, during the use or storage, may lead to leaks, fires, explosions, and secondary environmental impacts due to sudden factors.

During the operation period, the risks along the associated facility (Wuchu Avenue) primarily arise from the transportation of various hazardous chemicals and dangerous goods; the risk accidents include leaks of hazardous substances and fires (explosions) as a result of traffic accidents involving transport vehicles.

After implementing the risk mitigation measures outlined in the report, the risks associated with the Project on the environment are manageable.

6) Light pollution

The solar panel mounting structures for the Hubei Global Air Cargo Logistics Hub Project will utilize fixed brackets, designed with an installation angle of 10°. The brackets will be approximately 1.5 meters high, which will minimize the reflection of sunlight to the greatest extent. In addition, polycrystalline silicon solar cells are proposed to be used in the Project. The cells have an extremely high light transmittance of over 95% and a low reflectivity of only 5%, and will not cause obvious light pollution, ensuring that drivers on city roads near the photovoltaic power station will not experience glare, and bird flight patterns or aircraft safety will not be affected.

7) Occupational Health and Safety

To mitigate potential health and safety risks to workers, the following measures are proposed:

① Prepare the environmental and social management plans for the operation phase, and regularly provide workers with relevant training;

② Provide workers with personal protective equipment free of charge, including goggles, gloves, and safety shoes. Provide sound-proof equipment for workers working in high noise environments.

③. Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures.

④ Train workers in occupational health and safety and emergency response.

⑤ Restrict the access of the public to the project operation area.

V. Main Social Impacts and Mitigation Measures

The impacts of the Project on society mainly include delivering social benefits and causing social risks.

Social benefits mainly include:

(1) Promote the construction of regional logistics distribution centers and express stations. As an important supporting facility for the Huahu Airport, the Project will drive the construction of logistics transfer stations and express stations in Ezhou City as the cargo throughput and transportation demand increase, thereby improving the spatial layout and functionality of the logistics infrastructure. It is expected that after the implementation of the Project, the number of express outlets in the airport economic zone will be increased by 2-3 times. The development of delivery logistics in this region will be promoted.

(2) Enhance the low-carbon awareness of residents in the project area. The construction and operation of the green logistics park will not only encourage employees within the park to adopt green commuting, paperless office practices, and waste sorting, thereby promoting a green lifestyle, but also disseminate the concept of green and low-carbon life to surrounding communities. This will enhance the awareness of low-carbon life among residents in the project area and its vicinity, fostering green consumption and production habits among the residents.

(3) Provide abundant employment opportunities for surrounding residents. Direct employment opportunities: including jobs provided by the PMO, Operator, and Construction Contractor. The Construction Contractor will provide temporary, low-skilled employment opportunities, including jobs in construction, cleaning, logistics, transportation, and catering services. The PMO will provide positions such as document handling and project management. Corresponding jobs will be provided after the Operator settles in. Indirect employment opportunities: The development of local industries, including the agricultural product processing industry and logistics industry, will be promoted. Firstly, the agricultural products, including Wuchang fish, Tuzhen blueberries, and Zhaoshan grapefruit, are distributed in the surrounding area of the Project. It is anticipated that after the Project is implemented, it will provide over 500 new job opportunities for local residents. Secondly, the logistics industry, involving logistics personnel and supporting infrastructure such as service points and distribution centers, will be promoted by the Project. The development of service industries like delivery services, catering, and accommodation will be driven by the Project. It is anticipated that 5,000 indirect job opportunities will be provided.

(4) Broaden employment and entrepreneurship opportunities for women in the surrounding area. After the Project is completed, it will create opportunities for women in the surrounding area to embrace new types of employment, such as intelligent logistics sorting, logistics transportation, and other related work. Additionally, the project will provide training on low-carbon awareness, employment, entrepreneurship, and business counseling for women

in the surrounding area, enhancing their overall quality and empowering women for employment and entrepreneurship initiatives.

(5) Promote the development of local agricultural product logistics. After the completion of the Project, a variety of agricultural products such as Red Rape, Bean Vermicelli, and Wuchang fish will be transported out and supplied efficiently. This will address the "last mile" issue of agricultural products from villages to urban areas, reduce transportation costs for agricultural products, improve post-harvest processing, packaging, storage, transportation, and distribution logistics, and drive the development of agricultural product logistics.

(6) Reduce the purchase cost of imported goods for residents The Project will involve the construction of multiple bonded warehousing and processing centers and customs infrastructure. With these facilities in place, residents of Ezhou City and the surrounding areas can expand their cross-border online shopping options. Instead of relying solely on overseas direct purchases or having items shipped through other domestic cities, they will have the convenience of receiving imported goods directly from local bonded warehouses. This direct access is expected to significantly reduce the cost of goods for consumers. Efficient customs can speed up logistics operations and shorten the entire supply chain cycle, which not only improves the satisfaction of logistics enterprises, but also directly reduces the transportation cost of residents purchasing goods.

(7) Improve the safety and health of local residents. Upon the completion of the customs infrastructure, there will be an increase in quarantine inspections for inbound goods (items) to prevent significant infectious diseases, major animal and plant epidemics, the influx of invasive species, and other biological security risks under customs supervision. The aim is to avoid and reduce potential harm to domestic ecosystems, biodiversity, agriculture, forestry, animal husbandry, fisheries, and the health of residents. The increase of imported food will effectively diversify the local food supply system, meet the diverse nutritional needs of the human body, and improve the health level of residents in the project area and surrounding areas.

Social risks during construction and operation of the Project mainly include:

(1) Risks related to land acquisition and demolition. 1598.3 mu of rural collective land is to be acquired for the Project, including 665.3 mu for Phase I and 933.0 mu for Phase II. The land acquisition will have an impact on 2 villages in 1 township in Ezhou Linkong Economic Zone, involving 386 households and 1503 people.

(2) Risks related to community traffic safety During the project construction process, there may be disturbances to the surrounding community, such as traffic congestion and safety risks. The transportation of construction materials and the large engineering vehicles traveling to and from the construction site may pose risks to along-the-way communities, such as noise, dust, and litter scattered in the area. The increase in transportation vehicles may lead to damage to the pavement of roads in the community surroundings, potentially resulting in sudden road traffic safety risks.

(3) Impact of migrant workers on local residents. The increased interaction between migrant workers and local residents may lead to social conflicts and issues due to differences in

language or social-cultural customs during communication. Moreover, close interactions between migrant workers and local residents may easily lead to health risks such as the spread of communicable or epidemic diseases.

(4) Worker management risk. The potential labor management risks of the Project will mainly have an impact on direct workers (directly employed by PMO of Ezhou Linkong Group and Project Implementation Units), contractor's workers (contractor's workers for civil engineering construction of the Project), and supplier's workers (supplier's workers for solar panel supply chain).

According to the identified main social impacts, corresponding mitigation measures are formulated: (1) reduce the risks of land acquisition; (2) reasonably plan the driving routes of vehicles; (4) minimize disruption to local residents and society caused by an influx of workers during the construction period. (5) implement worker management plan; (6) develop a social gender action plan. See Table 11.3-1 for details of the social management plan.

The ethnic minority identification survey found that: (1) In the project affected area, there are no ethnic minority group that triggers the ESS3 criterion. (2) The population of ethnic minorities within the scope of the project construction is extremely low. There are no traditional territories, ethnic minority languages, or traditional cultures, and there are no self-identified ethnic minorities in the area. Therefore, the ethnic minority development plan is not required for the Project.

VI. Implementation Arrangements

Ezhou Linkong Group Co., Ltd. will promote the construction of the Project. Overall responsibilities of Ezhou Linkong Group Co., Ltd.: (1) Appoint an environmental and social coordinator to oversee the implementation and coordination of the ESMP; (2) Ensure that the ESMP, monitoring plan and mitigation measures are included in the bidding documents and construction contracts; (3) Ensure the operation of the grievance redress mechanism; (4) Handle unforeseen adverse impacts and report relevant information to AIIB promptly; (5) Entrust a qualified external environmental monitoring unit and a qualified external social monitoring unit.

Ezhou Linkong Group Co., Ltd. is required to regularly report on the implementation of the Environmental and Social Management Plan (ESMP), Resettlement Action Plan (RAP), Stakeholder Engagement Plan (SEP), and Noise Management Framework (NMF). During the first year of project implementation, these reports shall be submitted quarterly. From the second year onwards, the reports shall be submitted every six months, and included in the semi-annual project progress reports.

The overall construction period of the AIIB Project is 5 years, from 2024 to 2028.

Associated facilities — The bidding for some works of the Phase I Project (including Type-B Bonded Logistics Center, International Cargo Terminal, Quarantine Processing Center, Special Cargo Transport Warehouse, International Express Center, Customs Inspection Center, Customs Kiosk 1#, and Customs Kiosk 3#) was completed in September 2023. The works are implemented by Ezhou Linkong Group Co., Ltd., constructed by CCCC Third

Highway Engineering Co., Ltd. and Ezhou First Metallurgical Construction Co., Ltd., and supervised by Zhongsheng Hongyu Engineering Consulting Co., Ltd. and WISDRI Engineering Consulting & Management Co., Ltd. At present, the Type-B Bonded Logistics Center has passed the on-site acceptance inspection on April 9, 2024, and the remaining works are expected to be completed in November 2024. Bidding for other works (International Express Center, Business Logistics Center, Bonded Processing Plant, Bonded Logistics Warehouse, and Dangerous Goods Warehouse) has not yet been started.

Associated facilities - Relevant bidding work for Wuchu Avenue was completed in May 2023. The project is implemented by Ezhou Linkong Group Co., Ltd., constructed by CCCC Second Harbor Engineering Co., Ltd., and supervised by Wuhan Feihong Engineering Management Consulting Co., Ltd. The construction of the project was commenced in June 2023 and completed at the end of June 2024.

VII. Stakeholder Engagement

The social impact assessment of the Project is conducted for both the major and minor stakeholders of the Project. The major stakeholders of the Project include the direct beneficiaries within the project's impact area and groups affected by the negative consequences of the project's construction, encompassing on-site workers for project construction, staff of Huahu Airport, as well as residents affected by land acquisition, vulnerable groups, and school teachers and students in Duwan Village, Chehu Village, and Bajiao Village in Yanji Town, and Gutang Village in Yangye Town within the project area. Minor stakeholders include the PMO of Ezhou Linkong Group, Natural Resources and Planning Bureau of Linkong Economic Zone, Social Affairs Bureau of Linkong Economic Zone, Organization and Human Resources Bureau of Linkong Economic Zone, Economic Development Bureau of the Linkong Economic Zone, Financial Bureau of Linkong Economic Zone, Women's Federation of Linkong Economic Zone, contractors, Hubei International Logistics Airport Co., Ltd., design consulting unit (e.g., feasibility study/environmental impact assessment units), and media. Meanwhile, attention will be paid to the livelihood development and public participation of vulnerable groups and women.

In the early preparation stage of the Project, the units responsible for the preparation of the feasibility study report, social assessment, and environmental assessment carried out project information disclosure and notification, as well as fully informed consultation and public participation activities such as institutional interviews, field investigations, focus group discussions, key informant interviews, and questionnaire surveys. The survey finds that the stakeholders mainly have the following concerns: (1) residents' demand for full compensation and development opportunities; (2) residents' demand for opportunities for improving income and employment; (3) construction workers' demand for formulating reasonable dust-reducing construction schemes; (4) stakeholder groups' demand for project information disclosure; (5) stakeholders' demand for participating in project implementation.

On the basis of the questionnaire surveys, workshops, in-depth interviews, and interviews with key informants, through participatory observation, the information disclosure and public participation plans for the Project are formulated. For details, please refer to the *Stakeholder Engagement Plan (SEP) for the Ezhou Global Air Cargo Logistics Hub Project.*

VIII. Grievance Redress Mechanism

In the process of project preparation, construction, and operation, in order to timely understand and solve the impacts and problems brought by the Project on stakeholders, and ensure residents' needs for information disclosure and broad community participation, a grievance and complaint mechanism at the project level will be established in combination with the current situation of complaints from residents in the project area. Records of all grievances, and resulting resolutions, will be kept and reported to AIIB through the semi-annual environmental and social monitoring mechanism.

The grievance redress mechanism of the Project mainly covers the following:

The project-level grievance redress mechanism: a mechanism established for residents, social organizations, and business entities affected by the Project to voice their concerns during the implementation and operation of the Project.

The grievance redress mechanism for project workers: a mechanism providing a channel for grievance for direct workers and contract workers, as well as employees responsible for the Project

1 Introduction

1.1 Project Background

According to the Feasibility Study Report for the AIIB-funded Hubei Global Air Cargo Logistics Hub Project (May 2024), the construction background of the Project is as follows:

The Hubei Global Air Cargo Logistics Hub Project is located in Ezhou City, Hubei Province, China. Ezhou City is a famous historical and cultural city in Hubei Province, an emerging industrial city on the southern bank of the middle reaches of the Yangtze River, an important support for the "metallurgical corridor", "garment corridor" and "building materials corridor" in eastern Hubei. It is one of the first batch of reform and opening-up pilot zones in Hubei Province, an important member of Wuhan metropolitan area and urban agglomeration along the middle reaches of the Yangtze River, one of the water and land transportation hubs in eastern Hubei, and the carrier city of airport-type national logistics hub. At present, a complete industrial system has been formed in Ezhou, with metallurgy, clothing, building materials, medicine, chemical industry, machinery, electronics, and light industry as the main bodies. It is an important industrial base in Hubei Province and a commodity distribution center in eastern Hubei.

With the smooth progress of the Hubei International Logistics Core Hub Project, Ezhou City encounters an unprecedented development opportunity. In 2019, approved by the CPC Hubei Provincial Committee and the People's Government of Hubei Province, Ezhou City officially established the Linkong Economic Zone. Its strategic positioning is as an international air cargo hub, a national multimodal transport innovation demonstration base, a new highland for opening up in central China, and an airport industry cluster in the middle reaches of the Yangtze River. Leveraging the directional characteristics of the airport industry, Ezhou Linkong Economic Zone is vigorously developing industries such as aviation logistics, e-commerce, aviation services, information technology, high-end aviation manufacturing, and great health. Following the development concept of "promoting production through the port, revitalizing the city through production, and integrating production with the city," efforts are made to actively construct a spatial development pattern based on the "one port, five zones" concept. It is emphasized to place a strategic focus on establishing the Ezhou Airport Comprehensive Bonded Zone. Following the principle of "overall planning, intensive sharing, convenient customs clearance, and inspection", it is planned to build a centralized customs inspection center on the north side of Ezhou Huahu Airport to undertake all international cargo inspection functions of the Comprehensive Bonded Zone, Huahu Airport and Yanji Port, thus realizing the integration of airports and water ports.

As a crucial component of the Ezhou Airport Comprehensive Bonded Zone, the Hubei Global Air Cargo Logistics Hub Project relies on the Ezhou Huahu Airport and aviation hub. It is guided by national and regional strategies such as the Belt and Road Initiative, the Yangtze River Economic Belt, and the rise of the central region. The project focuses on developing bonded services with an emphasis on aviation maintenance, cross-border e-commerce, and international logistics distribution. By creating a new platform for a comprehensive expansion of the airport industry system in both international and domestic

markets and fostering the development of a high-end airport industry cluster, the goal is to construct an internationally competitive and innovative global air cargo logistics park to facilitate the development of Hubei International Logistics Core Hub.

After the Project is completed, a key cross-border e-commerce platform in the central region, a new platform for innovative development of Ezhou Inland Free Trade Port, a significant industrial center in the central region, a model area for the integration of airport and bonded industries, and a crucial aviation logistics hub along the Belt and Road Initiative will be built.

1.2 Assessment Method

The purpose of the ESIA is to assess the potential environmental and social impacts and risks associated with the proposed project, assess alternatives, and develop suitable mitigation, management and monitoring measures to eliminate, offset or minimize any adverse environmental and social impacts while maximizing the positive benefits of the Project. Ezhou Linkong Group Co., Ltd. entrusted Central-Southern Safety & Environmental Technology Institute Co., Ltd., (hereinafter referred to as the ESIA preparation unit) to assess documents related to the environmental and social impacts of the Project. The ESIA is carried out according to the following steps:

(1) Collect and review project-related data, conduct preliminary engineering analysis, and identify key environmental and social impacts.

Clarify the key points of assessment and environmental and social protection objectives. The technical documents reviewed mainly include:

① Feasibility Study Report on Port Operation Area of the Hubei Global Air Cargo Logistics Hub Project at Ezhou Airport Comprehensive Bonded Zone (Phase I)

② Feasibility Study Report on Implementing Hubei Global Air Cargo Logistics Hub Project by Utilizing AIIB Loans;

③ Environmental Impact Report of Port Operation Area at Ezhou Airport Comprehensive Bonded Zone;

④ Environmental Impact Report of Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone.

(2) Between July and December 2023, the ESIA preparation unit conducted an extensive field survey at the proposed construction site linked to the development of the Project. The aim was to thoroughly assess the on-going early start-up construction activities, alongside understanding the rationale behind site selection, the site's environmental conditions, land use considerations, as well as identifying any environmentally and socially sensitive issues. The survey also encompassed factors that could potentially influence the project, the demographic structure and requirements of the local residents, and the socio-economic circumstances of the communities impacted by the project's execution.

(3) In December 2023, field surveys were carried out at the Project site within the scope of project implementation:

● Institutional interviews and data collection. Discussions or interviews were conducted with seven relevant institutions and departments involved in the project area, including the Planning Headquarters of Ezhou Linkong Group Co., Ltd., Operation Department of Huahu Airport and internal organizations of Management Committee of Linkong Economic Zone, including Organization and Human Resources Bureau, Social Affairs Bureau, Rural Revitalization Bureau, Urban Construction Bureau (Housing Acquisition and Demolition Compensation Office), Natural Resources and Planning Branch. Information and data closely related to the Project were collected.

● Field investigation. Field investigations were conducted for the townships, villages and the vicinity of the airport, road conditions and infrastructure conditions, as well as the construction site of the project stations, etc., affected by the project construction.

● Focus group discussion. A total of 14 resident focus group discussions were held in different townships and villages in the counties and districts involved in the Project, with a total of 157 participants. Among them, 68 were women, accounting for 43.31%, and 42 were elderly, accounting for 26.75%.

●Key stakeholder interviews. Thirty-eight key stakeholders in the project area, townships and villages were interviewed, respectively.

● Questionnaire. During the field investigation, a total of 250 one-to-one face-to-face questionnaires were completed in the project area. After statistical inspection and screening, 220 valid questionnaires were found, and the effective rate of the questionnaires was 88%.

(4) The *Environmental and Social Impact Assessment for Hubei Global Air Cargo Logistics Hub Project (draft)* was completed.

1.3 Report Structure

The report consists of the following chapters:

Chapter I Introduction: This chapter introduces the project background, ESIA method, and report structure.

Chapter II Policies, Laws and Regulatory Framework: This chapter clarifies national laws, regulations, and policies applicable to the Project, AIIB's ESF implementation requirements, as well as optimal international practices and standards.

Chapter III Project Description: This chapter describes the necessity of project construction, basic information about the Project, project components, and engineering design.

Chapter IV Analysis of Associated Facilities.

Chapter V: Analysis of Alternatives: analyzing possible alternatives from environmental and social perspectives.

Chapter VI Environmental and Social Baselines: This chapter introduces the relevant geography of the project location, overview of the quality of the ecological environment, population status, baseline information of low-income groups in the project area, economic baseline situation in the project area, and baseline situation of Huahu Airport.

Chapter VII Environmental Impact Analysis and Mitigation Measures: This chapter predicts and assesses the positive and negative impacts the Project may have on the environment, and proposes mitigation measures.

Chapter VIII Social Impact Analysis and Mitigation Measures: This chapter involves elucidating the subjects, scope, key issues, and methods of social impact assessment. It includes conducting a social impact analysis from the perspectives of social benefits and risks. Furthermore, it analyzes the current status of women's development in the project area, gender disparities, and the impact of the Project on women in order to propose a gender action plan.

Chapter IX Information Disclosure and Public Participation: This chapter includes identifying stakeholders and disclosing and consulting on information related to the Project that has been completed during the preparation period.

Chapter X Grievance Redress Mechanism: This chapter gives the ways and means of appeal handling.

Chapter XI Environmental and Social Management Plan

2 Policy, Legal and Administrative Framework

This report is prepared in accordance with the currently applicable environmental and social laws and regulations of the People's Republic of China, local and departmental regulations, technical guidelines and norms of Hubei Province and Ezhou City, and the requirements of AIIB's *Environmental and Social Framework* (revised in November, 2021).

2.1 Applicable Environmental Laws, Regulations, and Policy Documents

2.1.1 National Level

(1) Environmental Protection Law of the People's Republic of China (implemented on January 1, 2015);

(2) Law of the People's Republic of China on Environmental Impact Assessment (implemented on December 29, 2018);

(3) Law of the People's Republic of China on Prevention and Control of Water Pollution (implemented on January 1, 2018);

(4) Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution (implemented on October 26, 2018);

(5) Law of the People's Republic of China on Prevention and Control of Noise Pollution (implemented on June 5, 2022);

(6) Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste (implemented on September 1, 2020);

(7) Law of the People's Republic of Chi*na on the Prevention and Control of Soil Pollution* (implemented on January 1, 2019);

(8) Land Administration Law of the People's Republic of China (implemented on January 1, 2020);

(9) Laws of the People's Republic of China on Water and Soil Conservation (implemented on March 1, 2011);

(10) Law of the People's Republic of *China on Promotion of Cleaner Production* (revised on February 29, 2012);

(11) Water Law of the People's Republic of China (revised on July 2, 2016);

(12) Urban and Rural Planning Law of the People's Republic of China (implemented on April 23, 2019);

(13) Mineral Resources Law of the People's Republic of China (revised on August 27, 2009);

(14) Yangtze River Protection Law of the People's Republic of China (implemented on March 1, 2021);

(15) Civil Aviation Law of the People's Republic of China (revised on April 29, 2021);

(16) Regulations on the Administration of Construction Project Environmental Protection (implemented on October 1, 2017);

(17) Regulations on the Implementation of the Law of the People's Republic of China on Water and Soil Conservation (revised on January 8, 2011);

(18) Regulations of the People's Republic of China on Wild Plants Protection (October 7, 2017);

(19) Regulations on the Protection of Basic Farmland (revised on January 8, 2011);

(20) Regulation on the Safety Management of Hazardous Chemicals (revised on December 7, 2013);

(21) Measures for Public Participation in Environmental Impact Assessment (January 1, 2019);

(22) Opinions of the CPC Central Committee and the State Council on Strengthening Ecological Environment Protection in an All-round Way and Resolutely Fighting for Pollution Prevention (June 16, 2018);

(23) Notice on Further Strengthening Management of Environmental Impact Assessment and Prevention of Environmental Risks (HF [2012] No. 77);

(24) Notice on Effectively Strengthening Risk Prevention and Strictly Managing Environmental Impact Assessment (HF [2012] No. 98);

(25) National Ecological Environment Protection Outline (State Council, November 26, 2000);

(26) Action Plan for Air Pollution Prevention and Control (GF [2013] No. 37);

(27) Action Plan for the Prevention and Control of Soil Pollution (GF [2016] No. 31);

(28) Action Plan for Prevention and Control of Water Pollution (GF [2015] No. 17);

(29) Guidelines for the Negative List of the Yangtze River Economic Belt Development

(Trial, 2022 Edition) (CJB [2022] No. 7);

(30) National Catalogue of Hazardous Wastes (2021 Edition)

2.1.2 Local Level

(1) Regulations of Hubei Province on the Management of Urban Environmental Noise (revised at the 31st Meeting of the Standing Committee of the 12th People's Congress of Hubei Province, implemented on November 29, 2017);

(2) Regulations of Hubei Province on Environmental Protection (revised for the second time at the 25th Meeting of the Standing Committee of the 12th People's Congress of Hubei Province, implemented on December 1, 2016);

(3) Regulations of Hubei Province on the Prevention and Control of Atmospheric Pollution (revised at the 6th Meeting of the Standing Committee of the 13th People's Congress of Hubei Province, implemented on June 1, 2019);

(4) Regulations of Hubei Province on the Prevention and Control of Water Pollution (revised at the 2nd Session of the 12th People's Congress of Hubei Province on January 22, 2014, implemented on July 1, 2014);

(5) Regulations of the Hubei Province on the Prevention and Control of Soil Pollution (adopted at the 4th Session of the 12th People's Congress of Hubei Province on February 1, 2016, implemented on October 1, 2016);

(6) Reply of the People's Government of Hubei Province on Approval of Water Function Zoning in Hubei (EZH [2003] No. 101);

(7) Opinions of the People's Government of Hubei Province on Implementing the Action Plan of the State Council on Air Pollution Prevention and Control (EZF [2014] No. 6);

(8) Notice of Hubei Provincial People's Government on Printing and Distributing the Working Program of the Action Plan of Hubei Province for Prevention and Control of Water Pollution (EZF [2016] No. 3, January 10, 2016);

(9) Notice of the Provincial People's Government on Printing and Distributing the Planning of Main Functional Areas in Hubei Province (EZF [2012] No. 106, December 21, 2012);

(10) Regulations of Hubei Province on Lake Protection (adopted at the 30th Meeting of the Standing Committee of the 11th People's Congress of Hubei Province on May 30, 2012, implemented on October 1, 2012);

(11) Measures of Hubei Province for Implementing the Wildlife Protection Law of the People’s Republic of China (revised for the 4th time at the 6th Session of the Standing Committee of the 13th People's Congress of Hubei Province, implemented on November 19, 2018);

(12) List of Key Protected Terrestrial Wildlife in Hubei Province (EZF [1994] No. 146, issued on June 5, 1994);

(13) Opinions of the Provincial People's Government on Accelerating the Implementation of "Three Lines and One List" Zoning Control of Ecological Environment (EZF [2020] No. 21);

(14) Regulations on Promoting the Development of Modern Logistics Industry in Ezhou City (implemented on March 1, 2020);

(15) Outline of Urban-Rural Master Planning for Ezhou City (2017-2035);

(16) Medium and Long-term Development Plan for the Logistics Industry of Ezhou City (2021-2030);

(17) Master Plan for Lake Protection of Ezhou City (2015-2025);

(18) Notice on Printing and Distributing *the Implementation Plan for "Three Lines and One List" Zoning Control of Ecological Environment in Ezhou City* (May 31, 2021);

(19) Plan of Re-regionalizing Environmental Noise Function in Urban Areas in Ezhou City (EZZBF [2020] No. 5);

(20) Notice on Issuing the 14th Five-Year Plan for Ecological Environmental Protection in Ezhou City (EZZF [2021] No. 16);

(21) Outline of the 14th Five-Year Plan for Economic and Social Development and the Long-Range Objectives Through the Year 2035 *of Ezhou City* (January 15, 2021).

2.1.3 Technical Guidelines, Standards and Specifications

(1) Technical Guideline for Environmental Impact Assessment of Construction Project-General Program (HJ2.1-2016);

(2) Technical Guidelines for Environmental Impact Assessment-Atmospheric Environment (HJ2.2-2018);

(3) Technical Guidelines for Environmental Impact Assessment-Surface Water Environment (HJ2.3-2018);

(4) Technical Guidelines for Envi*ronmental Impact Assessment – Surface Water Environment* (HJ610-2016);

(5) Technical Guidelines for Environmental Impact Assessment - Acoustic Environment (HJ2.4-2021);

(6) Technical Guidelines for Environmental Impact Assessment - Ecological Impact (HJ19-2022);

(7) Technical Guideline for Environmental Impact Assessment - Soil Environment (Trial) (HJ 964-2018);

(8) Technical Guidelines for Environmental Risk Assessment on Projects (HJ169-2018);

(9) Technical Guidelines for Environmental Impact Assessment - Civil Airport Construction Project (HJ 87-2023);

(10) Technical Specifications for Regionalizing Environmental Noise Function (GB/T15190-2014);

(11) Technical Criterion for Ecosystem Status Assessment (HJ192-2015);

(12) Technical Specification for Comprehensive Control of Soil and Water Conservation (GB/T16543.1-16453.6-2008);

(13) Major Hazards Identification of Dang*erous Chemicals* (GB 18218-2018).

2.2 Applicable Social Laws, Regulations, and Policy Documents

2.2.1 Social Risk Management Policy

(1) Opinions on Strengthening the Building of Social Stability Risk Assessment Mechanism for Major Decisions under the New Situation (ZBF [2021] No. 11);

(2) Notice on Issuance of the Interim Measures for Social Stability Risk Assessment of Major Fixed Assets Investment Projects of the National Development and Reform Commission (FGTZ [2012] No. 2492)

(3) Notice of the General Office of National Development and Reform Commission on Issuance of the Outline for Analysis and Assessment Report of Social Stability Risk of Major Fixed Assets Investment Projects (Trial) (FGBTZ [2013] No. 428);

(4) Interim Regulations on Procedures for Maj*or Administrative Decisions* (Decree No. 713 of the State Council);

(5) *Implementation Measures for Assessment of Social Stability Risks of Major Administrative Decisions of Ezhou City (Trial)* (EZZG [2012] No. 3).

2.2.2 Land Acquisition and Demolition Policies

(1) *Land Administration Law of the People's Republic of China* (revised for the third time in 2019);

(2) *Regulations on Implementation of Land Administration Law of the People's Republic of* China (revised in 2021);

(3) *Regulations on House Acquisition and Compensation Resettlement on State-owned Land* (Decree No. 590 of the State Council of the People's Republic of China);

(4) *Guiding Opinions of the Hubei Provincial Government on the Participation of Land-Expropriated Farmers in Basic Pension Insurance* (EZF [2014] No. 53);

(5) *Notice of the Hubei Provincial Government on Reissuing the Comprehensive Land Acquisition Price Standards for the Entire Province* (EZF [2023] No.16);

(6) *Notice of the Hubei Provincial Department of Natural Resources on Promoting the Reform of "Multiple Reviews in One" for Construction Land Approval and Urban-Rural Planning Permits* (EZRZF [2019] No.15);

(7) *Notice of the Municipal People's Government on Printing and Distributing the Measures for the Compensation and Resettlement of Houses on Expropriated Collective Land in Ezhou City (Revised)* (EZZG [2020] No. 9);

(8) *Implementation Measures for the Expropriation and Compensation of Houses on State-owned Land in Hubei Province* (EZF [2015] No. 380);

(9) *Announcement on the Compensation and Resettlement Plan for Land Acquisition in Linkong Economic Zone* (LKZAZ [2023] No. 021).

2.2.3 Labor Management Policy

(1) *Labor Law of the People's Republic of China* (revised in 2018);

(2) *Labor Contract Law of the People's Republic of China* (revised in 2012);

(3) *Regulations on Labor Security Supervision* (2004);

(4) *Trade Union Law of the People's Republic of China* (2021)

(5) *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* (revised in 2018);

(6) *Law of the People's Republic of China on the Protection of Rights and Interests of Women* (revised in 2018);

(7) *Special Provisions on the Labor Protection of Female Employees of the People's Republic of China* (2012);

(8) *Notice on Printing and Distributing the Measures for the Administration of Labor Ability Appraisal in Hubei Province* (ERSG [2021] No. 1);

(9) *Implementation Measures for Filing of Labor Employment in Hubei Province (Trial)* (ERSG [2011] No. 1);

(10) *Regulations on Labor Contract of Hubei Province* (EZF [2005] No. 273);

(11) *Notice of the Leading Group for Labor and Employment Work of Ezhou Municipal Government on Printing and Distributing Ten Action Plans of "For Enterprises and in Ezhou"* (EZJGF [2023] No.1).

2.2.4 Policies Regarding Information Disclosure and Public Participation

(1) *Measures for Public Participation in Environmental Impact Assessment* (implemented in January 2019);

(2) *Opinions of the General Office of the State Council on Promoting Government Information Disclosure in the Approval and Implementation of Major Construction Projects* (GBF [2017] No. 94);

(3) *Opinions of the General Office of the State Council on Promoting Government Information Disclosure in Public Resource Allocation* (GBF [2017] No. 97);

(4) *Notice of the General Office of the CPC Central Committee and the General Office of the State Council on Issuing the Opinions on Comprehensively Promoting the Publicity of Government Affairs*;

(5) *Notice of the General Office of the Ministry of Natural Resources on Printing and Distributing Guidelines on Standards for Publicity of Community-level Government Affairs on Acquisition of Farmers' Collective Land* (ZRZBH [2019] No. 1105);

(6) *Notice of the General Office of the CPC Hubei Provincial Committee and the General Office of the People's Government of Hubei Province on Printing and Distributing the Implementation Measures of the First Visit Responsibility System for Petition Work in Hubei Province* (EBF [2013] No. 14);

(7) *Implementation Opinions of the General Office of the Provincial People's Government on Comprehensively Promoting the Standardization and Normalization of Publicity of Community-level Government Affairs* (EZBF [2020] No.39).

2.2.5 Other Relevant Policies

(1) *Guiding Opinions of CAAC on Promoting the Development of Aviation Logistics Industry* (MHF [2018] No. 48);

(2) *Decision of the Ministry of Transport on Amending the Provisions on the Administration of Civil Airport Construction* (Order No. 32 [2018] of the Ministry of Transport);

(3) *Regulations on Management of Operation Safety of Civil Airports* (CCAR-140);

(4) *Special Planning for Aviation Logistics Development during the 14th Five-Year Plan Period* (MHF [2022] No. 7);

(5) *Opinions of the State Council on Promoting the Development of Express Delivery Industry* (GF [2015] No. 61);

(6) *Implementation Plan of the National Development and Reform Commission for the Construction of National Logistics Hub Network (2021-2025)* (FGJM [2022] No. 956);

(7) Description of the results of soliciting public opinions on *Incentive Measures for Ezhou International Air Freight Collection (Draft for Comments)*;

(8) *Opinions of the Provincial People's Government on Accelerating the Development* of *Provincial Civil Aviation Industry* (EZF [2012] No. 23);

(9) *Interim Measures for the Administration of Special Funds for Development of Civil Aviation Industry in Hubei Province* (ECJF [2018] No. 185);

(10) *Notice on Printing and Distributing the Interim Measures for the Administration of Special Funds for Incentives of Air Routes in Ezhou* (EZZF [2022] No.16);

(11) *Notice of the Municipal People's Government Office on Printing and Distributing the Implementation Plan for Regulations on Promoting the Development of Modern Logistics Industry in Ezhou City* (EZZBF [2020] No. 50).

2.3 AIIB's Environmental and Social Requirements

As the Project will apply for a loan from the AIIB, AIIB's Environmental and Social Framework (ESF) applies to the Project. The key elements are the Environmental and Social Policy (ESP), the Environmental and Social Standards (ESSs), and the Environmental and Social Exclusion List (ESEL).

(1) Environmental and Social Policy (ESP), The ESP sets out the mandatory requirements for identifying, assessing, and managing environmental and social risks and impacts in projects undertaken by AIIB and its clients and AIIB-supported projects.

(2) Environmental and Social Standards (ESSs). Depending on the nature of the project, mandatory environmental and social requirements that need to be implemented by the Employer are specified in detail. ESSs include the following contents:

1) Environmental and Social Standard 1 (ESS 1): It aims to ensure the project's environmental and social robustness and sustainability, as well as the integration of environmental and social considerations into decision-making and implementation. ESS 1 applies in cases where a project is likely to have adverse environmental risks and impacts or/and social risks and impacts. The scope of environmental and social assessment and management measures is directly proportional to the risks and impacts of the project. ESS1 allows for high-quality environmental and social assessment and management of risks and impacts by providing effective mitigation and monitoring measures during project implementation. ESS1 delineates the specific requirements for conducting environmental and social assessments for any project funded by AIIB.

2) Environmental and Social Standard 2 (ESS 2): It applies if the project scoping process indicates that the project involves involuntary resettlement (including recent or foreseeable involuntary resettlement directly related to the project). Involuntary resettlement includes both physical relocation (such as relocation, loss of residential land, or housing) and economic displacement (such as loss of land or access to land and natural resources, loss of assets, loss of sources of assets and income, or loss of livelihood) caused by (a) involuntary land acquisition and (b) forced restrictions on land use or entry into legally designated parks and protected areas. It encompasses all forms of displacement, whether partial or total, permanent or temporary, resulting from losses and involuntary restrictions. ESS2 establishes detailed requirements for the resettlement plan of projects involving involuntary resettlement.

3) Environmental and Social Standard 3 (ESS3). ESS3 applies in cases where, in the proposed project area, there are indigenous peoples (ethnic minorities) or those attached to such groups, likely to be affected by the project.

(3) Environmental and Social Exclusion List (ESEL). ESEL lists activities and projects that are excluded from the financing by AIIB and which the clients must exclude from their plans.

Among the ESSs, Environmental and Social Standard 1: Environmental and Social Assessment and Management (ESS 1) and Environmental and Social Standard 2: Land Acquisition and Involuntary Resettlement (ESS2) will apply to the Project. The ethnic minority identification survey found that:

(1) There are no ethnic minority groups triggering the conditions of ESS3 criterion in the project-affected area.

(2) The population of ethnic minorities within the scope of the project construction is extremely low. There are no traditional territories, ethnic minority languages, or traditional cultures, and there are no self-identified ethnic minorities in the area.

Therefore, for the Project, the formulation of an Ethnic Minority Development Plan (EMDP) is not necessary, and ESS3 regarding Indigenous Peoples is not applicable.

The AIIB's *Environmental and Social Framework* (revised in November 2022) requires projects to adhere to internationally recognized technologies and best practices in pollution prevention and control. The Project will be implemented according to the following Good International Industry Practices (GIIP): the *World Bank Group's EHS Guidelines - General* and *the EHS Guidelines - Toll Roads* (2007).

The table compares China's national laws with the AIIB ESF. The project must comply with both sets of requirements simultaneously. In case of any conflicts, the more stringent requirements from both sets of laws/policies must be met.

Table 2.3-1 Comparative Analysis of China's and AIIB's Environmental and Social Frameworks

Items	Requirements of the AIIB	Requirements of China	Comparative Analysis
Environmental policy and regulation system	The Project is funded by AIIB, therefore, the AIIB ESF is applicable, which mainly includes Environmental and Social Policy (ESP), Environmental and Social Standards (ESS), and Environmental and Social Exclusion List (ESEL). The AIIB's Environmental and Social Framework (revised in November 2022) requires projects to adhere to internationally recognized technologies and best practices in pollution prevention and control. The Project will be implemented according to the World Bank Group's EHS Guidelines - General and the EHS Guidelines - Toll Roads (2007).	**1. Environmental aspects** China has established laws, regulations, and regulatory systems at both the national and local levels, technical guidelines and norms, environmental quality standards, and pollutant emission standards. **2. Social aspects** China has established a systematic social risk management system, primarily focusing on project's social risks, land acquisition and resettlement, ethnic minorities, worker, and information disclosure.	Most of China's requirements and standards for environmental and social management align with the policies and standards of the AIIB. However, there are some differences in regulations. (For example, Chinese law does not require the preparation of a separate Environmental Management Plan or any other environmental documents/plans/lists for the projects.) When there are differences between the requirements and standards of China and the AIIB, stricter standards will be followed and implemented.
Screening and classification	The AIIB conducts project screening and classification at the earliest stages of project preparation. Projects are classified as A, B, C, or FI categories, primarily depending on the project location and the components that pose the highest environmental or social risks, including relevant direct, indirect, cumulative, and induced impacts. Based on the results of screening and classification, the Project is classified as an environmental and social Category A project. According to environmental and social policies, Category A projects are required to be provided with an Environmental and Social Impact Assessment report, including the ESMP, RP, SEP, and Noise Management Framework. The environmental and social impact assessment report shall include the following chapters: (a) Project description	**1. Environmental aspects** The Catalogue for the Classified Management of Environmental Impact Assessment of Construction Projects (2021 Edition) provides detailed requirements for 55 industries and 173 sub-industries. The Project falls under the category "LIII. Loading, handling and warehousing", specifically under "Others (including the warehousing of toxic, harmful, and dangerous goods; including liquefied natural gas storage)" in "149. Hazardous Goods Storage 594 (fuel depots without fueling stations; gas depots without gas stations). It also pertains to the category " XLVII. Ecological Protection and Environmental Governance," specifically under "102. Medical Waste Disposal, Harmless Disposal of Dead And Diseased Animals," classified under "Others." Therefore, an environmental impact assessment report form should be prepared. Therefore, an	The AIIB has stricter requirements, and this project will adhere to the AIIB standards. The environmental and social impact assessment is conducted in accordance with the requirements of AIIB ESF. AIIB standards are followed, and a Social Impact Assessment (SIA) report has been prepared in accordance with AIIB requirements. The Project Office will conduct social assessment on the low-income population, gender development and community residents within the scope of influence of the project, and put forward suggestions for social management plan and gender action plan to improve project benefits and

Items	Requirements of the AIIB	Requirements of China	Comparative Analysis
	(b) Policies, laws, and administrative frameworks, including international and national legal frameworks applicable to the Project. (c) Project description (d) Analysis of alternatives (e) Environmental and Social Baseline (f)Environmental and social risks and impacts (g) Public consultation and information disclosure (h) Develop mitigation, monitoring and management measures and action plans in the form of an environmental and social management plan or environmental impact assessment.	environmental impact report form is prepared for the Project. The domestic EIA report includes the following chapters: I. Basic information of construction project II. Engineering analysis of construction project III. Current Situation of Regional Environmental Quality, Environmental Protection Objectives and Assessment Standards IV. Main environmental impacts and protection measures V. Supervision and inspection list of environmental protection measures VI. Conclusion **2. Social aspects** Regarding social risks of the Project, a Social Stability Risk Assessment Report needs to be submitted. The report primarily focuses on the social stability risks arising from project construction and decision-making, but pays less attention to aspects such as promoting social development, social equity, and social sustainability. In terms of worker management risks, policies and regulations require employers to have detailed provisions at the company management level regarding labor contracts, working hours and rest time, wages, occupational health and safety, special protection for female workers and minors, labor disputes, and other related aspects. Regarding stakeholder engagement, it is required that major decisions and investigations for significant	reduce social risks.

Items	Requirements of the AIIB	Requirements of China	Comparative Analysis
		Furthermore, information regarding the approval and implementation processes of major construction projects should be made as publicly available as possible to enhance transparency and efficiency in project approval and implementation.	
Tangible Cultural Heritage	AIIB ESS1 requires cultural resource-based field surveys to protect cultural resources and avoid destroying them in the Project.	Domestic EIAs pay limited attention to this issue. However, it is prohibited domestically to damage tangible cultural heritage.	A chance find procedure in the event of discovery of tangible cultural heritage has been included in this report.
Public Consultation	The Project Borrower is responsible for conducting at least one meaningful consultation for all Class A projects to discuss the issues to be addressed in the Environmental Management Plan or to discuss the draft of the Environmental Management Plan itself. The discussion content will encompass all project activities, including technical support activities, capacity building, equipment procurement, and construction activities. It is essential to identify and engage stakeholders, considering their opinions, and ensuring their involvement through various consulting and negotiation methods, including conducting workshops, interviewing key informants, and setting up hotlines. Before conducting public participation, it is crucial to publicize relevant materials in understandable language and accessible formats to ensure the effectiveness of public participation.	In terms of environmental impact assessment (EIA), domestic regulations for such projects do not require public participation. In terms of social assessment, the social stability risk assessment requires public participation, but there is no requirement to prepare a related report at the project level.	As required by AIIB, specific stakeholder groups have been identified, and a targeted Stakeholder Engagement Plan (SEP) has been developed to ensure the full participation of stakeholders throughout the project's lifecycle. After the project activities are established, the PMO and Project Implementation Unit will conduct information disclosure and public consultations in accordance with the requirements of the SEP. They will provide timely, relevant, understandable, and accessible information to stakeholders and engage in thorough negotiations with them. The SEP will pay particular attention to the needs of vulnerable groups, such as the elderly, low-income populations, and women, ensuring their participation in the

Items	Requirements of the AIIB	Requirements of China	Comparative Analysis
	documents such as public consultation, questions raised and replies shall be provided. The Project Implementation Unit (PIU) is required to interact with and provide adequate information to stakeholders throughout the project cycle.		websites, and relevant information is disclosed as required by the AIIB.
Grievance Handling	The AIIB requires clients to establish an appropriate Grievance Redress Mechanism (GRM) based on the ESP and relevant ESS to address and respond to public grievances.	The Department of Ecology and Environment has established an environmental complaint hotline to address relevant complaints, without requiring formal grievance redress mechanisms to be established for projects.	A sound grievance redress mechanism is established in accordance with AIIB regulations.

2.4 International Conventions

(1) *Vienna Convention for the Protection of the Ozone Layer* (March 22, 1985);

(2) The amended *Montreal Protocol on Substances that Deplete the Ozone Layer* (September 16, 1987);

(3) *United Nations Framework Convention on Climate Change* (1994);

(4) *Convention on Biological Diversity* (5 June, 1992);

(5) *The Paris Agreement* (2016).

2.5 Assessment Criteria

2.5.1 Environmental Quality Standards

2.5.1.1 Ambient Air Quality Standards

China's *Ambient Air Quality Standards* (GB3095-2012) specifies two classes of standards for air quality. Class 1 standard applies to nature reserves, scenic spots, and other areas requiring special protection. Class 2 standard applies to residential areas, commercial, traffic and residential mixed-use areas, cultural areas, industrial areas, and rural areas. The site of the Project falls under the Class II ambient air quality functional area.

The *Environmental, Health, and Safety (EHS) Guidelines* of the World Bank Group is based on the WHO's *Global Air Quality Guidelines*. The *Global Air Quality Guidelines* offers guidance on thresholds and limits for significant air pollutants that present health risks. Alongside the guideline values, the WHO's *Global Air Quality Guidelines* also establish transitional targets to facilitate the shift from high to low concentrations.

Table 2.5-1 compares the Class 2 standard in China's *Ambient Air Quality Standards* (GB 3095-2012) with the WHO's standards. While the 24-hour SO_2 limit (0.15 mg/m^3) in the Class 2 standard of China's *Ambient Air Quality Standards* (GB3095-2012) exceeds the upper limit (0.125 mg/m^3) established by the World Bank Group's provisional standards, the 24-hour PM_{10} (0.15 mg/m^3) and $PM^2_{.5}$ (0.075 mg/m^3) limits, as well as the annual average NO_2 (0.04 mg/m^3) and $PM^2_{.5}$ (0.035 mg/m^3) limits, align with the upper limits specified in the WHO's transitional standards. In general, China's standards are largely consistent with the guidelines and provisional target values established by the WHO. As a result, the Project will adhere to the Class 2 standard outlined in China's *Ambient Air Quality Standards* (GB3095-2012), with the exception of the 24-hour SO_2 limit which will follow the WHO's standard.

Table 2.5-1 Comparison of Standards for Ambient Air Quality (unit: mg/m^3)

No.	Contaminants	Average Period	*Ambient Air Quality Standards* (GB3095-2012), Class 2 standard;	WHO's Global Air Quality Guidelines		Standard Limit to be Adopted
				Target for the transitional period	Target	
1	SO_2	1 year	0.06	N/A	N/A	0.06
		24 hours	0.15	0.05-0.125	0.04	0.125
		1 hour	0.50	N/A	N/A	0.50
2	PM_{10}	1 year	0.07	0.02-0.07	0.015	0.07
		24 hours	0.15	0.05-0.15	0.045	0.15
3	$PM^2_{.5}$	1 year	0.035	0.01-0.035	0.005	0.035
		24 hours	0.075	0.025-0.075	0.015	0.075
4	NO_2	1 year	0.04	0.02-0.04	0.010	0.04
		24 hours	0.08	0.05-0.12	0.025	0.08
		1 hour	0.20	N/A	N/A	0.20
5	CO	24 hours	4.0	7.0	4.0	4.0
		1 hour	10.0	N/A	N/A	10.0
6	O_3	8 hours in average for daily maximum	0.16	0.12-0.16	0.10	0.16
		1 hour	0.20	N/A	N/A	0.20

The main atmospheric particular pollutants involved in the Project are methyl bromide and volatile organic compounds. There are no relevant standard limits set for methyl bromide in the WHO's *Global Air Quality Guidelines* (2021) and China's *Ambient Air Quality* Standards (GB3095-2012). Therefore, for this environmental quality factor, the concentration limit value taken from the *Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical Hazardous Agents* (GBZ2.1-2019), with a reference limit of 2 mg/m^3, will be referred to. With reference to TVOC (total volatile organic compounds), the standard limit value of volatile organic compounds specified in Appendix D of *Technical Guidelines for Environmental Impact Assessment - Atmospheric Environment* is followed, and the 8h average reference value is 0.6mg/m^3.

2.5.1.2 Environmental Quality Standard for Surface Water

The surface water bodies involved in the construction period and operation period of the Project and Associated Facility mainly include the Yangtze River (Yanji Section), Huama Lake, and Zouma Lake. According to the *Letter of Responsibility for Water Pollution Prevention and Control Objectives in Ezhou City* signed by Hubei Provincial People's Government and Ezhou Municipal Government, the standard of Class II in Environmental Quality Standard for Surface Water (GB3838-2002) will be implemented for Yanji Section in Yangtze River Basin. According to the Classification of Environmental Functions of Surface Water in Hubei Province (EZBF [2000] No. 10), Zouma Lake belongs to the Huama Lake water system and is classified as Class III water.

(31) The EHS Guidelines of the World Bank Group do not provide reference standards for surface water quality. According to the environmental function zoning, Class II and III standards in the Environmental *Quality Standard for Surface Water* (GB3838-2002) of the People's Republic of China will be implemented for surface water.

Table 2.5-2 Environmental Quality Standards for Surface Water

Executive Standard	Items	Unit	Class II standard value	Class III standard value
Environmental Quality Standard for Surface Water (GB3838-2002)	Chemical oxygen demand (COD)	mg/L	15	20
	Five-day biochemical oxygen demand (BOD5)	mg/L	3	4
	Ammonia nitrogen (NH_3-N)	mg/L	0.5	1.0
	Total phosphorus (counted as P)	mg/L	0.1	0.05 (for lakes and reservoirs)
	Total nitrogen (counted as N)	mg/L	0.5	1.0
	Dissolved oxygen	mg/L	6	5
	Number of fecal coliforms	Nr./L	2000	10000
	Fluoride	mg/L	1.0	1.0
	pH	/	6~9	6~9

2.5.1.3 Environmental Quality Standard for Noise

According to China's *Environmental Quality Standard for Noise* (GB 3096-2008), the acoustic environment function areas are divided into 5 classes based on the functional characteristics and environmental quality requirements in the region. Class 0 acoustic environment function area refers to rehabilitation and convalescence areas and other areas that need to be especially quiet; Class 1 acoustic environment function area refers to areas whose main functions are residential buildings, medical treatment and public health, culture and education, scientific research and design, and administrative office, which need to be kept quiet; Class 2 acoustic environment function area refers to areas whose main functions are commercial finance and market trade, or areas where residence, commerce and industry are mixed, which need to maintain the quiet of residences; Class 3 acoustic environment function area refers to industrial production, storage and logistics, where it is necessary to prevent industrial noise from seriously affecting the surrounding environment; Class 4 acoustic environment function zones refer to areas within a certain distance on both sides of traffic arteries, where it is necessary to prevent serious impact of traffic noise on the surrounding environment, including two types: Class 4a and Class 4b. Class 4a refers to expressways, Class I highways, Class II highways, urban expressways, urban trunk roads, urban secondary trunk roads, urban rail transit (ground section) and areas on both sides of inland waterways, and Category 4b refers to areas on both sides of the railway trunk line. **The area around the airport is affected by aircraft noise (takeoff, landing, and low-altitude flyover), so this standard is not applicable.**

The *Environmental Health and Safety Guidelines* of the World Bank Group classify noise level guideline values into two categories by receiver type, i.e. residential, office and cultural/educational as well as industrial and commercial facilities. The guidance values for noise levels in residential, office, and educational settings are the same as those in Class 1 areas according to China's *Environmental Quality Standard for Noise* (GB 3096-2008).

However, for industrial areas and commercial facilities, domestic standards are more stringent compared to those of the World Bank Group.

Compared to the World Bank's standard classification, China's noise standards are more specific and are applicable to different acoustic environment functional zones. Acoustic environment functional zones are officially delineated by the local government based on a comprehensive consideration of land use purposes and the actual background conditions. Based on this zoning management model, noise standards apply to the entire zone rather than being tailored to individual receivers. The World Bank's standards only refer to receivers and do not take into account the background environment of the project. This makes them technically or financially unfeasible when applied to noise impact assessments for transportation projects such as railways or highways. Therefore, the environmental quality standard for ground noise of the Project is generally subject to domestic standards.

The Hubei Global Air Cargo Logistics Hub Project is located in the Linkong Economic Zone of Ezhou City. This zone primarily functions as an industrial production and warehousing logistics area, and is categorized as an industrial area. The residential areas surrounding the Project are all situated within the Linkong Economic Zone of Ezhou City. Therefore, the Project will adhere to the Class-2 standards of the domestic *Environmental Quality Standard for Noise* (GB 3096-2008). The Polong Temple, primarily used for cultural and religious activities, falls under Class 1 of the *Environmental Quality Standard for Noise* (GB 3096-2008) and is recognized as the residential, office, and educational areas as defined in the World Bank Group's *Environmental Health and Safety Guidelines*. Both systems have identical standard limits for such areas.

The associated facility, Wuchu Avenue, is classified as a major urban road. According to the *Acoustic Environment Functional Zoning of Ezhou City*, a certain distance has been delineated on both sides of the road based on the types of adjacent functional zones. Within this distance from the road boundary, the Class 4a standards of the *Environmental Quality Standard for Noise* (GB 3096-2008) are to be implemented. When the adjacent areas are classified as Class-2 and Class-3 zones, the Class-4a standards will be implemented within 35 m and 20 m on either side of the road, respectively.

The specific standard limits are as follows:

Table 2.5-3 Comparison of Standards for Acoustic Environment Quality

Class of Noise in the Functional Area	Area	*Environmental Quality Standard for Noise* (GB 3096-2008)		EHS Guidelines of the World Bank Group		Executive Standard	
		Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
0	Areas that require a high degree of quietness, such as convalescence areas	50	40	55	45	50	40
1	Areas mainly for residential buildings and	55	45			55	45

Class of Noise in the Functional Area	Area	*Environmental Quality Standard for Noise* (GB 3096-2008)		EHS Guidelines of the World Bank Group		Executive Standard	
		Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
	cultural and educational institutions						
2	Areas with mixed residential, commercial, and industrial functions	60	50	70*	70*	60	50
3	Industrial area	65	55			65	55
4a	Areas on both sides of urban trunk roads	70	55	N/A	N/A	70	55

* Excluding residential areas within industrial and commercial facilities.

In addition to the standard limits listed in the above table, the World Bank's *General EHS Guidelines* requires that noise impacts should result in an increase in background noise at the closest receiving point outside the site by less than 3dB.

For the evaluation standards of aircraft noise resulting from the operation of the Hubei Global Air Cargo **Logistics Hub Project, please refer to the *Noise Management Framework for the Hubei Global Air Cargo Logistics Hub Project* (Appendix H).**

2.5.1.4 Environmental Quality Standard for Groundwater

The EHS Guidelines of the World Bank Group do not provide reference standards for groundwater quality.

Therefore, the groundwater environment is subject to the Class III standard of *Environmental Quality* Standard *for Groundwater* (GB/T14848-2017) of China. The standard values are shown in the following table:

Table 2.5-4 Environmental Quality Standard for Groundwater

Executive Standard	Category	Items	Standard Value	
			Unit	Value
Environmental Quality Standard for Groundwater (GB/T14848-2017);	Class III	pH	/	6.5~8.5
		Ammonia nitrogen	mg/L	0.5
		Nitrate	mg/L	20
		Nitrite	mg/L	1.0
		Volatile phenol	mg/L	0.002
		Cyanide	mg/L	0.05

Executive Standard	Category	Items	Standard Value	
			Unit	Value
		Arsenic	mg/L	0.01
		Mercury	mg/L	0.001
		Lead	mg/L	0.01
		Cadmium	mg/L	0.005
		Ferrum	mg/L	0.3
		Manganese	mg/L	0.1
		Chromium (hexavalent)	mg/L	0.05
		Total hardness	mg/L	450
		Total dissolved solids	mg/L	1000
		Oxygen demand	mg/L	3.0
		Sulphate	mg/L	250
		Chloride	mg/L	250
		Fluoride	mg/L	1.0
		Total coliforms	CFU/100mL	3.0
		Total bacterial count	CFU/mL	100

2.5.1.5 Environmental Quality Standard for Soil

The EHS Guidelines of the World Bank Group do not provide reference standards for soil quality.

According to different types of land, China formulated soil environmental quality standards including Soil *Environmental Quality Risk Control Standard for Soil Contamination of Development Land (Trial)* (GB36600-2018) and *Soil Environmental Quality - Risk Control Standard for Soil Contamination of Agricultural Land (Trial)* (GB15618-2018). In the *Soil Environmental Quality Risk Control Standard for Soil Contamination of Development Land (Trial)* (GB36600-2018), Class I/Class II land is defined according to different exposure conditions of protected objects. The Class I land refers to urban construction residential land, land for public administration and public service, including land for primary and secondary schools, land for medical and healthcare, and land for social welfare facilities, as well as land for community park or children's park in park green space; Class II land refers to the industrial land, logistics and warehousing land, land for commercial service facilities, roads and land for transportation facilities, land for public facilities, land for public administration and public services, green space and square land in urban construction. The risk screening value provided in the standard indicates that for specific land use scenarios, if the pollutant levels in the soil of the construction site are equal to or below this value, the risk to human health can be disregarded. If the levels exceed this value, there might be potential risks to human health, prompting the need for further detailed investigation and risk assessment to determine the specific pollution scope and risk level.

The land for both the AIIB project and the Phase I project is classified as Class II construction land. Therefore, the soil environment quality will be subject to screening values of Class II land in the *Soil Environmental Quality Risk Control Standard for Soil Contamination of Development Land (Trial)* (GB36600-2018).

The types of land on the two sides of Wuchu Avenue are different. The agricultural land is subject to the *Soil Environmental Quality - Risk Control Standard for Soil Contamination of Agricultural Land (Trial)* (GB15618-2018); The construction land is subject to the screening values of Class I or Class II land in the *Soil Environmental Quality Risk Control Standard* for *Soil Contamination of Development Land (Trial)* (GB36600-2018) according to different exposure conditions of protected objects.

The standard values are shown in the following table:

Table 2.5-5 Environmental Quality Standard for Soil of Construction Land

S/N	Pollution Item	CAS No.	Screening Value	
			Class I Land	Class II Land
Heavy Metals and Inorganic Substances				
1	Arsenic	7440-38-2	40	60
2	Cadmium	7440-43-9	20	65
3	Chromium (hexavalent)	18540-29-9	3.0	5.7
4	Copper	7440-50-8	2000	18000
5	Lead	7439-92-1	400	800
6	Mercury	7439-97-6	8	38
7	Nickel	7440-02-0	150	900
Volatile Organic Compounds				
8	Carbon tetrachloride	56-23-5	0.9	2.8
9	Chloroform	67-66-3	0.3	0.9
10	Chloromethane	74-87-3	12	37
11	1,1- Dichloroethane	75-34-3	3	9
12	1,2-Dichloroethane	107-06-2	0.52	5
13	1,1-Dichloroethylene	75-35-4	12	66
14	Cis-1,2-dichloroethylene	156-59-2	66	596
15	Trans-1,2-dichloroethylene	156-60-5	10	54
16	Dichloromethane	1975-9-2	94	616
17	1,2-Dichloropropane	78-87-5	1	5
18	1,1,1,2-Tetrachloroethane	630-30-6	2.6	10
19	1,1,2,2-Tetrachloroethane	79-34-5	1.6	6.8

S/N	Pollution Item	CAS No.	Screening Value	
			Class I Land	Class II Land
20	Tetrachlorethylene	127-18-4	11	53
21	1,1,1-Trichloroethane	71-55-6	701	840
22	1,1,2-Trichloroethane	79-00-5	0.6	2.8
23	Trichloroethylene	1979-1-6	0.7	2.8
24	1,2,3-Trichloropropane	96-18-4	0.05	0.5
25	Vinyl chloride	1975-1-4	0.12	0.43
26	Benzene	71-43-2	1	4
27	Chlorobenzene	108-90-7	68	270
28	1,2-Dichlorobenzene	95-50-1	560	560
29	1,4-Dichlorobenzene	106-46-7	5.6	20
30	Ethylbenzene	100-41-4	7.2	28
31	Styrene	100-42-5	1290	1290
32	Methylbenzene	108-88-3	1200	1200
33	M-xylene + P-xylene	108-38-3, 106-42-3	163	570
34	O-xylene	95-47-6	222	640
35	Nitrobenzene	98-95-3	34	76
36	Aniline	62-53-3	92	260
37	2-Chlorophenol	95-57-8	250	2256
38	Benzo [a] anthracene	56-55-3	5.5	15
39	Benzo [a] pyrene	50-32-8	0.55	1.5
40	Benzo [b] fluoranthene	205-99-2	5.5	15
41	Benzo [k] fluoranthene	207-08-9	55	151
42	Chrysene	218-01-9	490	1293
43	Dibenzo [a,h] anthracene	53-70-3	0.55	1.5
44	Indeno [1,2,3-cd] pyrene	193-39-5	5.5	15
45	Naphthalene	91-20-3	25	70

Table 2.5-6 Environmental Quality Standard for Soil of Agricultural Land (unit: mg/kg)

S/N	Pollutant Item		Risk Screening Value			
			pH≤5.5	5.5< pH≤6.5	6.5< pH≤7.5	pH > 7.5
1	Cadmium	Paddy field	0.3	0.4	0.6	0.8
		Others	0.3	0.3	0.3	0.6
2	Mercury	Paddy	0.5	0.5	0.6	1.0

S/N	Pollutant Item		Risk Screening Value			
			pH≤5.5	5.5< pH≤6.5	6.5< pH≤7.5	pH > 7.5
		field				
		Others	1.3	1.8	2.4	3.4
3	Arsenic	Paddy field	30	30	25	20
		Others	40	40	30	25
4	Lead	Paddy field	80	100	140	240
		Others	70	90	120	170
5	Chromium	Paddy field	250	250	300	350
		Others	150	150	200	200
6	Copper	Orchard	150	150	200	200
		Others	50	50	100	100
7	Nickel		60	70	100	190
8	Zinc		200	200	250	300
9	Total amount of BHC		0.10			
10	Total amount of DDT		0.10			
11	Benzo [a] pyrene		0.55			

2.5.2 Pollutant Emission Standards

2.5.2.1 Exhaust Gas Emission Standards

The atmospheric pollutants during the construction period of the Project are mainly construction dust and asphalt smoke, and their emission complies with requirements in Table 2 in the *Integrated Emission Standard of Air Pollutants* (GB16297-1996). See the following table for standard limits.

Table 2.5-7 Emission Standard Limits of Pollutants during Construction Period

Standard	Pollution Factor	Monitoring Concentration Limit for Fugitive Emission	
		Monitoring point	Concentration mg/m^3
Integrated Emission Standard of Air Pollutants (GB16297-1996);	Particulate matter	Highest concentration point outside perimeter	1.0
	Asphalt smoke	No obvious fugitive emission shall exist in the production equipment	

Waste gas pollutants during the operation period mainly include waste gas from customs inspection experiments, bonded processing, quarantine (including fumigation and harmless incinerator), and animal house, canteen oil fume, and odor from sewage treatment and garbage transportation. The pollutants involved include volatile organic compounds (calculated by non-methane hydrocarbon), HCl, particulate matter, H_2S, NH_3, odor concentration, canteen cooking fume, and methyl bromide. For the above pollution sources, only the emission concentration of pollutants from small combustion facilities is required in the Guidelines for Emissions of Small and Medium-sized Combustion Facilities in

Environmental Health and Safety Guidelines issued by the World Bank Group. The limit values are applicable to harmless incinerators in the Quarantine Processing Center of the Project, and the emission limits of other pollutants are mainly based on domestic standards. See the following table for specific standard values.

Table 2.5-8 Emission Standard Limits of Pollutants during Operation Period

Pollution Source	Pollution Factor	Applicable Domestic Emission Standard Limits		World Bank Group EHS Guidelines	Executive Standard Limit
Waste gas from bonded processing	Particulate matter	*Integrated Emission Standard of Air Pollutants* (GB16297-1996);	120mg/m^3	/	120mg/m^3
Waste gas from experiments in the Customs Inspection Center	HCl		100mg/m^3	/	100mg/m^3
Oil fume in canteen	fume	*Emission Standard of Cooking Fume (Trial)* (GB 18483-2001);	2.0mg/m^3; treatment efficiency not less than 85%	/	2.0mg/m^3; treatment efficiency not less than 85%
Fumigation waste gas from Quarantine Processing Center	Methyl bromide	*Integrated Emission Standard of Air Pollutants in Shanghai* (DB31/933-2015)	20mg/m^3	/	20mg/m^3
Experimental waste gas from Customs Inspection Center and fumigation waste gas from Quarantine Processing Center	Volatile organic compounds (calculated by non-methane hydrocarbons)	*Detailed Explanation for Integrated Emission Standards of Air Pollutants*	120mg/m^3	/	120mg/m^3
Waste gas from animal house, sewage treatment, and garbage transfer odor	H_2S	*Emission Standard for Odor Pollutants* (GB14554-93)	0.06mg/m^3	/	0.06mg/m^3
	NH_3		1.5mg/m^3	/	1.5mg/m^3
	Odor concentration		20 (Dimensionless)		
Waste gas from harmless incinerator of Quarantine Processing Center	Particulate matter	*Emission Standard of Air Pollutants for Coal-Burning Oil-Burning Gas-Fired Boiler* (GB13271-2014)	20mg/m^3	/	20mg/m^3
	SO_2		50mg/m^3	/	50mg/m^3
	NO_x		150mg/m^3	320mg/m^3	150mg/m^3

2.5.2.2 Wastewater Discharge Standard

The wastewater generated during the construction period of the Project mainly includes construction wastewater, Rainwater containing silt from surface runoff on the construction site, water gushing from the foundation pit, and domestic sewage. Among them, construction

wastewater, rainwater containing silt from surface runoff and water gushing from the foundation pit are recycled after being treated by a sedimentation tank and oil-water separator for site sprinkling or greening instead of discharging outwards; domestic sewage is treated by temporary septic tanks, oil-water separators and other facilities before being discharged into the surrounding municipal pipe network. The wastewater generated during the operation period mainly includes domestic sewage, cleaning wastewater from the general warehouse, catering wastewater, wastewater from the animal house and laboratory, wastewater from bonded processing, leachate from the waste transfer station and cleaning water. Those kinds of wastewater are pretreated to meet the Class III requirements in the *Integrated Wastewater Discharge Standard* (GB8978-1996) before being discharged into the reclaimed water plant in the aviation metropolitan area.

The wastewater generated during the construction period of the associated facility – Wuchu Avenue is mainly construction wastewater, which will be recycled after being treated by a sedimentation tank and oil-water separator for site sprinkling and will not be discharged outwards. Domestic sewage during the construction period will be treated by existing sewage treatment facilities in residential areas. No sewage will be produced during the operation of the Project.

The wastewater discharge standards are as follows:

Table 2.5-9 Standard Limits for Wastewater Discharged into Municipal Pipelines

S/N	Items	Unit	Class III standard of *Integrated Wastewater Discharge Standard* (GB8978-1996)
1	pH	/	6~9
2	BOD_5	mg/L	≤300
3	CODcr	mg/L	≤500
4	SS	mg/L	≤400
5	NH_3-N	mg/L	≤28
6	TP	mg/L	≤4
7	TN	mg/L	≤35

Note: No constraints are set for NH_3-N, TP, TN, and some other indicators in the *Integrated Wastewater Discharge Standard* (GB8978-1996). The unconstrained indicators will be subject to the requirements in the standard for influent quality of the reclaimed water plant in the aviation metropolitan area.

After being sent to the reclaimed water plant of the aviation metropolitan area, the wastewater is further treated to meet the Class I A requirements in the *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB18918-2002) before being discharged into the Yangtze River (Ezhou Section).

Table 2.5-10 Standard Limits for Discharge of Effluent of Reclaimed Water Plant in Aviation Metropolitan Area

S/N	Basic Control Item		Grade I standard A
1	Chemical oxygen demand (COD)		50
2	Biochemical oxygen demand (BOD_5)		10
3	Suspended solid (SS)		10
4	Animal and vegetable oils		1
5	Petroleum		1
6	Anionic surfactant		0.5
7	Total nitrogen (counted as N)		15
8	Ammonia nitrogen (in N) ②		5(8)
9	Total phosphorus (counted as P)	Constructed before December 31, 2005	1
		Constructed as of January 1, 2006	0.5
10	Chromaticity (dilution factor)		30
11	pH		6-9
12	Number of fecal coliform bacteria (Nr./L)		103

Notes: ① The removal rate index shall be followed in the following cases: When COD in influent is more than 350mg/L, the removal rate shall be greater than 60%; when BOD is more than 160mg/L, the removal rate shall be greater than 50%. ② The values outside the brackets will be the control indicators when the water temperature is > 12°C, and the values inside the brackets will be the control indicators when the water temperature is ≤12°C.

Considering that the park construction has introduced Low Impact Development (LID) technology and included a rainwater recycling system, the recycled and treated rainwater, meeting the standard limit values in the *Water Quality for Recycled Urban Sewage for Green Land Irrigation* (GB/T 25499-2010), will be utilized for greening irrigation, vehicle washing, and road cleaning. The treated reuse rainwater shall meet the following standard limits.

Table 2.5-11 Control Items and Limits

S/N	Control Items	Items	Limit	Remarks
1	Turbidity	NTU	< 5 (non-restrictive green space), 10 (restrictive green space)	Basic Control Item
2	Odor	—	Without discomfort	
3	Chromaticity	C	≤30	
4	pH value	—	6.0~9.0	
5	Total dissolved solids	mg/L	≤1000	
6	Five-day biochemical oxygen demand	mg/L	≤20	
7	Total residual chlorine	mg/L	0.2≤ at the end of pipe network ≤0.5	
8	Chloride	mg/L	≤250	
9	Anionic surfactant	mg/L	≤1.0	

S/N	Control Items	Items	Limit	Remarks
10	Ammonia nitrogen	mg/L	≤20	
11	Fecal coliforms	Nr./L	≤200 (non-restrictive green space), ≤1000 (restrictive green space)	
12	Number of ascaris eggs	Nr./L	≤1 (non-restrictive green space), ≤2 (restrictive green space)	
13	Sodium absorption ratio (SAR)*	/	≤0.01	Select control items
14	Cadmium	mg/L	≤0.05	
15	Arsenic	mg/L	≤0.001	
16	Mercury	mg/L	≤0.1	
17	Chromium (hexavalent)	mg/L	≤0.2	
18	Lead	mg/L	≤0.002	
19	Beryllium	mg/L	≤1.0	
20	Cobalt	mg/L	≤0.5	
21	Copper	mg/L	≤2.0	
22	Fluoride	mg/L	≤0.3	
23	Manganese	mg/L	≤0.5	
24	Molybdenum	mg/L	≤0.05	
25	Nickel	mg/L	≤0.02	
26	Selenium	mg/L	≤1.0	
27	Zinc	mg/L	≤1.0	
28	Boron	mg/L	≤0.1	
29	Vanadium	mg/L	≤1.5	
30	Ferrum	mg/L	≤0.5	
31	Cyanide	mg/L	≤0.01	
32	Trichloroacetaldehyde	mg/L	≤0.5	
33	Formaldehyde	mg/L	≤1.0	
34	Benzene	mg/L	≤2.5	

2.5.2.3 Emission Standards of Noise

The noise generated during the construction period of the Project is mainly from construction machinery and transportation vehicles. The noise control is subject to the provisions of the *Emission Standard of Environment Noise for Boundary of Construction Site* (GB12523-2011). The specific limits are shown in the following table.

Table 2.5-12 Noise Limits during Construction Period Unit: dB(A)

Standard	Pollution Factor	Daytime	Nighttime

Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011)	Noise	70	55

During the operation period of the Project, the main sources of noise include logistics equipment noise and vehicle noise. The Project will comply with the *Emission Standard for Industrial Enterprises Noise at Boundary* (GB12348-2008), with specific limit values as shown in the table below.

Table 2.5-13 Noise Limits during Operation Unit: dB(A)

Class of acoustic environment functional zone outside the plant boundary	Period	
	Daytime	Nighttime
0	50	40
1	55	45
2	60	50
3	65	55
4	70	55

2.5.2.4 Solid Waste Discharge Standards

The general solid waste of the Project is subject to relevant provisions in the *Standard for Pollution Control on the Non-Hazardous Industrial Solid Waste Storage and Landfill* (GB18599-2020); hazardous waste is subject to relevant provisions in the *Standard for Pollution Control on Hazardous Waste Storage* (GB18597-2023).

3 Project Description

3.1 Necessity of Project Construction

3.1.1 Drive Economic Development along the Yangtze River Economic Belt and Promote International Cooperation under the "Belt and Road" Initiative

In the report to the 20th CPC National Congress, General Secretary Xi Jinping emphasized the need to accelerate the construction of a strong trading nation, promote the high-quality development of the "Belt and Road" Initiative, and preserve the diversity and stability of the international economic landscape and economic and trade relations. According to data, as of present, the "Belt and Road" Initiative has attracted active participation from 149 countries and 32 international organizations, becoming a highly popular international public good and cooperation platform. Hubei Province, as a key region along the "Belt and Road", actively responds to and implements central decisions and deployments, participates in and integrates into the "Belt and Road" construction, and has established numerous investment cooperation projects with enterprises from countries and regions along the "Belt and Road". With full policy support, Hubei has achieved rapid trade development and industrial upgrading.

The construction of the Project will help seize the significant opportunities brought by the national initiative to advance the "Belt and Road" construction. By leveraging the unique advantage of the comprehensive bonded zone in terms of having cargo within territory but out of customs, and relying on its functions such as "bonded logistics, bonded processing, and bonded services," as well as the policy of "import bonded, tax rebate upon entry into the zone, and tax exemption within the zone", efforts will be made to vigorously develop bonded logistics business. The Project shares the air cargo market with Ezhou Huahu Airport under the "Belt and Road" Initiative from various aspects such as air transportation and peripheral effects, promoting the integration of Ezhou and even the surrounding regions into the "Belt and Road" construction through aviation development and driving the development of the Yangtze River Economic Belt.

3.1.2 Establish an Inland Free Trade Port and Build a Broader Opening-up Pattern in the Central Region

Entering the "14th Five-Year Plan" period, the country has proposed fostering a new pattern of development that is focused on the domestic economy and features positive interplay between domestic and international economic flows, thereby cultivating new advantages for China's participation in international cooperation and competition under the new situation. The Several Opinions of the State Council on Boosting the High-level Opening-up and High-quality Development of Comprehensive Bonded Areas pointed out that comprehensive bonded zones shall be endowed with a new mission of reform and opening up, aiming to build special customs supervision zones with international competitiveness and innovation.

The comprehensive bonded zone, as an important window for China's opening up and a significant platform connecting the international and domestic markets, needs to have its role accurately identified, expand its functional advantages, and explore new development paths. It is necessary to transform from the previous development path of "raw materials and sales in the international market; massive imports and massive exports" to an advanced gateway connecting both international and domestic markets, facilitating the establishment of a new development pattern.

The Project will drive the efficient allocation of airport industry elements, industrial chains, and industrial service systems by establishing an innovative and internationally competitive comprehensive bonded zone. It will also leverage the scale-driving and upgrading effect of air cargo on the industrial development of the comprehensive bonded zone, providing strong support for the construction of an inland free trade port in Ezhou. This will lay a solid foundation for developing a new frontier of openness in the central region and accelerating the improvement of China's economic internationalization level.

3.1.3 Ensure Stable Supply Chains and Enhance the International Competitiveness of the Logistics Industry

The ever-changing landscape of the world economy and increasingly fierce international competition make it imperative for China to possess logistics and supply chain services that are in line with economic globalization. On March 24, 2020, Premier Li Keqiang proposed at the State Council executive meeting that China should further enhance its international air cargo capacity, strengthen international cooperation, facilitate international express, and strive to stabilize the supply chain.

At present, China is in a crucial period of accelerating economic transformation and industrial restructuring. The manufacturing industry is transforming from traditional heavy industry to high-tech manufacturing industry. Strategic emerging industries such as chips, integrated circuits, and biopharmaceuticals are developing rapidly. Therefore, there is an urgent need to establish an efficient, fast, and stable aviation logistics network and service system to support industrial expansion. The modern logistics industry, as a strategic emerging industry with vast development potential, effectively connects production and consumption, and is an important force to promote the sustained and rapid growth of the national economy. Ezhou should seize the development opportunities created by national strategies, utilize the favorable policy environment, fully leverage its advantageous geographical and transportation conditions, and vigorously develop the modern logistics industry, thereby enhancing the comprehensive competitiveness and influence of Ezhou, and promoting rapid, healthy, and sustainable development of the regional economy.

Taking the deepening development of the "Belt and Road" Initiative as an opportunity, the construction of the Hubei Global Air Cargo Logistics Hub Project is beneficial for expanding international logistics businesses, nurturing and strengthening a group of logistics enterprises with global competitiveness, building a global logistics information system, and forming an independent and controllable global logistics operation and service system. The Project lays a solid foundation for Ezhou to establish itself as a global logistics supply chain center, enhancing the international competitiveness in logistics industry.

3.1.4 Advance the Foreign Trade Development of the Wuhan Metropolitan Area and Enhance Cross-border Interconnectivity and Collaborative Innovation

The Wuhan Metropolitan Area refers to an urban agglomeration centered around Wuhan, the largest city in central China, covering 8 large and medium-sized surrounding cities like Huangshi, Ezhou, Huanggang, Xiaogan, Xianning, Xiantao, Tianmen, and Qianjiang. The Wuhan Metropolitan Area is not only the core region of Hubei's economic development but also a crucial strategic fulcrum for the rise of central China, representing an important initiative for Wuhan to return to its status as a national central city. Hubei Province actively integrates into the development of the Yangtze River Economic Belt, accelerates the construction of the Wuhan Metropolitan Area into the most important growth pole of the urban agglomeration in the middle reaches of the Yangtze River, and promotes interactive development among adjacent cities.

Total import-export volume data of the three major cities in central and western China: Chengdu is RMB 715.4 billion, accounting for 44% of the total; Chongqing is RMB 651.3 billion, accounting for 40% of the total; Wuhan is RMB 270.4 billion, accounting for 16% of the total. In terms of import and export data, Chengdu, which is not as administratively prominent as the direct-controlled municipality Chongqing, and not as geographically well-located as Wuhan, ranks first in central and western China in foreign trade. The import and export volume of Chengdu is not only 1.1 times that of the only direct-controlled municipality in central and western China, Chongqing, but also 2.65 times that of the "Oriental Chicago", Wuhan. This also indicates the serious shortcomings of Wuhan in foreign trade. As an important part of the Wuhan Metropolitan Area, Ezhou will rely on the construction of the Hubei Global Air Cargo Logistics Hub Project to fill the gap in foreign trade in the Wuhan Metropolitan Area.

The construction of the Project will further enhance resource integration, innovate the construction and industrial development mode of the airport-based comprehensive bonded zone, and enhance high-end resource allocation capacity and global influence. Consequently, it aims to establish a major hub, major channel, and major platform rooted in central China, serving the entire nation and facing the world. The Project will contribute to promoting the foreign trade development of the Wuhan Metropolitan Area and enhancing the cross-border Interconnectivity and collaborative innovation.

3.2 Basic Information of the Project

According to the Feasibility Study Report for the AIIB-funded Hubei Global Air Cargo Logistics Hub Project (May 2024), the basic information of the Project is as follows:

3.2.1 Project Name, Nature and Location

(1) Project Name: Hubei Global Air Cargo Logistics Hub Project;

(2) Nature: newly-built project;

(3) Location: Ezhou Linkong Economic Zone, Hubei Province, north of Ezhou Airport.

(4) Content and Scale: The Project covers a total area of 1.349 km^2 and is planned to be constructed in two phases. Among them, Phase I occupies an area of 0.727 km^2 and has been partially completed. The Type-B Bonded Logistics Center in Phase-I passed on-site acceptance on April 9, 2024. The remaining works are expected to be further expanded in 2024, with the main civil works to be funded by the Client's own funds and scheduled for completion by November 30, 2024. **The AIIB Project** will be built in Phase II, covering an area of 0.622 km^2. The main construction contents include customs infrastructure, bonded warehousing and processing, trade and cargo service facilities, low-carbon intelligent facilities, earthworks, supporting facilities, and capacity building. The photovoltaic system in the self-constructed area of Phase I is also included in the Project.

(5) Performance of environmental protection procedures in China: According to the *Catalogue for the Classified Management of Environmental Impact Assessment of Construction Projects (2021 Edition)*, the AIIB Project requires the preparation of an EIA Report. Currently, this report is under preparation, and it will undergo review and approval process after the feasibility study is approved. Construction work cannot commence before obtaining the EIA approval for the Project.

3.2.2 Function Orientation

Seize the opportunity presented by the "Belt and Road" initiative to establish a central port core to radiate the central China;

Build a global commercial logistics distribution center based on the multi-modal three-dimensional transport system of "coordinated transportation by highway, waterway, railway and air and direct access to rivers, seas and lakes";

Seize the opportunity of domestic manufacturing industry transfer to create a Hubei industrial highland that connects with the world;

Seize the opportunity of enhancing bonded services to create a vibrant international trade zone with a perfect international trade service system.

3.2.3 Planned Cargo Volume of the Project

By 2030, the Hubei Global Air Cargo Logistics Hub Project is planned to achieve an international cargo volume of 381,600 tons (all included in the annual cargo and mail throughput of Huahu Airport in 2030). The corresponding aircraft movements are 3,816. 747-type aircraft is exclusively used, with all operations scheduled during nighttime hours.

3.2.4 Site Selection and General Layout

With a planned area of 1.349 km^2, the Hubei Global Air Cargo Logistics Hub Project is

located within Ezhou Airport Comprehensive Bonded Zone, east of Echeng District and north of Ezhou Airport.

Specific scope: to the north is Ezhou Airport Comprehensive Bonded Zone, to the east is the east runway of Ezhou Huahu Airport, to the west is the west runway of Ezhou Huahu Airport, and to the south is the apron on the north side of Ezhou Huahu Airport. The project area is 8.5 km away from Ezhoudong Railway Station, 14 km away from Huahu Railway Station and 16 km away from Ezhou Railway Station. It is located in the core area of Wuhan Metropolitan Area and is also a highland for Ezhou's external development.

The project area has flat and open terrain, and the land is of industrial land. The specific location is shown as follows:

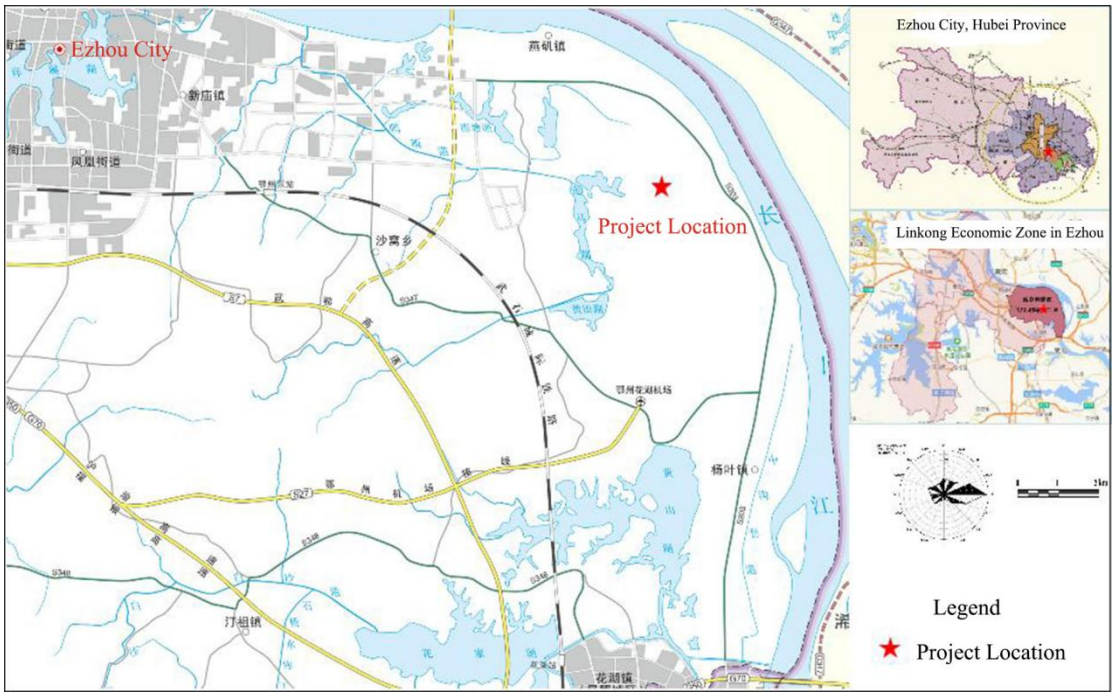


Figure 3.3-1 Geographical Location of the Project

The project is generally arranged from north to south, with the AIIB Project in the north and Phase I construction in the south. The specific general layout is shown in the following figure.

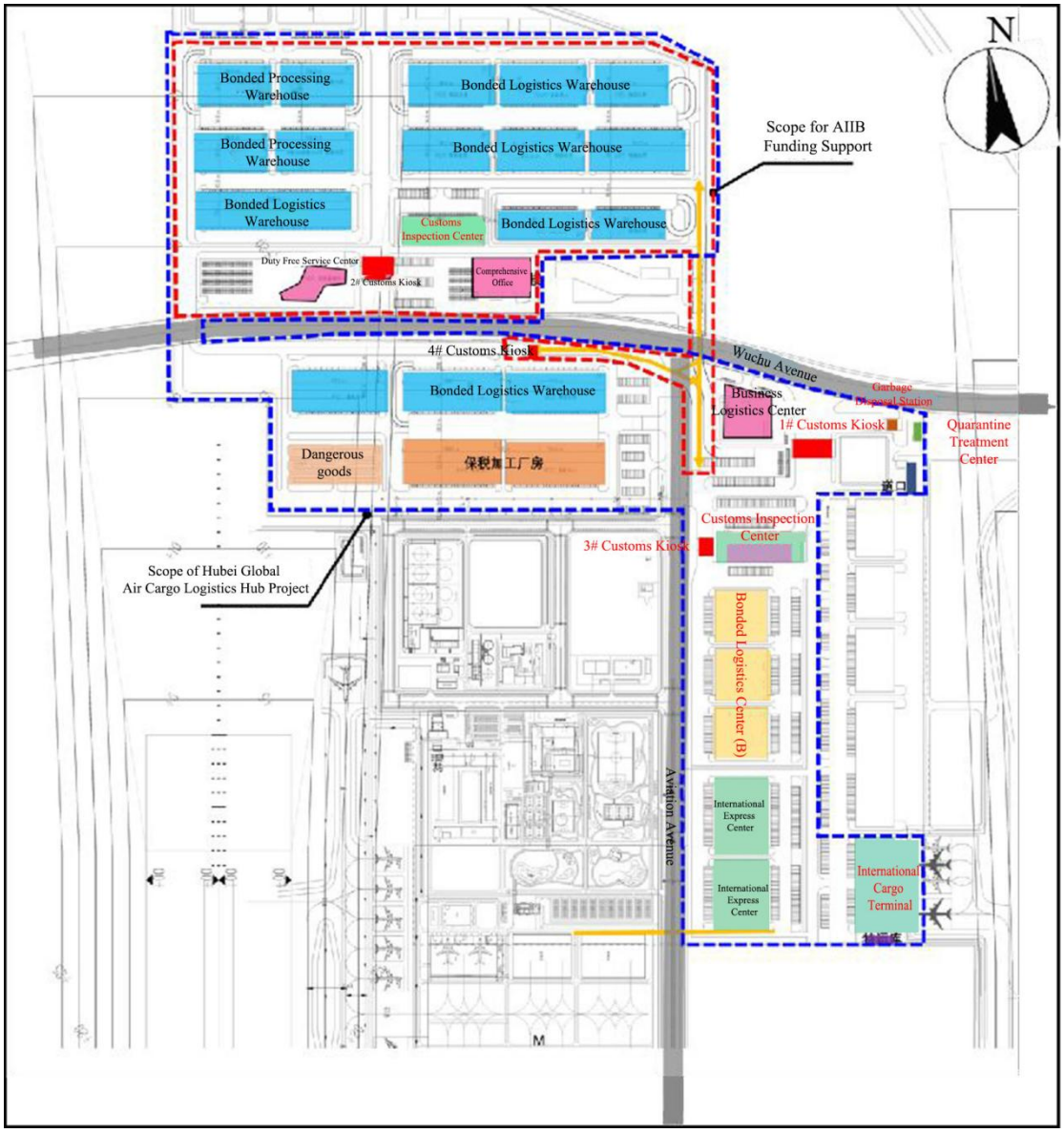


Figure 3.3-2 General Layout Plan of the Project

3.2.5 Implementing Entity

Ezhou Linkong Group Co., Ltd. (hereinafter referred to as "Ezhou Linkong Group") is the Project Implementation Unit (PIU), which is mainly responsible for project implementation and management, as well as supervision of project contractors and suppliers.

Ezhou Linkong Group is a market-oriented entity engaged in investment attraction, investment, financing, development, construction, and operation in the Linkong Economic Zone. It was jointly funded and established by the Financial Bureau of Ezhou Linkong Economic Zone, Ezhou Municipal Department of Finance, and Ezhou State-owned Assets Supervision and Administration Commission, with a registered capital of RMB 500 million. Ezhou Linkong Group is responsible for primary land development, infrastructure and public service facility construction, and industrial park development & operation. It provides consulting, human resources management, property management, and other supporting services, and is engaged in franchising, securities investment, venture capital, and other

businesses.

3.2.6 Construction Period

The overall construction period of the AIIB Project is 5 years, from 2024 to 2028.

3.3 Construction Scheme

The AIIB Project covers an area of about 0.622 km^2. The construction contents mainly include customs infrastructure, bonded warehousing and processing, trade and cargo service facilities, low-carbon, intelligent and supporting facilities, earthworks, and capacity building. The photovoltaic system in the self-constructed area of Phase I is also included in the Project. The details are as follows:

The specific construction contents are shown in the following table.

Table 3.3-1 List of Construction Contents of the AIIB Project

S/N	Project Name	Construction Content
1	Customs Infrastructure	① T01 Customs Inspection Warehouse The floor area of the Customs Inspection Warehouse and the Customs Inspection Center is 10911.00m^2 respectively, and the "I-shaped" layout is adopted. The inspection warehouse is primarily designated for the inspection of imported and exported goods, cross-border e-commerce parcels, designated goods, and pharmaceuticals. It has 1 floor above ground and is of single-storey portal frame structure. ② Customs Kiosk The floor area of the 2# Main Customs Kiosk is 949.00 m^2. It is mainly used for the access control of trucks and administrative vehicles entering and exiting the port operation area, including 6 truck lanes and 2 administrative lanes. It has 1 floor above ground and is of single-storey steel frame structure; ③ New Customs Perimeter Fencing (7,730 m).
2	Bonded Warehousing and Processing	E01-04 Bonded Processing Warehouse (individual building area: 14,296 m^2), E05 Logistics Warehouse (individual building area: 27,798.00 m^2), M01 Logistics Warehouse (individual building area: 25,396.00 m^2), H01-04 Logistics Warehouse (individual building area: 31,974.00 m^2), L01 Logistics Warehouse (individual building area: 36,150.00 m^2), J01 Logistics Warehouse (individual building area: 22,866.00 m^2), K01 Logistics Warehouse (individual building area: 19,914.00 m^2), Container Truck Ramp 3 (individual building area: 1,589.34 m^2), Container Truck Ramps 4-5 (individual building area: 2,111.37 m^2). Overhead Platform 2 (building area: 30,059.00 m^2), Overhead Platform (building area: 13,058.59 m^2), Gatehouse (building area: 113.00 m^2), and Equipment Room (building area: 762.00 m^2). They are of two-storey structure on the ground, with reinforced concrete frame structure for the first floor and reinforced concrete frame column + steel beam structure for the second floor.
3	Trade and Cargo Service Facilities	The total floor area of S01 Duty Free Service Center is 10450.00m^2, with a reinforced concrete frame structure. The main functions will include reception, display, and duty-free consumption. The total floor area of W01 Comprehensive Office Building is 39432.16m^2, with a reinforced concrete frame structure. It is mainly used to meet the operational company's needs for office space, living facilities, and duty rooms. It also

S/N	Project Name	Construction Content
		provides office space for tenant companies and additional amenities such as a small supermarket. It is of reinforced concrete frame structure, and one-way multi-secondary beam system is adopted for the floor system.
4	Low-carbon Smart Facilities	The main components include customs supervision equipment and IT applications of the comprehensive bonded zone (port operation area, bonded function area, kiosks + video surveillance + alarms, software systems, IT infrastructure), civil aviation cargo inspection equipment & facilities (intelligent employee passage security management system, layered cargo security inspection management system, security inspection cloud platform, cargo security inspection management platform, scanning and transmission sorting system), weak current intelligent systems and unmanned driving for the park.
5	Earthworks	/
6	Supporting Facilities	1# Elevated Connecting Road with a total length of 430.00 m, 2# Elevated Connecting Bridge with a total length of 511.00 m, Planned Road No.2 with a total length of 518.60 m, Planned Road No.3 with a total length of 990.00 m, Planned Road 4# with a total length of 1075.00 m, Planned Road No. 5 with a total length of 354.00m, and outdoor works.
7	Capacity Building	It mainly includes: LEED certification consulting, green building three-star certification consulting, project management, project monitoring and evaluation, and other capacity building services.

3.3.1 Customs Infrastructure

(1) Geographical location

Customs infrastructure mainly includes: T01 Customs Inspection Warehouse, Customs Kiosk 2#, and Customs Perimeter Fencing. T01 Customs Inspection Warehouse is located in the central part of the AIIB Project, with bonded logistics warehouses on three sides except the south side. Customs Kiosk 2# is situated in the middle area on the south side of AIIB Project, with a comprehensive business building on the east side and a duty free service center on the west side.

(2) Structures

The floor area of the T01 Customs Inspection Warehouse is 10911.00 m^2 respectively, and the "I-shaped" layout is adopted. The floor area of the 2# Main Customs Kiosk is 949.00 m^2; the kiosk is mainly used for the access control of trucks and administrative vehicles entering and exiting the port operation area, including 6 truck lanes and 2 administrative lanes.

The new customs perimeter fencing is 7,730 m.

(3) Functions

The international inbound and outbound goods are inspected in a centralized manner, and the inspection of all inbound and outbound goods is carried out at the customs inspection center. The inspection center is primarily designated for the inspection of imported and exported goods, cross-border e-commerce parcels, designated goods, and pharmaceuticals. The cargo terminal can be directly linked to the inspection center's warehouse area to facilitate loading

and unloading operations.

The refrigerants used for storing frozen goods in the inspection center are environmentally friendly refrigerants; the selected unit refrigerant should have an ozone depletion potential (ODP) value of 0 and a global warming potential (GWP) value of less than 150. Optional refrigerants include R1234yf, R1234ze, and other fourth-generation refrigerants (HFOs). The above refrigerants are not listed in the *China's Inventory of Controlled Ozone Depleting Substances* jointly issued by the Ministry of Ecology and Environment, the National Development and Reform Commission, and the Ministry of Industry and Information Technology in 2021. Furthermore, the refrigerants comply with the revised legislative framework of the European Union regarding the emissions of fluorinated gases (F-gases), which states that: From January 1, 2027, for coolers with a rated power not exceeding 12 kW, fluorinated greenhouse gases with a GWP value greater than or equal to 150 are prohibited, except when necessary to meet safety requirements at the operation site; from January 1, 2027, for coolers with a rated power exceeding 12 kW, fluorinated greenhouse gases with a GWP value of 750 are prohibited, except when necessary to meet safety requirements at the operation site.

For the small batches of damaged and rotten fruits generated during the routine inspection at the cargo terminal, it is proposed to carry out harmless treatment using miniature harmless treatment equipment, employing processes such as high temperature treatment, decomposition, cutting, grinding, sterilization, and drying. For large quantities of damaged fruits, a qualified third-party quarantine treatment company (Wuhan Zhongli Wailun Cargo Handling Co., Ltd.) will be entrusted to conduct batch disinfection, transfer, and destruction for harmless treatment.

Customs Kiosk 2# is mainly used for the access control of trucks and administrative vehicles entering and exiting the port operation area.

3.3.2 Bonded Warehousing and Processing

(1) Geographical location

The bonded warehousing and processing sector is located in the north of the AIIB Project. From north to south, E01 Bonded Processing Warehouse, E02 Bonded Processing Warehouse, H01 Bonded Logistics Warehouse, H02 Bonded Logistics Warehouse, E05 Bonded Logistics Warehouse, E03 Bonded Processing Warehouse, E04 Bonded Processing Warehouse, H03 Bonded Logistics Warehouse, H04 Bonded Logistics Warehouse, L01 Bonded Logistics Warehouse, M01 Bonded Logistics Warehouse, J01 Bonded Logistics Warehouse, and J02 Bonded Logistics Warehouse are arranged side by side from west to east.

(2) Structures

E01-04 Bonded Processing Warehouse (individual building area: 14296 m^2), E05 Logistics Warehouse (individual building area: 27798.00 m^2), M01 Logistics Warehouse (individual building area: 25396.00 m^2), H01-04 Logistics Warehouse (individual building area: 31974.00 m^2), L01 Logistics Warehouse (individual building area: 36150.00 m^2), J01 Logistics Warehouse (individual building area: 22866.00 m^2), K01 Logistics Warehouse (individual building area: 19914.00 m^2), Container Truck Ramp 3 (individual building area: 1589.34 m^2), Container Truck Ramps 4-5 (individual building area: 2111.37 m^2). Overhead

Platform 2 (individual floor area: 30059.00 m^2), Overhead Platform 3 (individual floor area: 13058.59 m^2), Gatehouse (floor area: 113.00 m^2), and Equipment Room (floor area: 762.00 m^2).

(3) Functions

The bonded processing warehouse is mainly used for productive operations such as processing, assembly, manufacturing, and related support services for international inbound goods. The bonded logistics center provides bonded warehousing, bonded distribution, and international transit services for international inbound goods, as well as related services such as simple processing related to circulation and value-added services for stored goods.

3.3.3 Trade and Cargo Service Facilities

1) Geographical location

Trade and cargo service facilities consist of S01 Duty Free Service Center and W01 Comprehensive Office Building, which are located in the south of the AIIB Project area. The duty-free service center is located west of Customs Kiosk 2# and the comprehensive office building is located east of Customs Kiosk 2#.

(2) Structures

The total floor area of S01 Duty Free Service Center is 10450.00m^2, with a reinforced concrete frame structure. The total floor area of W01 Comprehensive Office Building is 39432.16m^2, with a reinforced concrete frame structure.

(3) Functions

The functions of S01 Duty Free Service Center include reception, display, and duty-free consumption;

W01 Comprehensive Office Building is mainly used to meet the operational company's needs for office space, living facilities, and duty rooms. It also provides office space for tenant companies and additional amenities such as a small supermarket.

3.3.4 Low-carbon Intelligent Facilities

Low-carbon intelligent facilities do not involve the construction of physical structures, primarily consisting of photovoltaic facilities, intelligent operation system, and comprehensive information platform.

The photovoltaic facilities are mainly arranged on the roofs of buildings and structures such as logistics warehouse + customs inspection warehouse, express center, international express center, duty free service center, and comprehensive office building involved in the AIIB Project and Phase I construction. A total of 71,777 roof solar panels are proposed to be installed, with an installed capacity of 39,477 kW and a PV grid-connected energy output of about 34,568,342 kWh.

3.3.5 Supporting Facilities

The supporting facilities mainly include Elevated Connecting Road 1# with a total length of 430.00 m, Elevated Connecting Bridge 2# with a total length of 511.00 m, Planned Road No.2 with a total length of 518.60 m, Planned Road No.3 with a total length of 990.00 m, Planned Road No.4 with a total length of 1075.00 m, Planned Road No. 5 with a total length of 354.00 m, and outdoor works.

3.3.6 Capacity Building

It mainly includes: LEED certification consulting, green building three-star certification consulting, project management, project monitoring and evaluation, and other capacity building services.

4 Associated Facilities

4.1 Definition of Associated Facilities

"Associated Facilities" refer to activities not included in the project description specified in the project management agreement but have an intrinsic connection with the Project's construction scope. The main principles defining the associated facility are as follows: (a) directly and substantively related to the Project; (b) implemented or planned with the Project; and (c) necessary for the viability of the Project. It will not be constructed or expanded in the absence of the Project.

4.2 Identification of Associated Facilities

According to the definition of associated facilities, any related works within the project area but not included in the construction scope of the Project, as well as any related works adjacent to the Project, will be considered as the identification objects of associated facilities. Specifically, it includes three categories: (1) Phase I of Hubei Global Air Cargo Logistics Hub Project, (2) Wuchu Avenue connected with the Project, and (3) Ezhou Huahu Airport on which the Project's air cargo transportation relies. The location relationship between the above identification objects and the Project is shown in the figure.

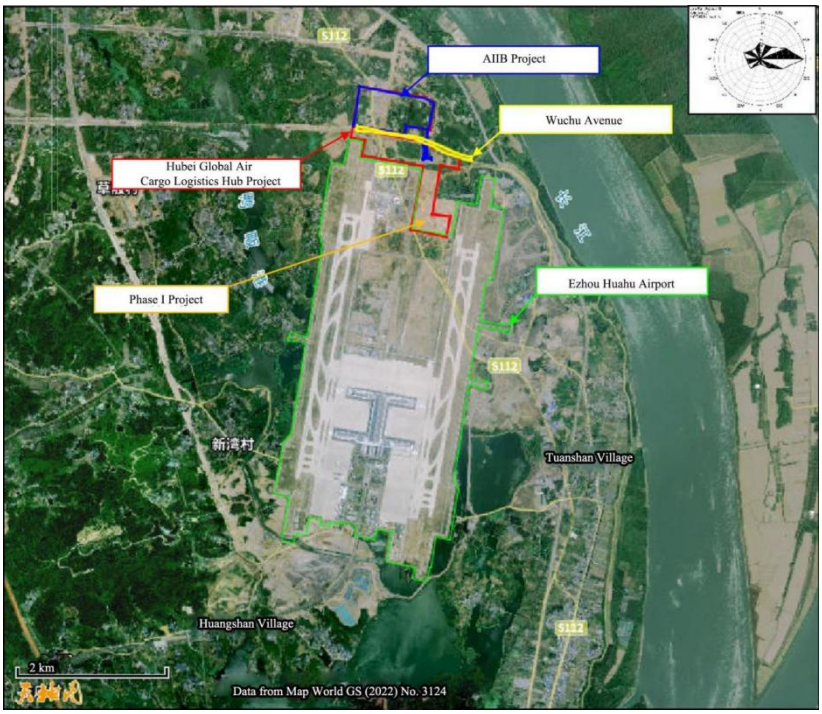


Figure 4.2-1 Location Relationship between Identification Objects of Associated Facilities and the AIIB Project

(1) Hubei Global Air Cargo Logistics Hub Project (Phase I): The total land area is about 0.727 km^2; the main construction contents include an International Cargo Terminal, International Express Center, Type-B Bonded Logistics Center, Customs Inspection Center, Quarantine Treatment Center, Business Logistics Center, Bonded Processing Plant, Bonded

Logistics Warehouse, Dangerous Goods Warehouse, Garbage Disposal Station, 1# Customs Kiosk, and Customs Kiosk 3#. Phase I project is located on the south side of the AIIB Project and has been under construction. The investment entity is Ezhou Linkong Group Co., Ltd. Once completed, it will, together with the AIIB Project, build an inland open economy strategic highland by creating a comprehensive bonded logistics park featuring prosperous international trade, developed import and export processing, perfect comprehensive logistics functions, the highest level of openness, and the most favorable policies. Without the Project, Phase I project alone will not be able to meet the demand of Hubei's international air cargo volume.

(2) Wuchu Avenue: It is located within the Ezhou Linkong Economic Zone, which serves as an east-west traffic artery in the park. It is directly connected with the Project and serves as a crucial channel for the Project to establish external communication. Aviation cargo related to the Project must be transported in and out of the port via Wuchu Avenue. Furthermore, Wuchu Avenue is a significant municipal engineering endeavor, established with the objectives of refining the skeletal road network of the Aviation Logistics Industrial Park and boosting the cargo transport synergy within the Linkong Economic Zone. Therefore, it is intrinsically linked to the Project. The construction of Wuchu Avenue was completed at the end of June 2024.

(3) Ezhou Huahu Airport: It consists of airport works (including air traffic control works), oil supply works, transfer center works, and base works, which have been completed and put into operation. Ezhou Huahu Airport is the fourth in the world, the first in Asia, and the only professional cargo hub airport in China. As a key component of the national productivity layout and Hubei Province's "No.1 Project", Ezhou Huahu Airport has been included in China's "14th Five-Year Plan", the *Outline of the National Comprehensive Three-dimensional Transport Network Planning*, and several other national-level planning initiatives. The goal is to develop an internationally competitive air cargo hub. Even without the Project, Huahu Airport would still be constructed.

Table 4.2-1 Identification Matrix of Associated Facilities

Description of facility	Definition of associated facilities			Remarks
	Directly and substantively related to the Project	Implemented or planned with the Project	Necessary for the viability of the Project. It will not be constructed or expanded in the absence of the Project.	
Phase I of Hubei Global Air Cargo Logistics Hub Project	√	√	√	It is located on the south side of the AIIB Project. Together with the AIIB Project, it forms a comprehensive bonded logistics park. Without the Project, Phase I project alone will not be able to meet the demand of Hubei's international air cargo volume.
Wuchu Avenue	√	√	√	Wuchu Avenue serves as a crucial channel for the Project to establish external communication. Aviation cargo

Description of facility	Definition of associated facilities			Remarks
	Directly and substantively related to the Project	Implemented or planned with the Project	Necessary for the viability of the Project. It will not be constructed or expanded in the absence of the Project.	
				related to the Project must be transported in and out of the port via Wuchu Avenue. Furthermore, this avenue is a significant municipal engineering endeavor, established with the objectives of refining the skeletal road network of the Aviation Logistics Industrial Park and boosting the cargo transport synergy within the Linkong Economic Zone. Therefore, it is intrinsically linked to the Project.
Ezhou Huahu Airport	√	×	×	It is a cargo hub airport of great strategic significance. Even without the Project, it would still be constructed.

Based on the identification matrix of associated facilities in the above table, the associated facilities of the Project are Phase I project and Wuchu Avenue.

4.3 Overview of Associated Facilities

4.3.1 Associated Facility - Phase I Project

(1) Basic information

Phase I project is located on the south side of the AIIB Project, covering an area of 0.727 km^2. The main construction contents include an International Cargo Terminal, International Express Center, Type-B Bonded Logistics Center, Customs Inspection Center, Quarantine Treatment Center, Business Logistics Center, Bonded Processing Plant, Bonded Logistics Warehouse, Dangerous Goods Warehouse, Garbage Disposal Station, Customs Kiosk 1#, and Customs Kiosk 3#.

(2) Performance of environmental protection procedures

The Customs Inspection Center, Type-B Bonded Logistics Center, International Cargo Terminal, Special Transportation Depot, and Quarantine Treatment Center in Phase I project have been included in the Port Operation Area Project in Ezhou Airport Comprehensive Bonded Zone. The *Letter of Approval Opinions on the EIA Report Form for the Port Operation Area Project in Ezhou Airport Comprehensive Bonded Zone of Ezhou Linkong Group Co., Ltd.* (EZHS [2021] No.81) was received from the Municipal Bureau of Ecology and Environment in 2021.

(3) Land Use

The Phase I project involves 425.2 mu of already expropriated rural collective land. This is part of the land acquisition activities in the 12th batch of 2020, the 81st batch of 2020, the 27th batch of 2021, the 16th batch of 2023, the 60th batch of 2023, and the area south of Wuchu Avenue (including the 32nd batch). In total, 1979.54 mu have been acquired, affecting 978 households and 4207 people.

(4) Bidding and construction

The bidding for some works of the Phase I project (including Type-B Bonded Logistics Center, International Cargo Terminal, Special Transportation Depot, Quarantine Treatment Center, International Express Center, Customs Inspection Center, Customs Kiosk 1#, and Customs Kiosk 3#) was completed in September 2023. The works are implemented by Ezhou Linkong Group Co., Ltd., constructed by CCCC Third Highway Engineering Co., Ltd. and Ezhou First Metallurgical Construction Co., Ltd., and supervised by Zhongsheng Hongyu Engineering Consulting Co., Ltd. and WISDRI Engineering Consulting & Management Co., Ltd. At present, the Type-B Bonded Logistics Center has passed the on-site acceptance inspection on April 9, 2024, and the remaining works are expected to be completed in November 2024. Bidding for other works (International Express Center, Business Logistics Center, Bonded Processing Plant, Bonded Logistics Warehouse, and Dangerous Goods Warehouse) has not yet been started.

4.3.2 Associated Facility - Wuchu Avenue

(1) Basic information

Wuchu Avenue is the east-west axis of Ezhou City. The section from the urban area of Ezhou to Yanhua Road has been completed and opened to traffic. The Bonded Zone ~ S203 Section of Wuchu Avenue is located within Ezhou Linkong Economic Zone, and serves as an east-west traffic artery in the park. It is currently under construction, connecting to Huama Lake Bridge in the west and extending to S203 (under construction) in the east. The road has a boundary line width of 55 m and features six lanes in both directions, with a total length of 1940 m and a design speed of 60 km/h. The main construction contents for Wuchu Avenue include road, water supply and drainage, cable tunnel, traffic, lighting, landscaping, and ancillary works.

(2) Performance of environmental protection procedures

Associated facility - Wuchu Avenue has been incorporated into the Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone, and the *Letter of Approval Opinions on EIA Report Form for Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone* (EZHS [2023] No.55) was received from the Municipal Bureau of Ecology and Environment in 2023.

(3) Land Use

90.99 mu of collective land is acquired for the Wuchu Avenue Project, all of which are collective land in Chehu Village and Duwan Village under Yanji Town in Ezhou Linkong Economic Zone, affecting 105 households and 443 people.

(4) Bidding and construction

The relevant bidding work for Wuchu Avenue has been completed in May 2023. It is implemented by Ezhou Linkong Group Co., Ltd., constructed by CCCC Second Harbor Engineering Co., Ltd., and supervised by Wuhan Feihong Engineering Management Consulting Co., Ltd.; the construction was commenced in June 2023 and completed at the end of June 2024.

4.4 Description of Associated Facilities

4.4.1 Associated Facility - Phase I Project

4.4.1.1 Project Composition

Phase I project covers an area of 0.727 $km^{2.}$ The main construction contents include an International Cargo Terminal, International Express Center, Type-B Bonded Logistics Center, Customs Inspection Center, Quarantine Treatment Center, Business Logistics Center, Bonded Processing Plant, Bonded Logistics Warehouse, Dangerous Goods Warehouse, Garbage Disposal Station, Customs Kiosk 1#, and Customs Kiosk 3#.

Table 4.4-1 List of Project Construction Contents

S/N	Project Name	Construction Content
1	Type-B Bonded Logistics Center	It includes bonded warehouse 1#, bonded warehouse 2# and bonded warehouse 3#, all of which are single-storey plant buildings, with a building height of 15.4m and a total floor area of about 38,800 m^2.
2	International Cargo Terminal	International Cargo Terminal 1#: single-storey plant building, with a building height of 23.9 m and a floor area of 20,500 m^2.
3	Special Transportation Depot	The floor area is 552 m^2 and the building height is 6.45 m. The warehouse has 1 floor above ground and is of reinforced concrete frame structure.
4	Quarantine Treatment Center	Quarantine Treatment Center 7#, with a building height of 6.45 m and a floor area of 500 m^2.
5	International Express Center	There are two international express centers with a total area of 45398.00 m^2 in total.
6	Customs Inspection Center	It includes the supervision site, other inspection areas, adjacent office area, and canopy, with a building height of 15.78 m and a total floor area of about 16,700 m^2.
7	1# and 3# Customs Kiosks	It has 1 floor above ground and is of single-storey steel frame structure.
8	Garbage Disposal Station	One waste transfer station is provided, with a building height of 5.55 m and a floor area of about 270 m^2.
9	Business Logistics Center	Commercial Logistics Building 20#: 55000.00 m^2.
10	Bonded Processing Plant	It mainly includes Bonded Processing Center 8# with a floor area of 39225.00 m^2 and Bonded Processing Center 9# with a floor area of 20936.00 m^2; 8# is a double-storey warehouse while 9# is a single-storey plant building.
11	Bonded Logistics Warehouse	It mainly includes Bonded Logistics Center 11# with a floor area of 19884.00 m^2, Bonded Logistics Center 12# with a floor area of 19884.00 m^2, Bonded Logistics Center 13# with a floor area of 12591.00 m^2 and Bonded Logistics Center 14# with a floor area of 12591.00 m^2; #11-#14 are double-storey plant buildings.

S/N	Project Name	Construction Content
12	Dangerous Goods Warehouse	It mainly includes Dangerous Goods Warehouse 10# with a floor area of 4500.00 m^2, which is a single-storey plant building.

4.4.1.2 Construction Scheme

(1) Type-B Bonded Logistics Center

1) Geographical location

Type-B Bonded Logistics Center includes three buildings of bonded warehousing - 1#, 2# and 3#. It is close to the eastern boundary of Hubei Global Air Cargo Logistics Hub Project on the east side, near Aviation Avenue on the west side, adjacent to the International Express Center on the south side, and close to the Customs Inspection Center (Phase I) on the north side.

2) Structures

The floor area of bonded warehouse 1# is 13668.19 m^2, and the floor areas of bonded warehouse 2# and bonded warehouse 3# are 12572.84 m^2 respectively. The building height is 15.4 m, and it is a single-storey plant building.

All buildings in the warehouse area have 1 floor above ground, and single-storey portal frame structure is adopted. The single-storey warehouse in the warehouse area is of single-storey steel frame structure;

3) Functions

The bonded warehouse in the Type-B Bonded Logistics Center provides bonded warehousing, bonded distribution, and international transit services for international inbound goods, as well as related services such as simple processing related to circulation and value-added services for stored goods.

The bonded warehouse is provided with double-sided platform stops, which can be used by multiple Employers. In each rental unit, there is a separate office space provided, catering to future business operations of the Employers. A small number of office rooms are set up within the bonded warehouse for staff to work and for temporary rest of the operational workers.

(2) International Cargo Terminal

1) Geographical location

International Cargo Terminal is located in the southeast of Phase I project, with its east and south sides close to the southern boundary of Hubei Global Air Cargo Logistics Hub Project and adjacent to land for Huahu Airport; its west side is close to the International Express Center of Phase I project.

2) Structures

The floor area is 20465.00 m^2 and the building height is 23.9 m. The cargo terminal mainly includes arrival, departure and transfer areas. A five-storey adjacent office building is built on

the landside, which can primarily meet the on-site business office needs of cargo terminal staff. Independent fire compartments are set up between the plant building and the adjacent office building.

The building in the cargo terminal warehouse area has 1 floor above ground, and single-storey portal frame structure is adopted. The single-storey warehouse in the warehouse area is of single-storey steel frame structure. The adjacent office building has 5 floors above the ground and is of reinforced concrete frame structure.

3) Functions

The main business of International Cargo Terminal is ground handling of air cargo with the air cargo terminal as the core, including professional loading and unloading, handling, sorting, metering, packaging, tallying, and warehousing. The types of cargo handled primarily include international general cargo, cross-border e-commerce goods, valuables, live animals, and fruits. The type of cargo is Category C (II).

The plant building is of Class C.

According to on-site surveys, the refrigeration equipment for the International Cargo Terminal has been installed, using R410A refrigerant. This refrigerant is a mixture of difluoromethane and pentafluoroethane. Both are listed as Category-IX hydrofluorocarbons in the *China's Inventory of Controlled Ozone Depleting Substances* jointly issued by the Ministry of Ecology and Environment, the National Development and Reform Commission, and the Ministry of Industry and Information Technology in 2021. According to the list, this substance has an ozone depletion potential (ODP) of zero but a global warming potential (GWP) of as high as 1700. Simultaneously, according to the revised EU legislative framework on the emission of fluorinated gases (F-gases), "as of January 1, 2027, the use of fluorinated greenhouse gases with a GWP of 150 or more, or that rely on such gases for functionality, is prohibited in cooling equipment with a rated capacity of up to 12 kilowatts, except where necessary to meet safety requirements at the work site." Additionally, "as of January 1, 2027, the use of fluorinated greenhouse gases with a GWP of 750 or more, or that rely on such gases for functionality, is prohibited in cooling equipment with a rated capacity above 12 kilowatts, except where necessary to meet safety requirements at the work site."

In order to meet the relevant requirements of F-gases in China and EU, this assessment requires that the International Cargo Terminal purchase environmentally friendly refrigerants to replace the existing R410A refrigerants before 2027. This requirement has been included in the Environmental and Social Management Plan and will be implemented by Ezhou Linkong Group Co., Ltd. on schedule.

(3) Special Transportation Depot

1) Geographical location

The Special Transportation Depot is located in the southeast of the International Cargo Terminal, with its south side close to the southern boundary of Phase I project and adjacent to land for Huahu Airport; its north side is close to International Cargo Terminal 1#.

2) Structures

The floor area is 552 m^2 and the building height is 6.45 m. The warehouse has 1 floor above ground and is of reinforced concrete frame structure.

3) Functions

Store nine categories of dangerous goods that do not contain items 3 and 4 substances of Class A and meet the requirements for safe transportation by air, including air-flammable solids, flammable liquids, flammable gases, corrosive goods, toxic goods, oxidizing goods, and miscellaneous dangerous goods, explosives, and radioactive materials.

(4) Quarantine Treatment Center

1) Geographical location

The Quarantine Treatment Center is located in the middle of the Phase I project, with the west side near Customs Kiosk 1# and Garbage Disposal Station and the east side near 5# Customs Kiosk; the north side is close to the associated facility—Wuchu Avenue; the east and south sides are adjacent to the boundary of Hubei Global Air Cargo Logistics Hub Project.

2) Structures

The floor area is 500 m^2 and the building height is 6.45 m. The plant building has 1 floor above ground and is of reinforced concrete frame structure.

3) Functions

The Quarantine Treatment Center mainly includes a fumigation chamber, heat treatment area, and harmless treatment area, which are mainly used for quarantine treatment of inbound goods or articles with biosafety risks.

Incineration process is adopted for harmless treatment, and a set of mobile incinerator is provided. The equipment consists of continuous pyrolysis drying system, sufficient combustion system, secondary incineration system, cooling and dust removal system, water bath curtain deacidification tower, pulse bag filter system, and electronic control system. The incineration capacity is 50kg/h.

The plant building is a Class B warehouse.

(5) International Express Center

1) Geographical location

The International Express Center is adjacent to the Type-B Bonded Logistics Center in the north, Ezhou Huahu Airport in the west, the boundary of Hubei Global Air Cargo Logistics Hub Project in the south, and the International Cargo Terminal in the east.

2) Structures

The floor area is 45398.00m^2, and the "I"-shaped layout is adopted. It is a two-storey plant building. The west side is the airside site with an airside canopy. The east side is the landside site with a platform and a landside canopy. Technical rooms are built adjacent to the landside, which are mainly used for on-site operation and management of workers and on-site

management personnel.

3) Functions

It is mainly used for the inbound and outbound operations for international express items and cross-border e-commerce parcels.

(6) Customs Inspection Center

1) Geographical location

The Customs Inspection Center is located in the middle of the Phase I project, with the west side close to Aviation Avenue, the south side adjacent to the Type-B Bonded Logistics Center, the east side adjacent to the boundary of Hubei Global Air Cargo Logistics Hub Project, and the north side as the Business Logistics Center.

(2) Structures

The floor area is 16652.36 m^2 and the building height is 15.7 m. The warehouse is used for the storage (including refrigerated storage) and supervision of goods to be inspected; a three-storey adjacent office building is built, which is mainly used for the layout of on-site inspection technical rooms of the inspection center.

The building in the warehouse area has 1 floor above ground, and single-storey portal frame structure is adopted; the single-storey warehouse in the warehouse area is of single-storey steel frame structure. The adjacent technical office building has 3 floors above ground and is of reinforced concrete frame structure.

(3) Functions

The international inbound and outbound goods are inspected in a centralized manner, and the inspection of all inbound and outbound goods is carried out at the customs inspection center. The inspection center is primarily designated for the inspection of imported and exported goods, cross-border e-commerce parcels, designated goods, and pharmaceuticals. The cargo terminal can be directly linked to the inspection center's warehouse area to facilitate loading and unloading operations.

For the small batches of damaged and rotten fruits generated during the routine inspection at the cargo terminal, it is proposed to carry out harmless treatment using miniature harmless treatment equipment, employing processes such as high temperature treatment, decomposition, cutting, grinding, sterilization, and drying. For large quantities of damaged fruits, a qualified third-party quarantine treatment company (Wuhan Zhongli Wailun Cargo Handling Co., Ltd.) will be entrusted to conduct batch disinfection, transfer, and destruction for harmless treatment.

The plant building is of Class C.

According to on-site surveys, the refrigeration equipment for the Customs Inspection Center has been installed, using R507 refrigerant. This refrigerant is a gaseous mixture of 1,1,1,2,2-pentafluoroethane and 1,1,1-trifluoroethane. Both are listed as Category-IX hydrofluorocarbons in the *China's Inventory of Controlled Ozone Depleting Substances*,

jointly issued by the Ministry of Ecology and Environment, the National Development and Reform Commission, and the Ministry of Industry and Information Technology in 2021. According to the list, this substance has an ozone depletion potential (ODP) of zero but a global warming potential (GWP) of as high as 3985. Simultaneously, according to the revised EU legislative framework on the emission of fluorinated gases (F-gases), "as of January 1, 2027, the use of fluorinated greenhouse gases with a GWP of 150 or more, or that rely on such gases for functionality, is prohibited in cooling equipment with a rated capacity of up to 12 kilowatts, except where necessary to meet safety requirements at the work site." Additionally, "as of January 1, 2027, the use of fluorinated greenhouse gases with a GWP of 750 or more, or that rely on such gases for functionality, is prohibited in cooling equipment with a rated capacity above 12 kilowatts, except where necessary to meet safety requirements at the work site."

In order to meet the relevant requirements of F-gases in China and EU, this assessment requires that the International Cargo Terminal purchase environmentally friendly refrigerants to replace the existing R507 refrigerants before 2027. This requirement has been included in the Environmental and Social Management Plan and will be implemented by Ezhou Linkong Group Co., Ltd. on schedule.

(7) Customs Kiosks 1# and 3#

1) Geographical location

The 1# Kiosk is located near the entrance area of Wuchu Avenue, and the 3# Customs Kiosk is located near the entrance area of Aviation Avenue.

2) Structures

It has 1 floor above ground and is of single-storey steel frame structure.

3) Functions

The Customs Kiosk 1# is the main kiosk of the Port Operation Area, with 14 passages designed, including 6-entry and 6-exit truck lanes and 1-entry and 1-exit administrative lanes. The Customs Kiosk 3# is a kiosk for the Type-B Bonded Logistics Center, with 6 passages designed, including 2-entry and 2-exit truck lanes and 1-entry and 1-exit administrative lanes; it is mainly used for the management of truck access in the Type-B Bonded Logistics Center.

Each lane at all kiosks is equipped with an automatic barrier gate, and the relevant information is connected to the customs electronic information platform. Truck lanes are equipped with truck scales, and lanes with electronic truck scales allow entry/exit and information collection for vehicles up to 18 m long. The kiosks are equipped with CCTV monitoring system, which enable license plate recognition and monitoring.

(8) Garbage Disposal Station

1) Geographical location

It is located at the northeast corner of the Phase I project, near Wuchu Avenue.

2) Structures

The floor area is 270 m^2 and the building height is 6.45 m. It has 1 floor above ground and is of reinforced concrete frame structure.

3) Functions

It is used for the transfer of generated domestic waste.

(9) Business Logistics Center

1) Geographical location

The trade and cargo service facilities are located in the north of the Phase I project, close to Aviation Avenue and adjacent to Customs Kiosk 1#.

2) Structures

The total floor area of the Commercial Logistics Building is 55000.00 m^2, including 35000.00 m^2 above ground and 20000.00 m^2 underground.

3) Functions

The Commercial Logistics Building primarily provides offices, living spaces, and duty rooms for the operation and management company of the international cargo zone. It offers office spaces for tenant companies such as customs declaration companies, freight forwarding companies, airlines, and third-party inspection organizations. Additionally, it incorporates small supermarkets and other complementary service amenities.

(10) Bonded Processing Plant

1) Geographical location

The Bonded Processing Plant is located in the south of the Bonded Logistics Plant, and Bonded Processing Center 9# and Bonded Processing Center 8# are arranged side by side from west to east.

2) Structures

The Bonded Processing Center 8# has a floor area of 39225.00m^2 and is a two-storey plant building.

The Bonded Processing Center 9# has a floor area of 20936.00m^2 and is a single-storey plant building.

3) Functions

The Bonded Processing Centers 8# and 9# are mainly used for productive operations such as processing, assembly, manufacturing, and related support services for international inbound cargo.

(11) Bonded Logistics Warehouse

1) Geographical location

The Bonded Logistics Warehouse is located in the northernmost part of the Phase I project,

with Bonded Logistics Center 14#, Bonded Logistics Center 13#, Bonded Logistics Center 12# and Bonded Logistics Center 11# arranged side by side from west to east.

2) Structures

The floor area of Bonded Logistics Centers #11-#14 is 19884.00 m^2 each (two-storey warehouse).

3) Functions

The Bonded Logistics Center provides bonded warehousing, bonded distribution, and international transit services for international inbound goods, as well as related services such as simple processing related to circulation and value-added services for stored goods.

(12) Dangerous Goods Warehouse

1) Geographical location

The Dangerous Goods Warehouse is located on the west side of the Bonded Processing Plant and the south side of the Bonded Logistics Warehouse.

2) Structures

The Dangerous Goods Warehouse has a floor area of 4500.00 m^2, comprising 6 buildings, each being a single-storey Class A warehouse.

3) Functions

Dangerous Goods Warehouse is mainly used for storage of 9 categories of dangerous goods transported by air.

4.4.2 Associated Facility - Wuchu Avenue

4.4.2.1 Project Composition

The design route of Wuchu Avenue has a total length of 1.94 km (K4+000 ~ K5+940), with a boundary line width of 55 m. The main construction contents include road, bridge, water supply and drainage, utility tunnel, traffic, lighting, landscaping, and ancillary works. See Table 4.4-2 for the main construction contents and scale, and see Tables 4.4-3 and 4.4-4 for the traffic volume projection.

Table 4.4-2 List of Main Construction Contents and Scale

<table>
<tr><th>Category</th><th>Description</th><th colspan="2">Content and scale</th><th colspan="4">Main design parameters</th></tr>
<tr><td rowspan="3">Main works</td><td rowspan="3">Road</td><td>Overall design</td><td>It is an urban trunk road with two-way 6-lane configuration, a boundary line width of 55 m, a lane width of 3.5 m, and a total route length of 1.94 km.
Road cross section:
4.0m sidewalk (including 1.5m tree pit) + 5.0m non-motorway + 5.5m green belt +11.5m motorway + 3m green belt +11.5m motorway + 5.5m green belt + 5.0m non-motorway + 4.0m sidewalk (including 1.5m tree pit) = 55.0m.</td><td colspan="4">Design speed: 60km/h;
Maximum longitudinal slope: 0.452%;
Minimum slope length: 319.815m;
Maximum slope length: 750m;
Minimum radius of convex vertical curve: 15000m;
Minimum radius of concave vertical curve: 2000m;
Minimum vertical curve length: 114.032m.</td></tr>
<tr><td>Subgrade</td><td>Subgrade works include subgrade protection works and subgrade drainage works.</td><td colspan="4">① Filled subgrade: The fill elevation of the subgrade along the whole line is less than 8 m, and ecological slope protection is adopted with a slope ratio of 1:1.5;
② Excavated subgrade: The height of all soil excavation subgrade is less than 8 m, and one-step sloping is adopted with a slope ratio of 1:1. Grass planting is adopted for slope protection. For rock sections with excavation height ≤8.0 m, one-step slope is adopted, and the slope ratio is determined according to geological conditions. For sections with excavation height of 8.0 m<h≤20.0 m, since this project only consists of the rock stratum excavation sections, stepped sloping is adopted. The Step I slope is 8 m, and a 2m wide platform is set up, with a 4% cross slope to the outside. For completely weathered rock, strongly weathered rock and moderately weathered rock, anchor bolt concrete frame beam is used to reinforce the slope, while the rest are protected by grass planting.
③ Subgrade filling & excavation boundary treatment: When the ground transverse slope or longitudinal slope is steeper than 1:5, the bottom of the subgrade shall be excavated into steps with a width of not less than 2.0 m, and the steps shall be provided with an inward inclined gradient of 2%;
④ Subgrade drainage: Surface drainage systems shall be set up on the top, surface and toe of the slope and in the middle plane of the slope. All drainage systems shall be of mortar rubble structure. In order to prevent the rainwater from the hillside from being drained to the slope, above the excavation slope, intercepting ditches shall be built in all sections where the rainwater from the hillside may be drained to the road. The distance between the inner edge of the intercepting ditch and the outer edge of the excavation slope top shall not be less than 5m, and the longitudinal slope shall not be less than 0.5%. The drainage ditch is arranged outside the excavation slope toe, and the longitudinal slope is consistent with the longitudinal slope of the road. The gradient of the drainage ditch opposite to the road longitudinal slope is 0.3%. When the excavation slope is provided with a platform, drainage ditches shall be provided inside the platform.</td></tr>
<tr><td>Pavement</td><td>Pavement works include motorway pavement,</td><td>Items</td><td>Description</td><td>Structure</td><td>Thickness</td></tr>
</table>

Category	Description	Content and scale		Main design parameters			
			non-motorway pavement, sidewalk pavement, and curb.	Pavement of motorway	Upper surface course	4cm fine-grained modified (SBS modified) asphalt concrete (AC-13C)	4cm
					Tack coat	PC-3 emulsified asphalt	
					Lower surface course	8cm coarse-grained asphalt concrete (AC-25C)	8cm
					Seal coat	0.6 cm synchronous macadam seal coat	0.6cm
					Surface course	26cm single-layer reinforcement mesh cement concrete (flexural-tensile strength ≥5.0MPa)	26cm
					Lower seal coat	ES-3 emulsified asphalt slurry seal coat	1cm
					Prime coat	PC-2 emulsified asphalt	
					Upper base course	18cm 5% cement stabilized macadam	18cm
					Middle base course	18cm 5% cement stabilized macadam	18cm
					Subbase	18cm 4% cement stabilized macadam	18cm
					Soil foundation	Plain soil compaction	
				Pavement of non-motorway	Upper surface course	4cm fine-grained asphalt concrete (AC-13C)	4cm
					Tack coat	PC-3 emulsified asphalt	
					Lower surface course	6cm medium-grained asphalt concrete (AC-20C)	6cm

Category	Description	Content and scale		Main design parameters			
					Lower seal coat	ES-2 emulsified asphalt slurry	0.6cm
					Upper base course	18cm 5% cement stabilized macadam	18cm
					Subbase	18cm 4% cement stabilized macadam	18cm
				Sidewalk pavement	Surface course	8cm sesame white granite slab, 60×40×8cm	8cm
					Leveling course	1:6 dry hard cement mortar	3cm
					Base course	C20 cement concrete	15cm
					Cushion	Graded crushed stone	10cm
				Curb	Vertical curb	15cm higher than roadway; positioned on both sides; vertical curbs for landscaping higher than roadway top surface by 20cm	/
					Flat curb	Prefabricated C30 concrete horizontal curb 30×6(9)×100 cm	/
					Flush curb	Sesame white granite vertical curb 15×42×100cm 12×30×100cm 10×15×100cm	/
Auxiliary works	Drainage	Water supply	A row of DN800mm water supply pipes are arranged along the south side of the designed road of Wuchu Avenue, and a row of DN400mm water supply pipes are arranged along the north side of the designed road, serving the surrounding plots respectively.	1. The height of the soil covered on the top of water supply pipes shall be controlled at about 1.2 m. At crossings and sections where other pipelines are concentrated, the soil covered on the top of pipes shall be adjusted according to specific conditions. 2. The designed water supply pipeline shall be provided with valve wells at regular intervals, and the spacing between valve wells is generally controlled within 500 ~ 600 m. Valves are installed on branch pipes at the junction of branch pipes and main pipes. Household wells need to be set up at regular intervals along the designed road for water supply, with the household pipe being DN150. 3. The main pipe is designed to be provided with above-ground fire hydrants at regular intervals, with a spacing not exceeding 120 m between fire hydrants. 4. Exhaust valve wells shall be installed at the high points of pipelines and at regular intervals. Ductile iron pipes are used for water supply pipelines. Sludge valve wells shall be installed at low points of			

Category	Description	Content and scale		Main design parameters
				pipelines. 5. Brick valve wells are adopted for valve wells, exhaust wells, and sludge discharge wells, and 10cm thick crushed stone cushion is laid under the well foundation. All valve wells shall be provided with anti-theft covers; the base shall match the cover and be made of the same material as the cover; the cover of household inspection well shall be 10cm higher than the surrounding ground, marked with words or signs such as "water supply". Well covers and seats with a strength of not less than D400 shall be adopted for roadways, and those for sidewalks shall have a strength of not less than C250.
		Rainwater	Rainwater pipelines of d800~d2000 mm are proposed along both sides of the road. The rainwater will be discharged into the designed rainwater box culvert on Wuchu Avenue from east to west and finally into Huama Lake.	① Pipeline under excavation: When the diameter of drainage pipeline is d≤800mm and the height of covering soil is 1.0m≤H≤3.5m, (PP-HM) double-wall corrugated pipe is adopted, with ring stiffness grade of SN10. When the height of covering soil is 3.5m<H≤6.0m, (PP-HM) double-wall corrugated pipe is adopted, with ring stiffness grade of SN12.5; pipe details: socket-type rubber ring interface; 180° medium-coarse sand foundation; 15cm crushed stone + 10cm medium-coarse sand under the pipeline foundation and leveling; When the drainage pipe diameter is 800mm<d≤1200mm, Grade II socket-and-spigot reinforced concrete pipe shall be adopted, with 180° sand-gravel foundation and rubber ring interface; When the drainage pipe diameter is d>1200mm, Grade II tongue-and-groove reinforced concrete pipe shall be adopted, with 180° sand-gravel foundation and rubber ring interface. ② Non-excavation pipeline: Polyethylene (PE) pipes are used for pipe towing. Such pipe is of PE100, SDR17 and PN=1.0MPa, and electric heat melting band connection is adopted; The pavement rainwater pipe is d300 Grade II socket-and-spigot reinforced concrete drainage pipe, with 180° sand-gravel foundation and rubber ring interface. Multiple reinforced steel-plastic composite pipes are used for the water supply pipeline (PN=1.0MPa), and electric heat melting band connection is adopted, with 180° medium-coarse sand foundation. 15cm crushed stone + 10cm medium-coarse sand are laid under the pipeline foundation for leveling, and medium-coarse sand is backfilled to 50cm above the pipe top. When the height of the soil covered on the pipeline is less than 70cm, C20 concrete shall be used for full covering, with a thickness of 20cm.
		Sewage	Along the south side of the road, it is proposed to build a sewage pipeline with a diameter of 500mm. The sewage will be discharged into the existing sewage pipeline with a diameter of 600mm, and then discharged into the nearby sewage lifting pump station, and finally discharged into the reclaimed water plant in the aerotropolis area.	
	Utility tunnel	The pipelines entering the utility tunnel include 10kV power lines, 18-hole communication pipelines, and DN800 main water supply pipes.		The cable tunnel is arranged under the south sidewalk; The single-compartment utility tunnel is set under the north sidewalk at Zoumahu East Road ~ K3+200 section, and under the central green belt at K3+200~K4+000 section; Net dimensions of cable trench: B×H=2m×1.8m; Net dimensions of single-compartment trunk utility tunnel: B×H=3.2m×2.6m.
	Traffic	① Traffic safety facilities: Class B, mainly including traffic signs and markings; ② Traffic management and monitoring facilities: Class III; monitoring facilities such as traffic parameter detectors, signals monitors, and video monitors shall be set up in key areas such as main intersections of roads; ③ Traffic signal lamps: Pedestrian crossing signals are placed at the start of crosswalk, while motor vehicle signals are set in multi-phase mode at intersections.		

Category	Description	Content and scale	Main design parameters
	Lighting	① Main road section: Symmetrical distribution of ordinary street lamps is adopted, and the street lamp poles are arranged on both sides of the road; ② Standard road section: Double-arm street lamps are arranged symmetrically on both sides, and the street lamp poles are situated within the green belts on both sides of the road. The spacing is 30 m. The lighting source power on the motorway side of Jiangjun Avenue and Wuchu Avenue is LED250W, the installation height of lamps is 12 m, and the arm length is 2.5 m; the lighting source power on the non-motorway side is LED120W, the installation height of lamps is 10 m, and the arm length is 2 m. The lighting source power on the motorway side of Zongbao Road is LED200W, the installation height of lamps is 11 m, and the arm length is 2.5 m; the lighting source power on the non-motorway side is LED100W, the installation height of lamps is 9 m, and the arm length is 2 m. ③ Level crossing: 16m medium-pole lamps equipped with 5*300W LED lights are additionally provided as supplementary lighting at the intersection.	
	Landscaping	The boundary line is 55m wide. The total landscaping area is about 25,152 m^2 and the landscaping rate is 31%.	

According to the EIA Report Form for Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone, the characteristic years for traffic forecast of the Project are set as 2024, 2030, and 2038. The predicted traffic volume and predicted traffic flow for each year can be found in Tables 4.4-3 and 4.4-4, respectively.

Table 4.4-3 Forecast of Traffic Volume in Peak Hours of the Project (pcu/h)

S/N	Road grade	Year	Total traffic volume
1	Trunk road	2024	1051
2		2030	2789
3		2038	4403

For the vehicle type ratio, refer to the investigation results of similar projects near the Project. Small vehicles: medium vehicles : large vehicles = 5:3:2.

The conversion coefficient of maximum hourly traffic flow (pcu) is: small vehicle = 1 pcu, medium vehicle = 1.5 pcu, and large vehicle = 2.5 pcu.

The ratio of daytime traffic flow to nighttime traffic flow is calculated at 4:1.

The daytime and nighttime traffic flow for different types of vehicles for different years are as shown in the following table:

Table 4.4-4 Traffic Volume of Different Vehicle Types in the Project (vehicle/h)

Forecast year	Day/night	Small vehicle	Medium vehicle	Large vehicle
2024	Daytime	420	168	67
	Nighttime	105	42	17
2030	Daytime	1116	446	178
	Nighttime	279	112	45
2038	Daytime	1761	704	282
	Nighttime	440	176	70

4.4.2.2 General Layout and Site Arrangement

(1) General layout and surrounding conditions

① Project layout plan

Wuchu Avenue covers a total area of about 240620 m^2, belonging to permanent land occupation (temporary land is within the permanent land). The types of land occupied are mainly rural residential areas, general farmland, etc., and basic farmland is not occupied.

② Surrounding conditions of the Project

Currently, there are plant buildings, fish ponds, wetlands, and canals along Wuchu Avenue. There is a small amount of construction land distributed locally, and in low-lying areas, there are some fish ponds. Within a 200m range from the road centerline, there are village residential areas such as Sunjiawan, Shaojia Dawan, Caopuwan, and Wangjiazui (demolition has been completed), and there is no other municipal roads.

(2) Layout of construction site

No construction camp is set up, and the office and living arrangements of the construction personnel will rely on local residential houses. Half-width construction is adopted during construction. The storage yards for construction materials are located within the boundary lines of roads, and no new temporary land will be added outside the boundary lines. The specific locations of the construction site and temporary soil stacking yard are as follows.

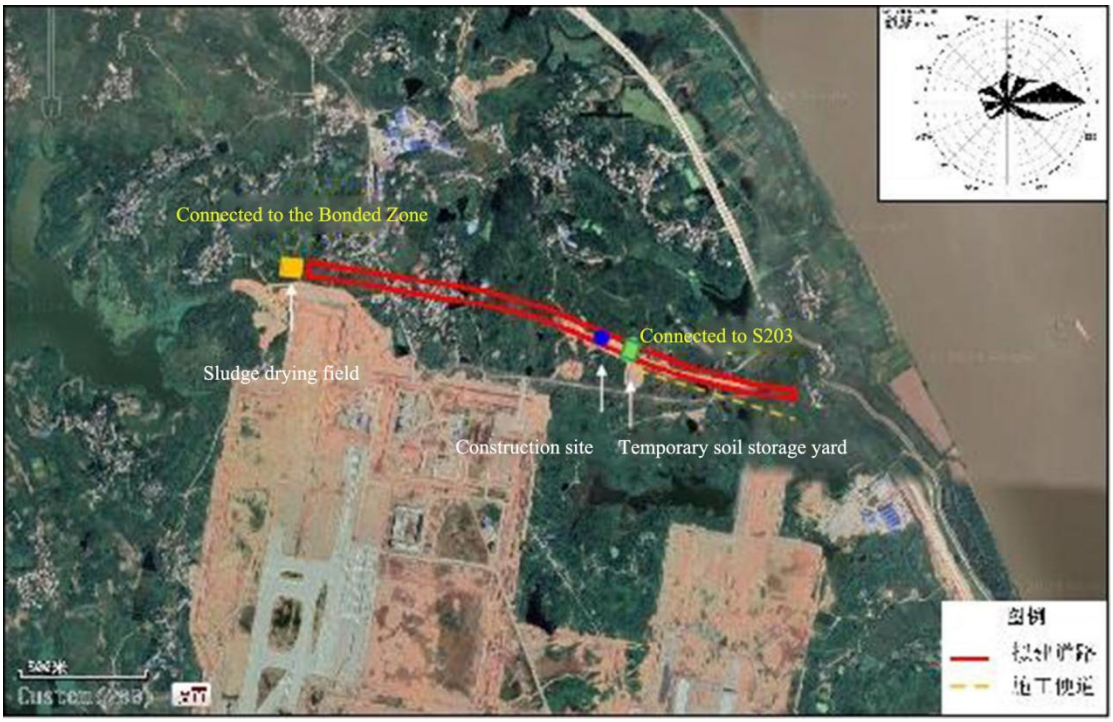


Figure 4.4-1 Location of Construction Site and Temporary Soil Stacking Yard for Wuchu Avenue

① Construction site

One construction site is set up within the boundary line of the road, with a total land area of about 250m^2. The construction site mainly includes material processing yard, material

stacking yard, and machinery parking yard. The construction site is temporarily stacked with road materials and auxiliary materials such as subgrade fillers and cement-stabilized materials, which are used for construction. The project construction site is arranged within the project boundary line and primarily used for machinery parking and materials stacking.

② Sludge drying field

A sludge drying field is set up within the project boundary line, covering an area of 2,500m^2, which can fully meet the needs for sludge drying in the Project. After the sludge is drained, it is transported to the sludge drying field for air drying. The pile height of sludge is about 3 m. Cofferdams and drainage ditches are set up. After the sludge is dried, it is uniformly removed by muck trucks.

Since there are no industrial enterprises distributed around the boundary line of Wuchu Avenue (associated facility), the sludge monitoring data of Huama Lake water system in the surrounding canal is used to evaluate the dredging of the Project. Based on the sampling and testing results of sludge from the Huama Lake water system, the pH value of the sludge is 7.56~7.57, the arsenic content is 2.26-2.79mg/kg, the cadmium content is 0.47-0.51mg/kg, the copper content is 38-64mg/kg, the lead content is 12.4-14.8mg/kg, the mercury content is 0.083-0.269mg/kg, the nickel content is 26-32mg/kg, the chromium content is 99-104mg/kg, and the zinc content is 97-133mg/kg. All values are below the limits set by the *Soil Environmental Quality - Risk Control Standard for Soil Contamination of Agricultural Land (Trial)* (GB15618-2018).

③ Temporary soil stacking yard

A temporary soil stacking yard is set up within the boundary line of Wuchu Avenue, covering a total area of 1,500 m^2. Fences and drainage ditches are built around the temporary soil stacking yard.

④ Construction access road

There are no other municipal roads and classified highways around the Project, and the main traffic roads existing in the surrounding area are rural village road networks. Temporary construction access roads are set up within the boundary line of Wuchu Avenue to connect with existing roads. The road construction materials, such as cement, lime, crushed stone, block stone and medium-coarse sand, need to be purchased from other places, and then directly delivered to the construction site of the Project through surrounding roads and construction access roads. The traffic is convenient. The land area of the temporary construction access road is about 29414.64m^2, and drainage ditches and grit chambers are arranged on both sides of the access road according to the terrain conditions.

⑤ Layout of Borrow and Spoil Yards of Earth-rock Balance

Borrow area: Due to the large excavation volume of the whole line, it can meet the earthwork requirements for the construction of Wuchu Avenue. Therefore, no additional borrowed soil is required during the construction of Wuchu Avenue. The disposal sites for the construction spoil from Wuchu Avenue are the Bajiao Village and Wo'ertang backfill areas. Both backfill areas are designed as part of the Hubei Global Air Cargo Logistics Hub Project. The Bajiao Village backfill area is designed to have a fill height of +33.0 m and a capacity of

approximately 3.349 million cubic meters. The Wo'ertang backfill area is designed to have a fill height of +22.0 m and a capacity of approximately 648,400 cubic meters. These capacities are sufficient to meet the disposal needs of the construction spoil from Wuchu Avenue.

The locations of the two spoil yards are shown in the following map.

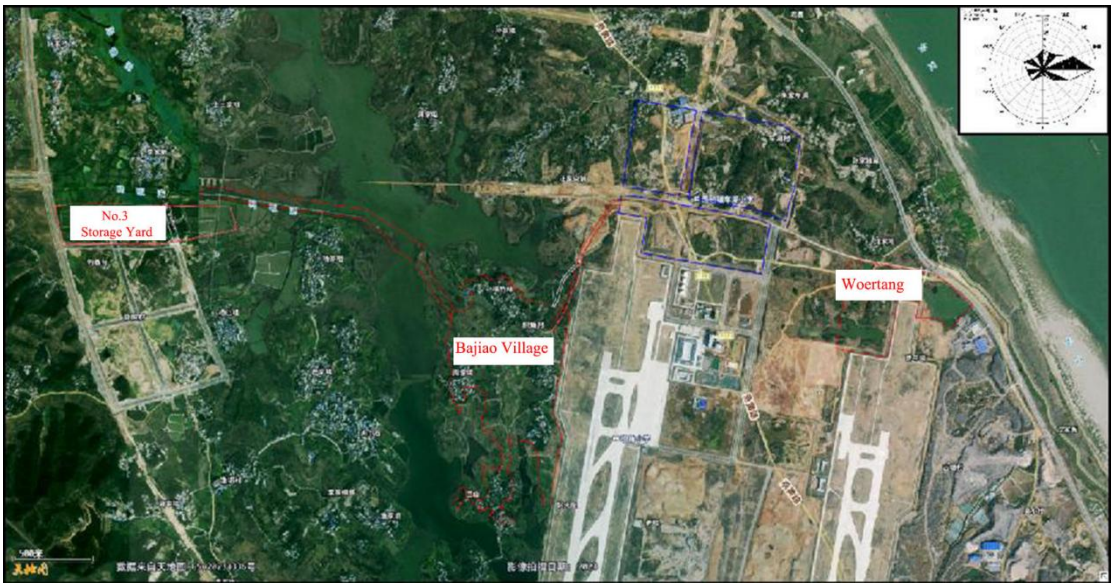


Figure 4.4-2 Locations of Spoil Yards

4.4.2.3 Construction Scheme of Associated Facilities

(1) Construction method and process

1) Subgrade works

① Filled subgrade

Mechanical construction is mainly adopted for the filled subgrade, with manual construction appropriately coordinated. Layered paving, filling and compaction are also adopted for the construction. Construction process: tree root removal, surface water drainage, excavation of temporary drainage ditches and grit chambers, removal of surface silt and weeds (topsoil is transported to the designated place for temporary storage) → grader and bulldozer → compaction with a road roller and subgrade filling. When filling, the width and height shall be appropriately increased, and the soil shall be filled and compacted in layers. The excess part shall be removed and trimmed by grader or other methods.

② Excavated cutting

Mechanical construction is mainly adopted for the cutting excavation construction, with manual construction appropriately coordinated. In addition to considering local topographical conditions and the machines and tools used, it is also important to consider the distribution and utilization of soil layers. Before cutting excavation, on-site clearing work such as tree cutting and root removal, as well as drainage work shall be completed. If the soil excavated is used for filling, the topsoil shall be excavated and discarded separately, or the soil shall be excavated in layers according to different soil layers, so as to meet the

requirements of embankment filling. Construction process: surface cleaning (topsoil is transported to the designated place for temporary storage) → setting-out of intercepting and drainage ditches → excavation of intercepting and drainage ditches → subgrade filling and slope excavation → subgrade protection.

Before subgrade excavation, the soil along the line shall be tested regarding the quality. Topsoil suitable for turf planting and other purposes shall be stored in designated places; excavated materials suitable for subgrade filling shall be used accordingly, while unsuitable materials shall be disposed of properly.

During excavation, the large-scale blasting construction is prohibited, and slope cutting and excavation must be carried out step by step from top to bottom, accompanied by protective measures.

2) Pavement works

The mechanized construction is preferred for pavement construction. If conditions permit, high-efficiency slipform pavers and supporting mixing equipment shall be introduced first to achieve full centralized mixing. It is essential to strictly control material quantities and compositions, implement rigorous process management, and carry out on-site supervision and process testing to ensure construction quality.

All indoor tests shall be done before pavement construction. Pavement construction has high requirements for construction season, construction temperature, raw materials, mix proportion, and flatness. Therefore, the construction of pavement works requires a higher standard from the Construction Contractor. It is advisable to adopt supporting pavement machinery & equipment and professional construction plan, and strictly control the mix proportion of mixtures, thus ensuring that various indicators of the pavement meet the specified requirements.

(2) Land occupation and demolition

The land occupied by Wuchu Avenue is permanent, about 240620m^2. The types of land occupied are mainly rural residential areas, general farmland, etc. The project does not involve scenic spots, nature reserves, wildlife habitats, or ecological protection areas such as basic farmland protection zones and public welfare forests.

For Wuchu Avenue, the demolition scope mainly focuses on Caopuwan and Shaojiadawan in Yanji Town, Echeng District, Ezhou City, mainly involving rural residential houses. The demolition is uniformly organized and arranged by the local government. The demolition for the Project only involves the land within the road boundary line of the Project, and the resettlement plan for relocated residents is uniformly planned by the local government.

(3) Earth-rock works and borrow/spoil situation

The earthwork of Wuchu Avenue mainly includes road excavation and backfilling. See Table 4.5-1 for the earth-rock balance. According to the comprehensive earth-rock disposition location and balance analysis, this construction project requires an earth-rock excavation volume of about 769,500 m^3, a dredging volume of 27,000 m^3, and a filling volume of about 85,400 m^3. Half-width construction is adopted for the road, and the excavated temporary

earthwork is stored within the boundary line of the project, without occupying additional temporary land. The stripped topsoil of the project will be reused as greening topsoil for vegetation restoration. The sludge is treated through a combination of dredging, sun drying, and transportation. The air-dried sludge, along with excess earth-rock works (742,400 m^3) that cannot be consumed, is transported to the storage yards in Woertang and Bajiao Village for backfilling.

Table 4.5-1 Earth-rock Works of the Project

Type of excavation	Earthwork volume (m^3)	Type of filling	Earthwork volume (m^3)	Spoil	Earthwork volume (m^3)
Topsoil	55386.3	Topsoil	55386.3	Earth-rock works	712136.12
Earth-rock works	807972.98	Earth-rock works	95836.86	Air-dried sludge	30269.84
Subgrade dredging	30269.84				
Total	863359.28		151223.16		742405.96

4.5 Due Diligence of Associated Facilities

See the *Environmental and Social Management Due Diligence Report for the Hubei Global Air Cargo Logistics Hub Project* for details of the due diligence results of Phase I project and Wuchu Avenue.

5 Analysis of Alternative Schemes

5.1 Scheme in the Absence of the Project

Upon the completion of the Hubei Global Air Cargo Logistics Hub Project, it will be developed into an innovative and internationally competitive global air cargo logistics park. In the future, the focus will be on developing bonded services primarily in aviation maintenance, cross-border e-commerce, and international logistics distribution. The Project has been included in relevant planning: The *14th Five-Year Plan for Civil Aviation Development*, the *14th Five-Year Plan for the Development of Urban Agglomerations in the Middle Reaches of the Yangtze River*, the *Overall Development Plan of Linkong Economic Comprehensive Experimental Zone of Wuhan Metropolitan Area (2019-2035)*, the *Outline of the 14th Five-Year Plan for Economic and Social Development and the Long-Range Objectives Through the Year 2035 of Ezhou City*, and the *14th Five-Year Plan for Comprehensive Transportation Development of Ezhou City*.

Through the construction of the Project, by 2030, the international cargo volume will reach 381,600 tons, and the corresponding aircraft movements will be 3,816 (both the corresponding cargo volume and aircraft movements are included in the annual cargo and mail throughput and aircraft movements of Huahu Airport in 2030). The total import and export volume will exceed RMB 450.52 billion. 50 new enterprises will be introduced, and 3,000 new jobs will be created.

It shall be noted that the cargo volume of 450,600 tons/year of the Project is included in the annual cargo and mail throughput of Huahu Airport in 2030. In other words, the operation of the Project will not lead to an increase in the cargo aircraft movements and the aircraft flight frequency of Huahu Airport.

Without the Project, it will be impossible to meet the growing demand for global air cargo logistics services and to achieve the strategic goal of developing Huahu Airport into a global air cargo logistics hub. Therefore, the scheme in the absence of the Project will not be considered.

5.2 Project Site Selection

5.2.1 Principle of Site Selection

The project site selection directly affects the functionality and operation efficiency of the aviation logistics park, as well as future business development. Therefore, the project site selection shall meet the following principles:

(1) Compliance with relevant plans

The planning and site selection of the Hubei Global Air Cargo Logistics Hub Project shall comply with the *Outline of Urban-Rural Master Plan for Ezhou City (2017-2035)*, *Master*

Plan of Land Use for Ezhou City (2006-2020), *Master Plan of National Land Space for Ezhou City (2021-2035)* (Draft), *Master Plan for Ezhou Civil Airport in Hubei Province*, *Master Plan for Linkong Economic Zone,* and other regulations. The plot where the Project is located is the construction land.

(2) Proximity to industrial clusters

The development of global air cargo logistics is based on market demand, and the site selection shall align with the development orientation, being close to a wide range of industrial clusters and matching the service scope. The project site is 15 km away from the industrial cluster of Echeng District, 40 km away from the industrial cluster of Gedian Economic and Technological Development Zone, 50 km away from Wuhan East Lake High-tech Development Zone, and about 10-20 km away from the industrial clusters of Huangshi and Huanggang. All locations are within a one-hour drive, so the Project can provide high-quality and efficient services for enterprises within the area.

(3) Easy traffic organization

The Project is located in Ezhou Comprehensive Bonded Zone, primarily chosen for its proximity to entrances and exits of the main traffic roads, cargo terminals, and other convenient transportation facilities, facilitating the distribution of cargo. Pedestrian-vehicle separation is adopted for the Project. The kiosk of the project site is located on Wuchu Avenue, allowing easy access to Provincial Highway S203 and surrounding main roads such as Daqing-Guangzhou Expressway, Shanghai-Chengdu Expressway, and Wuhan-Ezhou Expressway. Upon completion, the southern part will be connected to Ezhou Huahu Airport.

(4) Integrated and complete plot

Considering that the whole project needs to be fenced and closed for operation, the integrity and completeness of the plot is not only beneficial for creating a closed environment but also conducive to the practical production of the enterprise. The construction site of the Project is located in the comprehensive bonded zone. The project site has complete plots and convenient transportation. The port operation area, bonded functional area (including bonded processing, bonded warehouse, etc.) and other blocks are clearly divided, which facilitates the layout of traffic routes.

(5) Land conservation and intensive utilization

The land occupation of the Project shall be in strict accordance with the requirements of the *Notice on Promoting Land Conservation and Intensive Utilization* issued by the State Council, so as to effectively protect cultivated land and achieve land conservation and intensive utilization. Ensure compliance with relevant planning and land use standards; make full use of existing construction land and vigorously improve the utilization efficiency of construction land; give full play to the basic role of market in allocating land resources, and improve the long-term mechanism for land conservation and intensive utilization; strengthen the management of land use in the aviation logistics area, strengthen supervision and inspection, and fully implement the responsibility of land conservation and intensive utilization.

5.2.2 Site Selection Scheme

Based on the above principles, the Hubei Global Air Cargo Logistics Hub Project is located within Ezhou Airport Comprehensive Bonded Zone, east of Echeng District and north of Ezhou Airport. Specific scope: to the north is Wuchu Avenue, to the east is the east runway of Ezhou Huahu Airport, to the west is the west runway of Ezhou Huahu Airport, and to the south is the apron on the north side of Ezhou Huahu Airport. The project area is 8.5 km away from Ezhoudong Railway Station, 14 km away from Huahu Railway Station and 16 km away from Ezhou Railway Station. It is located in the core area of Wuhan Metropolitan Area and is also a highland for Ezhou's external development. The location relationship between the project area and Ezhou Airport Comprehensive Bonded Zone and its surrounding major transportation hubs is shown in Figure 5.2-1 and 5.2-2 respectively.

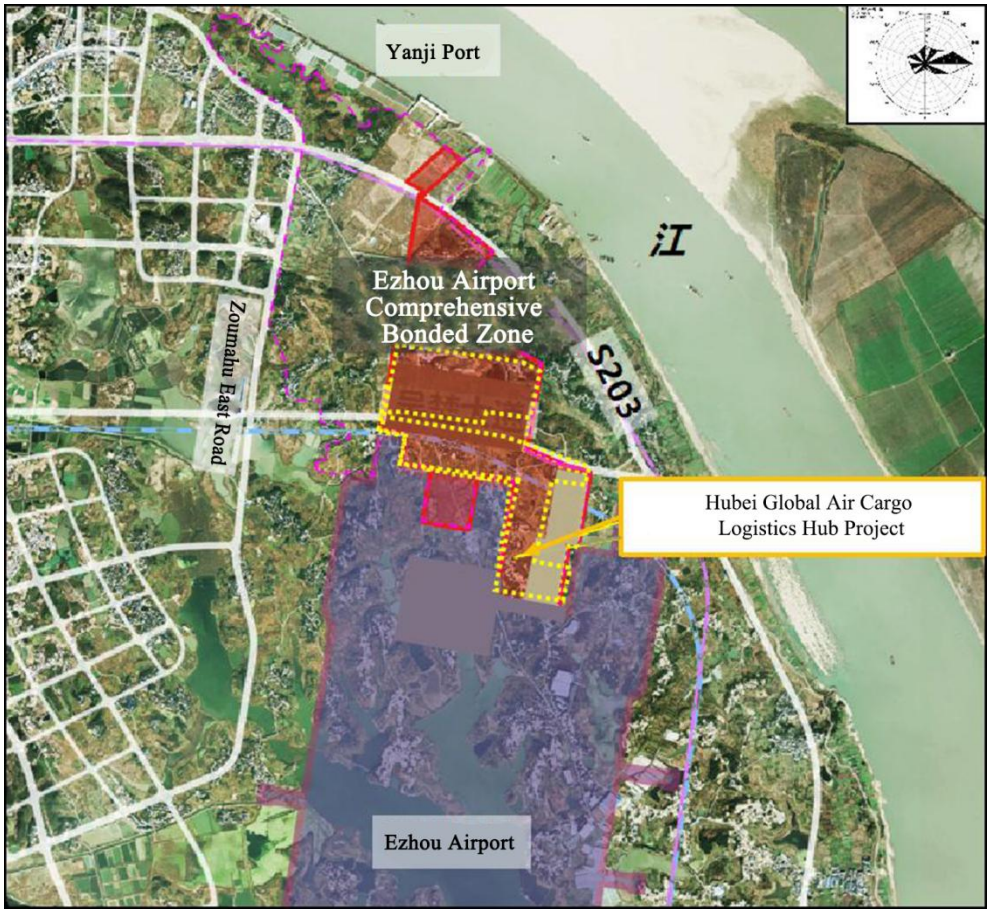


Figure 5.2-1 Relative Location Relationship between Hubei Global Air Cargo Logistics Hub Project and Ezhou Airport Comprehensive Bonded Zone

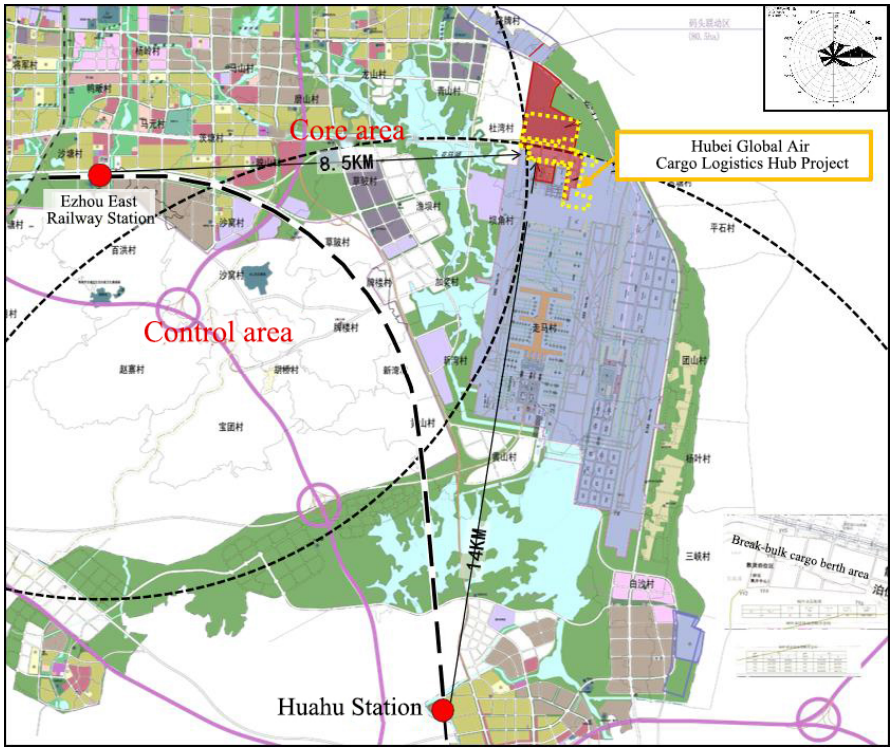


Figure 5.2-2 Relative Location Relationship between Hubei Global Air Cargo Logistics Hub Project and Surrounding Major Transportation Hubs

The planned land area of Ezhou Airport Comprehensive Bonded Zone is about 2.3 km^2. The project site is situated within this area with a land area of about 1.37 km^2, accounting for 59.56% of the total planned area of Ezhou Airport Comprehensive Bonded Zone (which is more than one-third of the total planned area). The terrain within the project area is flat and open, and the land is of the planned industrial construction land within the industrial base.

Around the Project, there are completed roads such as Wuchu Avenue (Yansha Road-Yanhua Road), Ezhou S203 Airport Expressway, Yanhua Road (Edong Avenue-Wudu Avenue), and Aviation Avenue. The terrain in the project area is relatively flat. Currently, land acquisition and demolition have been completed for the Project, and site leveling and surface cleaning have been started for some parts of the site.

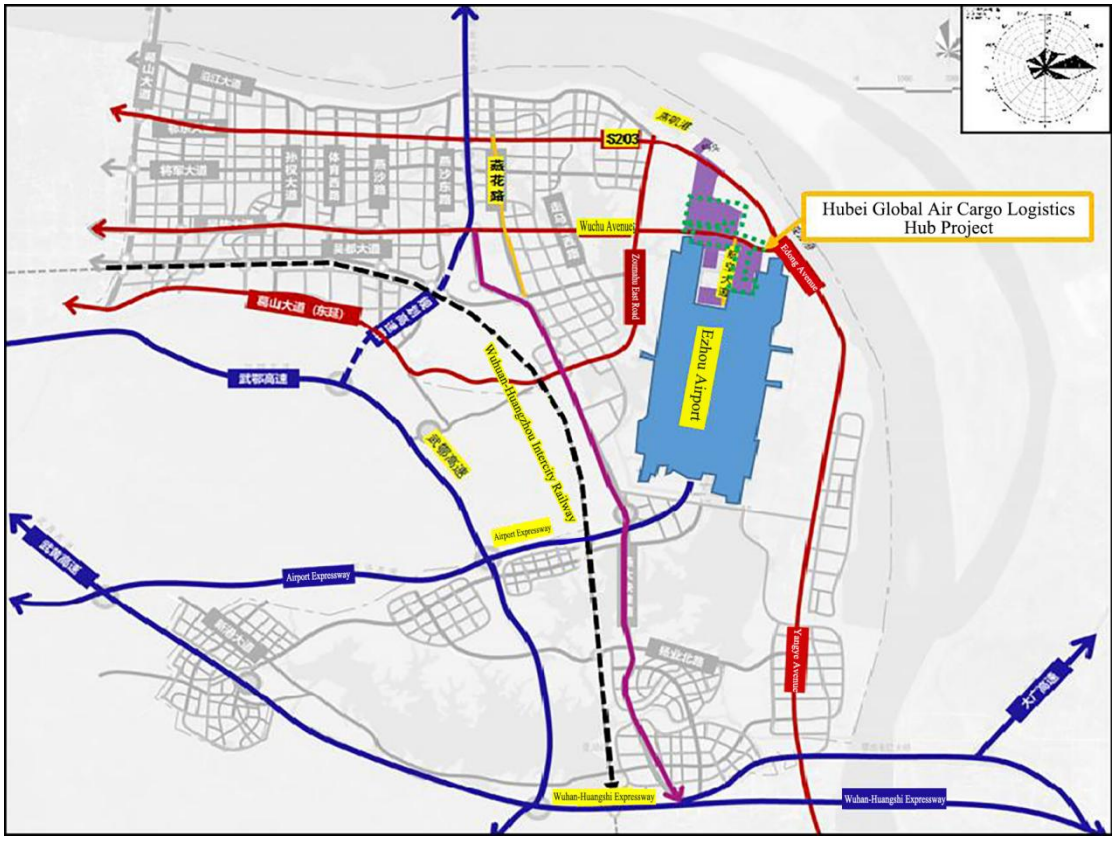


Figure 5.2-3 Roadmap around the Project Area

In conclusion, the project site selection adheres to the aforementioned principles, exhibiting a unique suitability that precludes the consideration of alternative locations.

5.3 Route Selection of Wuchu Avenue

Associated facility of the Project - Wuchu Avenue is located within Hubei International Logistics Core Hub Area in Ezhou City. It is connected with the Project through a kiosk. In the future, it will be convenient for inbound and outbound cargo to be promptly accessed to S203, as well as major surrounding roads such as Daqing-Guangzhou Expressway, Shanghai-Chengdu Expressway and Wuhan-Ezhou Expressway. It connects Huama Lake Bridge in the west, and reaches S203 in the east after passing through the bonded zone. The total length of the road is 1.94 km (K4+000~K5+940); the road has a boundary line width of 55 m and features six lanes in both directions, with a total length of 1940 m and a design speed of 60 km/h.

Wuchu Avenue, an urban trunk road, follows the planned road network, primarily occupying land areas and water bodies. This route alignment strategically avoids traversing through ecologically sensitive areas such as nature reserves, scenic spots, forest parks, and areas designated for the protection of basic farmland. Furthermore, it does not encroach upon or intersect the ecological boundary line zones within Ezhou City.

In conclusion, the route selection of this associated facility is reasonable, and the construction of this associated facility has already begun, eliminating the consideration of other alternatives.

6 Environmental and Social Baseline

6.1 Overview of Natural Environment

6.1.1 Geographical Location

Ezhou City is located in the east of Hubei Province, on the south bank of the middle reaches of the Yangtze River, bordering Wuhan City in the west, Huangshi City in the southeast and the Yangtze River in the north. It faces Wuhan City and Huanggang City across the river from west to east respectively. It is located between longitude 114°32′ ~ 115°05′E and latitude 30°00′ ~ 30°06′N, with a total area of 1596km^2. The highest peak in Ezhou City is Sifeng Mountain, with an altitude of 485.8m, and the lowest point Liangzi Lake in Liangzi Town is 11.7m a.s.l.

Hubei Global Air Cargo Logistics Hub Project is located within Ezhou Airport Comprehensive Bonded Zone, east of Echeng District and north of Ezhou Airport. Specific scope: to the north is Wuchu Avenue, to the east is the east runway of Ezhou Huahu Airport, to the west is the west runway of Ezhou Huahu Airport, and to the south is the apron on the north side of Ezhou Huahu Airport. The project area is 8.5 km away from Ezhoudong Railway Station, 14 km away from Huahu Railway Station and 16 km away from Ezhou Railway Station.

Associated facilities—Wuchu Avenue is located in Ezhou Linkong Economic Zone. It serves as an east-west traffic artery in the park, connects the Bonded Zone in the west and ends at S203 (under construction) in east, with a total length of 1940km.

6.1.2 Topography and Landform

The terrain of Ezhou City is high in the southeast, low in the northwest, and low and flat in the middle. The highest point "Sifeng Mountain" is 485.8m a.s.l., and the lowest point "Liangzi Lake" is 11.7m a.s.l. The region comprises four distinct geomorphic units: From Baihu Town to Linjiang in the north and from Yanji to Yangye in the east, the Yangtze River alluvial terraces are prevalent; the basic skeleton of the hilly landform, consisting of Baizhi Mountain, Fengjianzi Mountain, and Zaoshan Mountain, dominates the east and the east side of the south; the north and the west side of the south feature a hilly plain with an elevation of approximately 90 m; finally, the middle of the region contains a stagnant alluvial-lacustrine plain formed by the presence of lakes such as Liangzi Lake, Ya'er Lake, Sanshan Lake, and Yanglan Lake running through the hinterland of Ezhou.

The construction site of the Project is located in the transition zone between Jianghan lacustrine-alluvial plain and low mountains and hills of Ta-pieh Mountains. The site is characterized by eroded and denudated hilly terrain with microrelief, predominantly composed of Quaternary red clayey soil. The terrain exhibits a gradual rise from the northwest to the southeast and features well-developed water systems and numerous lakes. The lakes' shorelines are characterized by a zigzag pattern. Earth hummocks and wide

depressions are arranged in a dendritic manner, extending towards the center of the lake in alternating long sections.

6.1.3 Soil Geology

The Ezhou section of the Yangtze River features an eroded river bank, dotted with numerous bedrock hills and rocky ledges. The riverbed near these hills and ledges is primarily composed of sandstone or conglomerate, while the bank slopes in other reaches consist mainly of sandy bank slopes. The strata comprise mucky clay, silty clay, clay, fine sand, highly-weathered siltstone, and moderately-weathered siltstone from top to bottom, with a bedrock depth of approximately 30 m. The strata of Liangzi Lake primarily consist of several distinct layers, including silt, mucky soil, loam, sand loam, and clay. Meanwhile, the riverbed is predominantly composed of silt and sandy soil.

The construction site of the Project is situated within the lower Yangtze platform of the Yangtze paraplatform, characterized by well-developed folds, faults and magmatic activities. The regional tectonic environment is notably intricate. The surface is predominantly overlaid by Quaternary strata which are primarily distributed in bands along Grade I and II terraces, rivers, valleys, and intermountain depressions of the Yangtze River Basin. These strata are composed of alluvial-lacustrine deposits, dominated by modern river and lake alluvium, with a wide deposition range and relatively stable deposition thickness. The exposed bedrock in the slope area is mostly Cretaceous-Tertiary K-Rdn thick calcareous fine sandstone mixed with flesh red gravelly coarse-grained sandstone, and locally late Yanshanian (γ) granite porphyry and granite mixed with a small amount of basalt. The lithology and lithofacies exhibit significant variation, resulting in a complex rock-soil mass structure. However, the engineering geological properties are favorable.

6.1.4 Earthquake

The stability of the regional crust is primarily influenced by the neotectonic movement and its immediate impact, namely earthquakes. According to the seismotectonic zoning map of Hubei Province, the Project site falls within the northeastern Hubei seismic structure zone, situated in the seismic belt of the middle-lower reaches of the Yangtze River. Tectonic earthquakes are the predominant seismic activity in this region, and all of them are shallow-focus earthquakes. Due to their small magnitude, they pose minimal threat to the surface. Overall, seismic activity in this area is relatively weak, with few occurrences of strong earthquakes.

The literature documents several destructive earthquakes in close proximity to the Project's construction site, all of which registered a magnitude between 5 and 6 and an epicentral intensity ranging from 6 to 8. The last earthquake occurred in 1932, with a magnitude of 6 and an epicentral intensity of 8. This earthquake is the most severe in the region, with the highest magnitude and degree of destruction. Its epicenter is situated 12 km west of the Tuanma Fault, and the earthquake was triggered by recent activity of the Tuanma Fault. It can be seen that Tuanma Fault is a seismogenic fault. On the 1°×1° Isostatic Gravity Anomaly Map of China, all gravity anomaly values range from -10 to 10 mGal, falling in the transition section between the lower positive anomaly in eastern China and the higher negative anomaly in western China. This region exhibits an absolute value of isostatic anomaly closest

to zero, indicating that the crust has achieved a highly isostatic state. On the 5°×5° Mean Free-air Gravity Anomaly Map of China, the gravity anomaly values range from 5 to 10 mGal, indicating that this is one of the regions with the smallest and most stable anomaly values in China. This result reflects the weak modern stress action in the region.

According to the Code for Seismic Design of Buildings (GB 50011-2010), the basic seismic intensity of Ezhou City is VI. Based on the Seismic Ground Motion Parameters Zonation Map of China (GB18306-2015), the ground motion peak acceleration along the line at the site is 0.05 g or lower. The characteristic period of the ground motion response spectrum is 0.35 s, and the site is classified as a medium-hard site.

The basic seismic fortification intensity of the project site is Degree 6, the design earthquake group is I, and the design basic earthquake acceleration is 0.05g. The envelope value of seismic action parameters will be taken in accordance with the Code for Seismic Design of Buildings (GB50011-2010) (2016 Edition) and the Seismic Ground Motion Parameters Zonation Map of China (GB18306-2015).

6.1.5 Climate and Meteorology

6.1.5.1 Climatic Characteristics

Ezhou is situated in a subtropical monsoon climate zone within the mid-latitude region, characterized by a pronounced monsoon climate, with cold winters and hot summers. The city experiences four distinct seasons, with ample precipitation, abundant sunshine and a lengthy frost-free period. The periods of hot summers and bitter winters are short in the city, and the primary disaster weather conditions include rainstorm, drought, strong wind, hail, and freezing.

(1) Rainfall, evaporation and frost-free period

According to the data statistics of Ezhou Meteorological Station for the past few years, the annual average precipitation in Ezhou City is 1282.8 mm, and the rainfall is distributed across the seasons. The largest amount of rainfall occurs in summer, followed by spring, autumn, and winter, with significant interannual variation. The distribution of precipitation in the region is characterized by a slightly higher amount in the northwest than that in the southeast. The central and southwest areas receive an intermediate amount of precipitation. The average annual frost-free period is 266 days.

(2) Sunshine, temperature, air pressure and wind speed

Ezhou City has an annual average sunshine of 2003.7 hours, a daily average sunshine of 5.5 hours, an annual average percentage of possible sunshine of 45% (it is considered high in comparison to those in other regions in eastern Hubei), and an annual average frost-free period of 266 days. The city has an average annual temperature of 17.0°C, with the extreme minimum temperature being approximately -12.4°C and the extreme maximum temperature being approximately 41.3°C. Additionally, the city boasts the highest average annual temperature in eastern Hubei. The variation in ground temperature corresponds with the fluctuation in air temperature, exhibiting low temperatures during winter and high temperatures during summer. Specifically, the ground temperature reaches its minimum in January and its maximum in August. The monthly fluctuations in ground temperature mirror

those of air temperature. Moreover, the average annual ground temperature remains basically constant as the depth increases. The average atmospheric pressure in Ezhou City is 101.57 kPa. The prevailing wind direction in Ezhou City is northerly in autumn and winter, and easterly in spring and summer. The annual average wind speed is 1.9m/s and the maximum wind speed is 31m/s.

6.1.5.2 Flood Characteristics

Ezhou City, Hubei Province is located on the south bank of the middle reaches of the Yangtze River. It is a low-lying plain lake area. There have been several major floods in history in Ezhou City. External floods and waterlogging often occurred after liberation. The causes of flood disasters in Ezhou City are as follows:

The waterlogging in internal lakes cannot be discharged in time, the water level of internal lakes rises due to rainfall, the flood resistance capacity of river banks is low, the flood control standard of lake embankments is low, the area of lakes decreases due to enclosing lakes, the drainage standard is low, and there are many dangerous projects.

The flood control of buildings, structures and drainage works in the Project is designed as per 20-year return period according to the standard.

6.1.6 Hydrological System

6.1.6.1 Surface Water

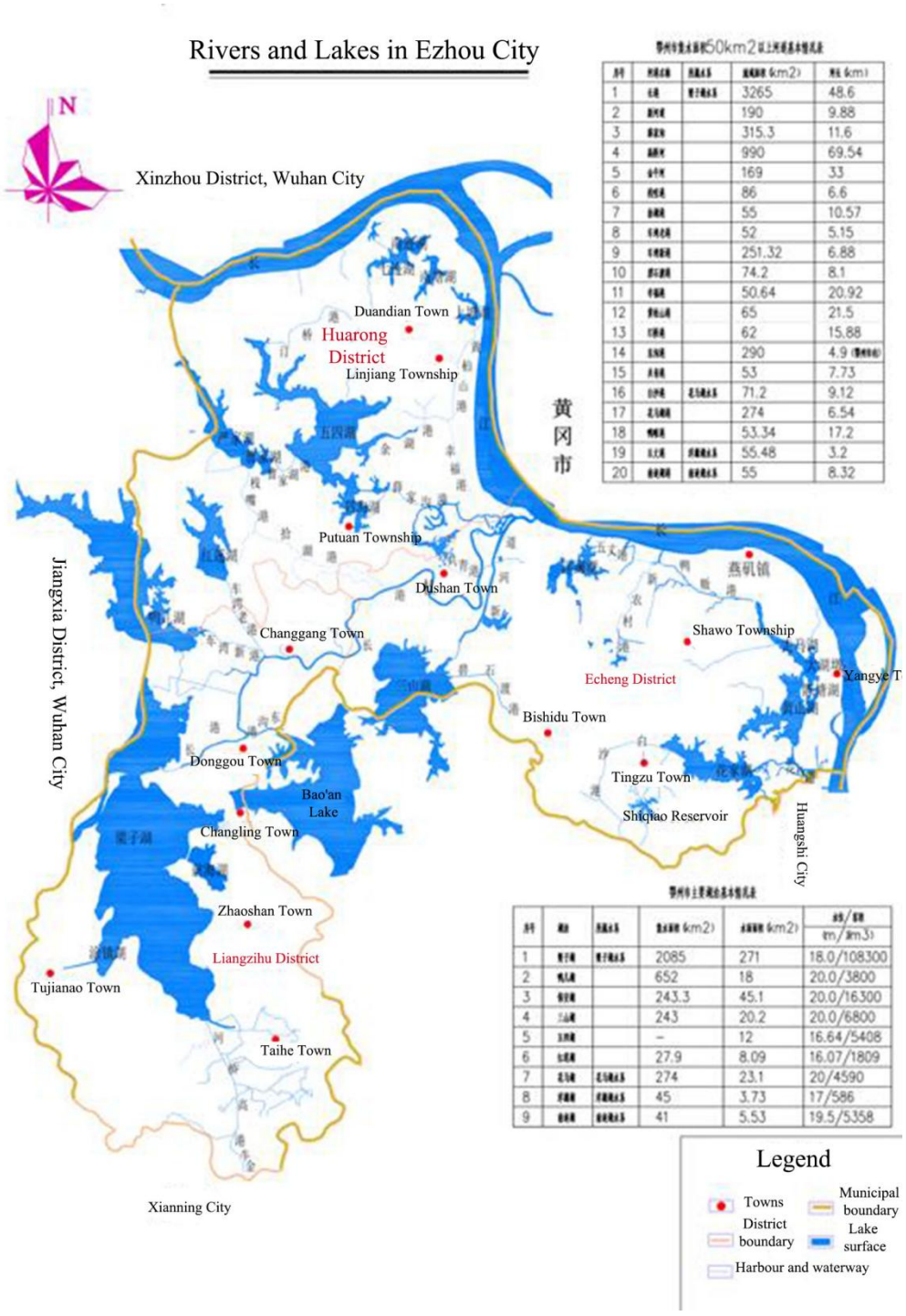
The water bodies around the Project include mainly the Yangtze River and Huama Lake.

The Yangtze River flows from Wuhan to Baihu Mountain before coursing through Ezhou City, The River is bounded by the middle of the river with Xinzhou, Huanggang and Xishui counties on the left bank, successively passes through Mu'e Port, Huangjiaji, Zhaojiaji, Niji, Sanjiangkou, Huangbaishan, Fankou, Panlongji, Wuzhang Port, Longwangji, and Yanji in Ezhou City on the right bank, and finally flows out of the city at Huama Lake pumping drainage station (Lijiawan) before entering Huangshi, with a flow path of 77.5 km in Ezhou. The Yangtze River in Ezhou City exhibits alternating narrow and wide sections, with a minimum width of 870 m and a maximum width of 8,000 m. Some single-type and curved sections are relatively narrow. Owing to the Yangtze River's copious water supply and prolonged flood season, and according to the average over many years, the period from May to October is typically considered the flood season, while the period from February to March is regarded as the dry season. In Ezhou City, the Yangtze River has an annual average water level of 17.20 m, an annual average discharge of 23,800 m^3/s, an annual average sediment concentration of 0.586 kg/m^3, and an annual average sediment runoff of 430 million tons.

Ezhou City boasts four prominent water systems, namely Liangzi Lake, Huama Lake, Yanglan Lake, and Nanji Lake. It has dense network of rivers and numerous lakes, possessing the characteristic of the typical riverside lake region in the middle reaches of the Yangtze River. The river network density in the city is 0.381 km/km^2. The city currently has a water area of 645,000 mu, which constitutes approximately 27% of its territorial area, making it the top-ranking municipality in the province in this regard. There are totally 119 lakes in Ezhou

City, mainly including Liangzi Lake, Sanshan Lake, Wusi Lake, Wutong Lake, Honglian Lake, Yanjia Lake, Nanji Lake, Huama Lake and Yanglan Lake. Rivers with a catchment area larger than 50 km^2 include Gaoqiao River, Changgang River, Xuejiagou River, Xingang River and Huama Lake Port. There are 37 reservoirs in Ezhou, including 1 medium-sized reservoir, 7 small (I) reservoirs, and 29 small (II) reservoirs, with a combined capacity of 59.11 million m^3, an effective capacity of 39.23 million m^3 and an effective irrigation area of 95,600 mu. Additionally, there are also 169 sluice gates (including 16 along the river), 907 pump stations, 7230 ponds, and 92 protective embankments with an area larger than 1,000 mu (including 12 embankments larger than 10,000 mu and 16 embankments larger than 5,000 mu). The total area of protective embankments is 480,000 mu, and the inner lake dikes span 282 km.

According to the Regulation of the People's Republic of China on the Administration of River Courses and the Regulation on the Administration of Reservoir Dam Safety, the protection range of the embankment shall be not less than 200 m (generally not less than 50 m) beyond the boundary line of the project management scope. As the minimum distance between the boundary line of the Project and the dam boundary exceeds 900m, the Project falls outside the protection range of the embankment.



1			3265	48.6
2			190	9.88
3			315.3	11.6
4			990	69.54
5			169	33
6			86	6.6
7			55	10.57
8			52	5.15
9			251.32	6.88
10			74.2	8.1
11			50.64	20.92
12			65	21.5
13			62	15.88
14			290	4.9
15			53	7.73
16			71.2	9.12
17			274	6.54
18			53.34	17.2
19			55.48	3.2
20			55	8.32

1			2085	271	18.0/108300
2			652	18	20.0/3800
3			243.3	45.1	20.0/16300
4			243	20.2	20.0/6800
5			–	12	16.64/5408
6			27.9	8.09	16.07/1809
7			274	23.1	20/4590
8			45	3.73	17/586
9			41	5.53	19.5/5358

Figure 6.1-1 Rivers and Lakes in Ezhou City

6.1.6.2 Groundwater

The proposed development area is located in the east of Ezhou City, Hubei Province. According to the comprehensive stratigraphic zoning in Regional Geology of Hubei Province, it belongs to the Yangtze Block and Paleozoic platform sedimentation. According to the formation lithology and groundwater occurrence medium, groundwater in the area may be classified as Quaternary loose pore phreatic water, Quaternary loose pore confined water and clastic rock fissure water.

(1) Pore phreatic water

Rainfall infiltration is the main recharge source of pore water, followed by surface water.

It is distributed on both banks of the Yangtze River and its tributaries. The groundwater occurs in the Quaternary alluvial sand loam, sand and sand gravel layers, and the thickness of aquifer group is less than 30m. It is distributed along the river and enjoys a good recharge environment. The groundwater has better occurrence conditions, with little difference, and consistent water yield. There is abundant water along the Yangtze River, and the water yield of single well is > 1000m^3/d; while the water on both banks of tributaries is scarce, and the water yield of civil well is< 10m^3/d.

The subwater is of good quality, mainly calcium-magnesium bicarbonate water, with a salinity of 0.2 ~ 0.9 g/L.

(2) Pore confined water

It is distributed on the first and second terraces. The thickness of aquifer group in the first terrace area is mostly 20 ~ 50m, while that in the second terrace area is mostly less than 10m. The roof lithology of the aquifer group is clay or loam, with a thickness of 5 ~ 20m in general and 35m at most, and it is thinner on the front edge of the terrace. The first terrace is thinner than the second terrace. The water abundance is divided into three levels:

Abundant water level: It is distributed in the middle and front part of the first terrace on both banks of the Yangtze River. The lithology of the aquifer group is mainly medium sand to gravel (cobble), with a thickness mostly ranging from 20 m to 50 m. The coefficient of transmissibility is mostly 200~500m^2/d. The elastic specific yield is 1.22×10^{-3} ~ 1.59×10^{-3}; for 92% of wells, the water yield per well is 1000 ~ 5000m^3/d, and it is greater than 5000m^3/d for 4% and slightly less than 1000m^3/d for another 4%.

Relatively abundant water level: It is distributed in the rear zone of the first terrace on both banks of the Yangtze River. The single-well water yield is 500 ~ 1000m^3/d and the buried depth of the aquifer roof is shallow;

Average water yield: It is distributed in the second terraces on both banks of Yangtze River. The single-well water yield is 100 ~ 500m^3/d and the buried depth of the aquifer roof is < 30 m;

(3) Clastic rock fissure water

The aquifer group consists of sandstone and glutenite, buried in aquifer group in clastic rock fissure under the hill and plain and covered by a clay aquiclude. Atmospheric precipitation cannot directly recharge groundwater, but through the local permeable layer at the lakebed. In fault development zones, groundwater recharge from adjacent aquifer groups with higher distribution positions can also be obtained through faults.

The groundwater in the area is mainly recharged by surface water, field irrigation return water and atmospheric precipitation infiltration as well as leaked water from adjacent aquifers and lateral runoff.

6.1.6.3 Water Quality

The Ezhou section of the Yangtze River is Yanji Section. In 2021 and 2022, the water quality reached Class II standard in Environmental Quality Standard for Surface Water (GB 3838-2002), meeting the water quality management objectives mentioned in the *Letter of Responsibility for Water Pollution Prevention and Control Objectives in Ezhou City*. The water quality of Huama Lake reaches Class III standard, and meets the water quality management objectives of Huama Lake in the *Notice on Hubei Provincial People's Government Office's Forwarding of the Classification of Environmental Functions of Surface Water Issued by Hubei Provincial Environmental Protection Bureau* (EZBF [2000] No. 10), with good water quality.

6.1.7 Main Resources

6.1.7.1 Water Resources

Ezhou City is located on the south bank of the middle reaches of the Yangtze River, with abundant water resources and an average annual rainfall of 1278.6 mm. The distribution of precipitation in the region is characterized by a slightly higher amount in the northwest than that in the southeast. The central area receives an intermediate amount of precipitation. Rainfall occurs mainly from April to August, with the maximum rainfall in May, June and July. The temporal, spatial and regional distribution of rainfall is uneven. The average annual runoff depth of the city is about 674.3mm (1956-2016), the surface runoff is about 2.10 billion m^3, and the total groundwater recharge is about 180 million m^3.

In 2018, the annual precipitation in Ezhou City was 1161.3 mm, equivalent to a water volume of 2.021 billion m^3, down 2.6% from the previous year and down 9.2% than the whole year. It is a relatively dry year. In 2018, the total water resources of the city was 750.07 million m^3, including 632.75 million m^3 of surface water resources and 221.65 million m^3 of groundwater resources, with 117.33 million m^3 of repeated calculation.

The water storage of the city's lake and river network was 884.33 million m^3 at the end of the year. The total water consumption of the whole city is 682.01 million m^3 (including the water consumption of Ezhou Thermal Power Plant), including 272.39 million m^3 for industry, 193.63 million m^3 for agricultural irrigation, 39.89 million m^3 for urban public use, 2.43 million m^3 for ecological environment, 61.63 million m^3 for residents' domestic use and 112.04 million m^3 for forestry, husbandry, fishery and livestock.

6.1.7.2 Land Resources

The total land area of Ezhou City is 159352.1 hectares, including 54463.5 hectares of cultivated land, accounting for 34.2% of the total area; 1237.0 hectares of garden plot, accounting for 0.78% of the total area; 17934.7 hectares of forest land, accounting for 11.25% of the total area; 7.2 hectares of grassland and 53372.7 hectares of water area, accounting for 33.49% of the total area; 13585.7 hectares of residential areas and industrial and mining land, accounting for 8.53% of the total area of the city; 2366.6 hectares of traffic land, accounting for 1.49% of the total area; 3339.6 hectares for water conservancy facilities, accounting for 2.09% of the total area of the city; 13045.1 hectares of unused land, accounting for 8.17% of the total area of the city.

6.1.7.3 Mineral Resources

Ezhou is located in the west of iron-copper and other metallogenic belts in the middle and lower reaches of the Yangtze River, with abundant mineral resources and scattered small iron ore occurrences. Metallic mineral resources mainly include iron, copper and molybdenum, while non-metallic mineral resources include coal, anhydrite, zeolite, bentonite, perlite and sulfur. The proven iron ore reserves are 250 million tons, ranking second in the province. With the mining of iron ore, there are about 210,000 tons of copper metal reserved. The proven reserves of anhydrite ore are 37.52 million tons, sulfur ore is 2.2628 million tons, total coal reserve is 27.84 million tons and bentonite reserve is 7.43 million tons.

The Project does not involve overburden mineral resources.

6.1.8 Protection of Scenic Spots and Cultural Relics

Ezhou is a famous historical and cultural city with rich human landscapes and numerous scenic spots. There are scenic spots such as Xishan Scenic Spot, Lotus Mountain Scenic Spot, Liangzi Island Eco-tourism Resort, Honglian Lake Resort, Baizhi Mountain Scenic Spot, Yanglan Lake Scenic Spot, Longpanji Scenic Spot, Geshan Scenic Spot, Qingfeng Mountain Scenic Spot and Taiping Mountain Scenic Spot. Among them, Lotus Mountain Scenic Spot is a national AAAA scenic spot, and Liangzi Island Eco-tourism Resort is a national agricultural tourism demonstration site, a provincial tourist resort and a national AAA scenic spot.

According to the Investigation Report on Cultural Relics in Comprehensive Bonded Zone at Ezhou Linkong Economic Zone of Hubei Province and site visit, no known cultural heritage or archaeological sites were found at the project site.

6.2 Social and Economic Baseline

The affected areas of Hubei Global Air Cargo Logistics Hub Project include Ezhou City, Linkong Economic Zone, Yangye Town, Yanji Town, Gutang Village, Bajiao Village and Chehu Village.

6.2.1 Population

According to the statistical report on national economic and social development of Ezhou City, Hubei Province, by the end of 2022, the province's permanent resident population was 58.44 million, including 37.79 million in urban areas and 20.65 million in rural areas. The urbanization rate was 64.67%. There were 355,000 newborns in the whole year, with a birth rate of 6.08‰, 472,000 deaths, with a death rate of 8.09‰. The natural population growth rate was -2.01‰.

Ezhou City had a registered population of 1,115,100 and a permanent resident population of 1,071,200, of which 587,400 were male (54.84%) and 527,700 were female (45.16%). The agricultural population was 356,000, accounting for 33.23%; the non-agricultural population was 713,700, accounting for 66.63%. The minority population was 3,700, accounting for

0.34%.

The Linkong Economic Zone had a registered population of 131,400 and a permanent resident population of 91,600. The agricultural population was 59,300, accounting for 64.74%; the non-agricultural population was 32,300, accounting for 35.26%.

Yangye Town had a permanent resident population of 28,800 and a registered population of 21,500, of which 18,400 were male (63.89%) and 13,500 were female (36.11%). The agricultural population was 28,100, accounting for 97.57%; the non-agricultural population was 600, accounting for 2.43%.

Yanji Town had a registered population of 37,900 and a permanent resident population of 40,900, of which 20,600 were male (54.34%) and 18,900 were female (45.66%). The agricultural population was 35,500, accounting for 93.67%; the non-agricultural population was 2,400, accounting for 6.33%.

Gutang Village had a registered population of 5,034, of which 2595 were male (51.55%), and 2439 were female (48.45%); 5034 agricultural population (100%).

Bajiao Village had a registered population of 4449, of which 2248 were male (50.53%), and 2201 were female (49.47%); 4449 agricultural population (100%).

Chehu Village had a registered population of 4004, of which 2092 were male (52.25%), and 1912 were female (47.75%); 4004 agricultural population (100%).

Duwan Village had a registered population of 3326, of which 1942 were male (58.39%), and 1384 were female (41.61%); 3326 agricultural population (100%).

Table 6.2-1 Population in the Project Area (Unit: 10,000 People) (2022)

Demographic Indicators	Hubei Province	Ezhou City	Linkong Economic Zone	Yangye Town	Yanji Town	Gutang Village	Bajiao Village	Chehu Village	Duwan Village
Resident population by the end of the year	5844	107.12	9.16	2.88	4.09	--	--	--	--
Registered population by the end of the year	6131.4	111.51	13.14	2.15	3.79	0.50	0.44	0.40	0.33
Male	2969	58.74	--	1.84	2.06	0.26	0.22	0.21	0.20
Female	2805	52.77	--	1.35	1.89	0.24	0.22	0.19	0.13
Agricultural population	2065	35.60	5.93	2.81	3.55	0.50	0.44	0.40	0.33
Urban population	3779	71.37	3.23	0.06	0.24	0	0	0	0
Minority population	277.109	0.37	0.0013	0	0.0006	0	0	4	0

Source: Demographic data is from the Statistical Communiqué of the People's Republic of China on the National Economic and Social Development.

6.2.2 Baseline of Low-income Groups in the Project Area

After targeted poverty alleviation and poverty relief, by the end of 2022, there were no poverty-stricken villages, poverty-stricken households, and poverty-stricken populations under the current standards in Echeng District, and absolute poverty has been historically eliminated. However, this does not mean that there is no poverty. Poverty still exists in many forms such as relative poverty and low-income population. The low-income population mentioned here refers to the monitored population out of poverty, and the data is provided by township governments.

By the end of 2022, there were 28,700 people in Yangye Town, including 1227 low-income population, accounting for 4.18%. There were 38,100 people in Yanji Town, including 761 low-income population, accounting for 1.84%. There were 66,800 people in the whole project area, including 1971 low-income population, accounting for 2.84%. See the table below for specific data and population composition.

Table 6.2-2 Overall Situation of Low-income Population in the Project Area

Project Area	Linkong Economic Zone		Total
Street	Yangye Town	Yanji Town	
Total population (10,000)	2.87	3.81	6.68
Female (10,000)	1.35	1.89	3.24
Percentage of women (%)	47.04%	49.60%	48.50%
Low-income population (10,000)	0.12	0.07	0.19
Percentage of low-income population (%)	4.18%	1.84%	2.84%

Source: Demographic data is from the statistical list of Social Affairs Bureau of Management Committee of Linkong Economic Zone

6.2.3 Economic Baseline in the Project Area

Table 6.2-3 Economic Situation in the Project Area (2022)

Indicator	Hubei Province	Ezhou City	Linkong Economic Zone
Economic aggregate	The province's GDP was RMB 5,373.492 billion, an increase of 4.3 percent over the previous year at comparable price. Hubei Province ranked seventh in terms of national GDP.	The GDP of the city was RMB 126.455 billion, an increase of 5.1% over the previous year at constant price. The per capita GDP was RMB 118133, an increase of 5.7% over the previous year at comparable price.	In 2022, the region's GDP was RMB 10.289 billion, with a per capita GDP of RMB 112325.
Per capita income	The annual per capita disposable income of each resident in the province was RMB 32914, an increase of	The per capita disposable income of urban permanent residents in the city was RMB 40654, an increase of	The disposable income of urban residents was RMB 42541, and that of rural residents was RMB

Indicator	Hubei Province	Ezhou City	Linkong Economic Zone
	6.8% over the previous year. By permanent residence, the per capita disposable income of urban residents was RMB 42626, up 5.8%; and that of rural residents was RMB 19709, up 7.9%. The per capita consumption expenditure of residents in the province was RMB 24828, up 4.1%. By permanent residence, the per capita consumption expenditure of urban residents was RMB 29121, up 2.2%; and that of rural residents was RMB 18991, up 7.6%.	6.1% over the previous year; that of rural permanent residents was RMB 23111, an increase of 7.6%.	24610.
Industrial Development	The ratio of three industries was 9.3:39.5:51.2. In the tertiary industry, the added value of transportation, warehousing and postal services, wholesale and retail, accommodation and catering, finance, real estate, and other service industries increased by 0.1%, 1.7%, 0.9%, 5.6%, -2.7% and 4.6% respectively. The per capita GDP was RMB 92059, an increase of 3.4% over the previous year at comparable price.	The ratio of three industry structures is adjusted to 9.7:45.5:44.8 in 2022. In the tertiary industry, the added value of transportation, warehousing and postal services, wholesale and retail, accommodation and catering, finance, real estate, and other service industries increased by 6.3%, 0.5%, -0.2%, 6.4%, -1.7%, and 2.2% respectively.	From January to December 2022, the GDP of the Linkong Economic Zone grew by 7.1%, that of industries enterprises above designated size 9.6%, that of total retail sales of consumer goods 25.5%, that of fixed-asset investment 47.3%, and that of real estate development 1.2%.
Employment	In the whole year, the number of newly registered market entities was 1,444,300, up 27.4% over the previous year. The number of market entities in the province reached 7.3641 million, up 13.9%. In the whole year, 916,500 new jobs were created in urban areas, and the annual target was over-fulfilled. The registered urban unemployment rate at the end of the year was 5.5%.	Market entities continue to develop. There were 146090 registered market entities in the city, an increase of 13.7% over the previous year. Of which, 26606 new market entities were registered, up 67.9%. The employment situation remained stable. The registered urban unemployment rate was 2.75%, lower than the target control value.	2450 trainings were conducted for 129,400 people (including 91,700 online trainings). Among them, 22594 people were employed in Yanji Town and 16482 people were employed in Yangye Town. The number of employed residents in the project area reached 78048.
Poverty alleviation	All 5.81 million poor people, 37 poverty-stricken counties and 4821 poverty-stricken villages in the province have been lifted out of poverty. Hubei people have said	By the end of August, a total of 2840 people in 921 households had been monitored and 611 people in 187 households were newly identified. The risk has been	As of December 2023, 2021 households (4896 people) have been lifted out of poverty in the Linkong Economic Zone. Among them,

Indicator	Hubei Province	Ezhou City	Linkong Economic Zone
	goodbye to absolute poverty.	eliminated for 1592 people in 510 households.	there were 328 households (761 people) in Yanji Town and 455 households (1210 people) in Yangye Town.

Data Source: Statistical Communiqué of the People's Republic of China on the National Economic and Social Development.

6.2.4 Baseline of Huahu Airport

Ezhou Huahu International Airport is located at the junction of Yanji Town, Shawo Township, and Yangye Town in Echeng District, Ezhou City, Hubei Province. It is approximately 16 km northwest of Ezhou downtown and about 15 km south of Huangshi downtown. Classified as a 4E international airport, it is the first professional cargo hub airport in Asia. The airport covers an area of approximately 11.89 square kilometers. The main construction commenced in June 2020, and it began official operations in July 2022. From January 1 to December 5, 2023, there were 13850 transport sorties in Huahu Airport, with a passenger throughput of 398,300 and a cargo throughput of 192,500 tons. As of February 29, 2024, Huahu Airport has opened 49 domestic cargo routes and 14 international cargo routes, establishing an air network layout that extends from Ezhou to Europe, North America, East Asia, Southeast Asia, and West Asia. This has initially formed an express cargo logistics circle capable of "next-day delivery nationwide, overnight delivery worldwide".

According to the *Overall Plan for the Ezhou Linkong Economic Zone* approved by the provincial government, Huahu Airport and its surrounding supporting industries are expected to provide over 200,000 jobs, generate RMB 12 billion in tax revenue, and achieve an economic output exceeding RMB 150 billion. Currently, 33 freight forwarding companies have already started operations at Huahu Airport, providing a significant number of job opportunities for local residents. In addition to cargo operations, Huahu Airport also handles passenger services. It has opened a total of 14 passenger routes and 20 passenger destinations, including routes from Ezhou to Beijing, Shanghai, Xiamen, and Chongqing. The airport serves over 12 million people in the eastern region of Wuhan, as well as the cities of Ezhou, Huangshi, and Huanggang.

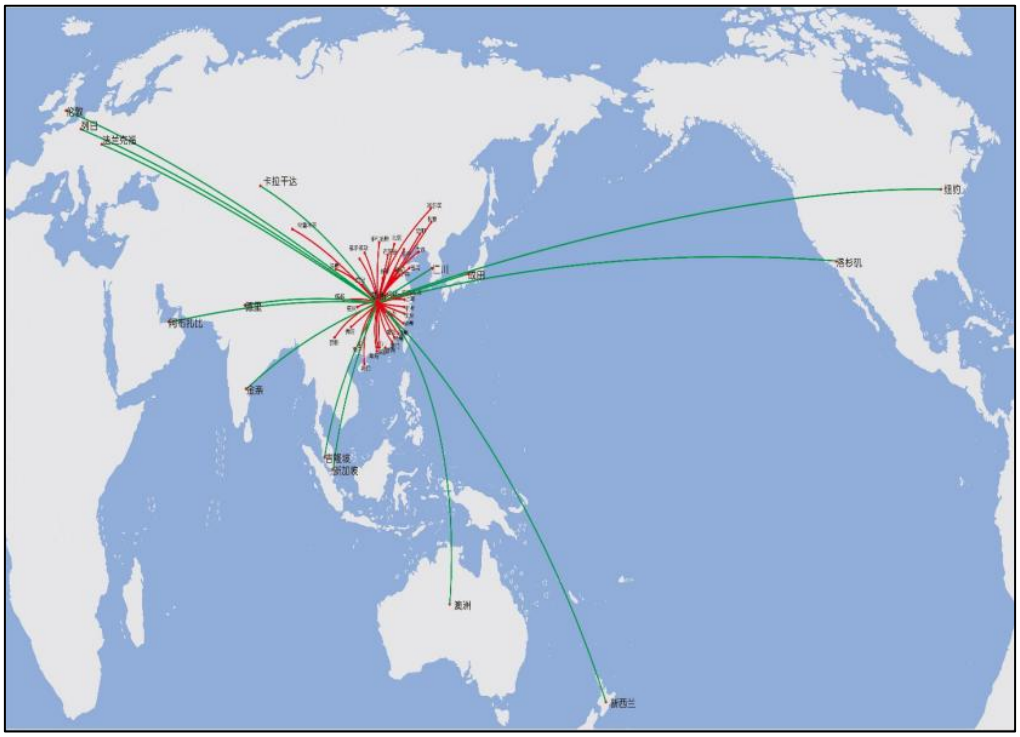


Figure 6.2-1 Cargo Destinations in the "14th Five-Year Plan"

6.3 Ecological Environment

6.3.1 Status Quo of Regional Ecological Environment

There are more than 3000 kinds of plants in Ezhou City, mainly grain, oil plants, fruits and vegetables. There are 83 families, 192 genera, 358 species of woody plants, mainly bamboo and wood. There are more than 60 kinds of aromatic plants, mainly herbs and woody plants. There are 125 families and 542 species of medicinal plants.

There are 21 families and 106 species of fish in Ezhou City, including 63 species of Cyprinidae, accounting for 60% of the total number of fish. Other rare fish also grows locally. The whitebait produced in Liangzi Lake is sold well at home and abroad. There are more than 10 kinds of poultry and 20 kinds of livestock. There are more than 20 kinds of wild animals, more than 40 kinds of birds, and dozens of reptiles, shrimp and shellfish.

6.3.2 Status Quo of Ecological Environment Around the Project

(1) Status Quo of Terrestrial Environment

According to the data in the Environmental Impact Report of Hubei Ezhou Civil Airport Project, the project area is a middle subtropical evergreen broad-leaved forest region—eastern moist evergreen broad-leaved forest subregion—northern subtropical evergreen and deciduous broad-leaved mixed forest zone, with rich plant species. There are 65 families, 167 genera and 284 species of wild vascular plants. Among them, there are 8 families, 12 genera and 17 species of ferns; 57 families, 175 genera and 267 species of seed

plants (3 families, 4 genera and 5 species of gymnosperms; 54 families, 171 genera and 262 species of angiosperms). The total number of wild vascular plant families, genera and species accounts for 26.53%, 12.75% and 4.59% of the total families, genera and species of Hubei Province respectively, accounting for 15.48%, 5.43% and 0.91% of the total families, genera and species of vascular plants in China. No national key protected wild plants and ancient and famous trees are found in the area.

The edible wild plants in the area include artemisia selengensis, lotus root, cane shoots, water caltrop, Gorgon fruit and vetch. In addition, there are also edible vegetables such as cabbage, wild chives, lambsquarters goosefoot, Portulaca oleracea L., beetroot, swallow flower and shrimps.

There are few mammals in the project area, including 3 orders, 3 families and 6 species, mainly grass hare, mus musculus, rattus flavipectus, rattus norvegicus, yellow weasel, yellow-bellied weasel, etc. There is no distribution of wild animals or rare species under national and provincial key protection.

There are 1 order, 4 families and 7 species of amphibians recorded in the project area, including 6 species of key protected wild animals in Hubei Province, such as bufo bufo gargarigans, green pond frog, rana guentheri, rana nigromaculata and microhyla ornata, which are mainly found in Huama Lake, canal and wetland around the Project.

The land for Hubei Global Air Cargo Logistics Hub Project is industrial construction land according to the planning. All plants within the project site are common plants, and no wild terrestrial plants and ancient and famous trees under state protection were found; national and provincial key ecological public forests are not involved. The construction area is land, so there in no effect on wild animals or rare species and amphibians under national and provincial key protection. At present, the original vegetation coverage has been removed. The existing vegetation is secondary vegetation, weeds and artificial vegetation. Land occupation and site excavation during the construction period will have a negative impact on ecological environment. However, greening and maintenance will be carried out after completion, which will greatly increase the area of green space and will have positive significance for the restoration of regional vegetation.

(2) Status Quo of Aquatic Environment

1) Status quo of aquatic plants

① Aquatic vascular plants

There are 86 species and 2 varieties of aquatic vascular plants in the assessment area, belonging to 35 families and 70 genera respectively. In terms of life form, there are 59 species of hygrophytes and emergent aquatic plants, accounting for 67.05% of all species; 7 species of floating plants, accounting for 7.95%; 10 species of floating-leaved plants, accounting for 11.36%; 12 species of submerged plants, accounting for 13.64%.

Due to the difference of life forms, all kinds of plants are distributed in different areas in the lake. Submerged plants are widely distributed from the shore to the center of the lake. Hygrophyte is only distributed in the coastal wetland. Emergent aquatic plants are distributed in the coastal zone, with a water depth of about 1.0 m or up to 2.6 m. Floating-leaved plants

are generally distributed in the depth of 0.9~1.7m and connected with emergent aquatic plant community. Floating plants migrate with lakes, wind and waves, some of which are intergrowth among emergent aquatic plants and floating-leaved plants.

The aquatic vegetation in Huama Lake is in irregular annular zonal distribution with the change of water depth. From the lakeshore to the center, there is hygrophyte zone, emergent vegetation zone, floating-leaved vegetation zone and submerged vegetation zone according to the life form. The aquatic vegetation in the lake can be divided into 15 associations, among which water chestnut association, potamogeton association, and ceratophyllum demersum+myriophyllum verticillum+water caltrop+tape grass association are dominant. It can also be divided into four vegetation zones: hygrophyte, emergent, floating-leaved and submerged. Floating plants do not become an independent vegetation zone in Huama Lake, but intergrow in the emergent vegetation zone and floating-leaved vegetation zone. The main species are Salvinia, Azoila imbricata, Duckweed, Lagerstroemia indica L., Rootless Weed, etc. They often drift with the movement of wind, waves and lake currents.

Among the upper, middle and lower lake areas of Huama Lake, the middle lake has the widest coverage area of aquatic vegetation, the most plant species and the largest biomass, followed by the lower lake. The upper lake has the smallest coverage area of aquatic vegetation with relatively poor species (Study on Aquatic Higher Plants in Huama Lake, Feng Can, et al). See the attached table for the list of aquatic vascular plants.

②Phytoplankton

In November 2018, professional and technical personnel conducted aquatic ecological investigation in the waters of the assessment area. A total of 8 phyla and 56 species (genera) of planktonic algae were found at 5 sampling points, as shown in Table 4.5.1-1. Among them, chlorophyta has the most species (23 genera), accounting for 41.07% of all algae; 19 species (genera) of Bacillariophyta, accounting for 33.93%; 7 species (genera) of cyanobacteria, accounting for 12.50%; Euglenophyta and Cryptophyta accounted for 3.57% respectively. There are 1 species (genera) of Pyrrophyta, Xanthophyta and Chrysophyta respectively, accounting for 1.79%. The common algal groups in the assessment area include Cyclotella sp., Navicula sp., Synedra sp., Spirulina sp., Actinastrum hantzachii, Closterium sp. and Cryptomonas sp.

2) Aquatic animals

Fish, zooplankton and benthonic animals are investigated by analogy and data consultation. The fish investigation is conducted by visiting the aquatic product market, inquiring local fishermen, and consulting relevant data such as Comprehensive Investigation Report of Huama Lake National Aquatic Germplasm Resources Conservation Area, Master Plan Report of Huama Lake National Aquatic Germplasm Resources Conservation Area, Adjustment Demonstration Report of Huama Lake National Aquatic Germplasm Resources Conservation Area, etc.

① Fish

Fish species:

There are 42 species of fish in Huama Lake, belonging to 14 families, including 27 species of

Cyprinidae, accounting for 64.3%. There are mainly river and lake migratory fishes such as black carp, grass carp, silver carp and bighead carp, as well as white bream, black bream and other lake settled fishes such as common carp and crucian carp. The original river-sea migratory fishes include eels, takifugu obscurus and shad which have not been seen for many years.

According to the difference in environmental conditions in water areas where fishes inhabit at different stages of their life, there are roughly three ecological types as below:

a. Lake settled fishes: They reproduce, grow and develop in Huama Lake, including common carp, crucian carp, hemibarbus annuus, culter alburnus, Pelteobagrus fulvidraco, catfish, snakehead, etc. They are dominant species in Huama Lake;

b. River-lake migratory fishes: They grow and develop in lakes, but spawn and breed in suitable flowing water and migrate between rivers and lakes. Examples are black carp, grass carp, silver carp, bighead carp and red-eye trout. The first four species are the main objects of freshwater aquaculture in China and play an important role in Huama Lake fishery;

c. River-sea migratory fishes: coilia ectenes, shad and eel are seawater-fresh water migratory fishes. The first two have the habit of anadromous migration. They grow and develop in seawater and must reproduce and spawn in freshwater after sexual maturity. The latter has the habit of catadromous migration. After sexual maturity, it will breed and spawn in the seawater. The young fish travel upstream to the lake to grow and develop, but rarely seen now.

Dynamic changes and characteristics of fish resources:

In the winter of 1955, Nihu, Huanghu, Taiping and Yanji Sluices for Huama Lake were demolished, and the lake water merges into the Yangtze River through Changda Sluice. In the winter of that year, a large wharf port was excavated and Shanggang Sluice was built in Huangshi City. Later, Huama Lake was diverted to discharge out of the Yangtze River at Shanggang Sluice. Therefore, before the 1950s, fish fries in the Yangtze River were poured into Huama Lake with the current, and the fish resources in the lake were rich and the species composition was relatively complex. Although rivers and lakes are blocked after the sluice is built, natural fish fries in Yangtze River were often introduced into Huama Lake before 1980s, so there are still many fish resources in the lake. Since then, due to the lack of natural fish resources in the Yangtze River, the diversity of fish resources in Huama Lake has been seriously affected.

According to the fishery regionalization in Ezhou City in 1983, there were 43 species of fishes belonging to 15 families in Huama Lake, including 28 species of Cyprinidae, accounting for 65.1%. The fishes are mainly composed of four major Chinese carps (black carp, grass carp, silver carp and bighead carp) artificially put into the lake, as well as white bream, black bream, siniperca chuatsi, etc., followed by settled fishes in the lake such as common carp, crucian carp and hemibarbus annuus etc. Due to their strong adaptability to environmental conditions, they are widely distributed and have abundant populations. They constitute the main fishery objects in Huama Lake. At present, it is difficult to find Ochetobius elongatus and Luciobrama macrocephalus in Huama Lake.

In history, the dynamic change of fish resources in Huama Lake was greatly affected by water level. First, the impact of low-flow period in winter. The low water level in winter is extremely unfavorable to the safe overwintering of fishes, and some adult and juvenile fishes that have just reached sexual maturity are caught, which affects the natural proliferation and growth of fishes in Huama Lake. Second, the impact of water level in flood season on fish and fish yield. Due to the large interannual variation of precipitation in Huama Lake area, the water level difference between flood seasons in high-flow years and low-flow years is also large. The highest water level measured in a year is 21.00m. The change of water level in the interannual flood season has a great impact on fish and fish yield. The fish yield is closely related to the highest water level. Compared with 1966 and 1972 (low-flow years), the fish yield in 1973 and 1998 (high-flow years) differs by 2 ~ 5 times. The reasons are as follows: ① In the year with abundant water, fishes in cultured and non-cultured water bodies around Huama Lake and other aquatic organisms enter the lake along with the current, resulting in increase in species and quantity of fishes in Huama Lake; ② In the year with abundant water, the water storage capacity of Huama Lake increases with large inflow and high water level. The increase in water storage gives fish more room to grow and move; ③ In years with abundant water, the water inflow from various places brings more nutrient salts and organic substances, which improves the productivity of aquatic organisms. In order to maintain a reasonable water level in Huama Lake during the dry season, ensure the normal habitat and reproduction of aquatic organisms in the lake, and take into account the regulation, storage and irrigation functions of Huama Lake. In 1997, Ezhou City determined that the water level of Huama Lake was basically stable at 18.0m.

According to the latest field investigation results, affected by factors such as changes in the water environment of Upper Lake in recent years, the total yield of the protected fish hemibarbus annuus in Upper Lake is about 4,000 kg, far lower than that in Middle Lake (6,600 kg) and Lower Lake (6,000 kg). In addition, the construction of industrial and mining enterprises and logistics industrial parks around Upper Lake will continue to affect the fish resources in Upper Lake. Hemibarbus spawns in slow-flowing floodplains of rivers and lakes, especially in places with certain water flow. The fertilized egg is sticky, and the egg membrane is covered with sticky long curls that adhere to plant fibrous roots or aquatic plants for development. The reproductive season shows obvious secondary sexual characteristics, the male head is covered with pearl stars, and the body appears bright color. The middle and lower lakes are of high water quality, and rich in aquatic grass resources, and more suitable for fish breeding such as hemibalbus.

② Zoobenthos

Species composition of benthonic animals:

The Huama Lake is about 2.0m deep, with lush aquatic plants, and suitable for the growth and development of various benthic animals. A total of 26 species of benthonic animals were identified by sampling in March and May 2016, including 17 species of mollusks (65.4%), 6 species of arthropoda (23%) and 3 species of annelida (11.5%). Dominant species are Corbicula fluminea, Chinese round field snails, freshwater shellfish, macrobrachium nipponensis, chironomidae larvae, limnodrilus and Bellamya aeruginosa. The species of benthonic animals in the survey area are unevenly distributed, and pyramidal snails, Bellamya aeruginosa and Chinese round field snails are commonly seen where there is lush aquatic plants. Chironomidae larvae and macrobrachium nipponensis are mostly found at the

outlet of Upper Lake. Annelids such as aquatic worms are distributed throughout the lake.

Composition of standing crop of benthonic animals:

The average density of benthonic animals in the survey area is 1036ind./m², and the proportions of annulata, mollusc and arthropod are 2.03%, 29.25% and 68.72% respectively; the average biomass is 179.18g/ m², and the proportions of annulata, mollusc and arthropod are 0.04%, 96.72% and 3.24% respectively. The density and biomass of benthonic animals in upper lake waters are 1207ind./m² and 76.92g/m² respectively. The density and biomass of benthonic animals in the middle lake are 1331ind./m² and 136.89g/m² respectively. The density and biomass of benthonic animals in the lower lake are 933ind./m² and 466.17g/m² respectively.

Dynamic change of resources:

The species of benthonic animals decreased slightly from 31 in 1983 to 26 in 2016. The density and biomass of benthonic animals increased by 15 times from 67.1 ind./m^2 to 1036ind./m^2 on average, and by about 3 times from 76.7g/ m^2 to 179.18g/ m^2 respectively. The dominant species used to be mollusks, and then mollusks and arthropods.

③ Zooplankton

Species composition of zooplankton:

The waters of Huama Lake were monitored in 2016, and a total of 26 species of zooplankton were detected. Among them, there are 4 species of protozoa, accounting for 15.4%; 15 species of rotifers, accounting for 57.7%; 5 species of cladocerans, accounting for 19.2%; 2 species of copepods, accounting for 7.7%. In terms of species composition of zooplankton, rotifers are dominant, followed by cladocerans and copepods. The common species are Brachionus calyciflorus, Rotifera guerrei, nauplius, long polyarthra sp, small polyarthra rotifera and widespread cyclops. The monitoring results show that the rotifer species in the upper lake are rich, but other species are relatively simple. The species in the middle lake and the lower lake are uniform. The species of zooplankton in the lower lake is richer than that in the upper lake.

Composition of standing crop of zooplankton:

The average density of zooplankton in the investigated waters is 1287.55 ind./L, and that of protozoa is 235.23 ind./L, accounting for 18.27%; the density of rotifers is 1044.33 ind./L, 81.11 %; the density of Cladocera is 1.363 ind./L, 1.059%; the density of copepods is 6.617 ind./L, 5.14%. The biomass ranges from 0.0434 to 1.6161 mg/L (average 0.2565 mg/L). The biomass of Protozoa is 0.0051mg/L, accounting for 2%; that of Rotifera is 0.1982mg/L, 77.28%; that of Cladocera is 0.0160mg/L, 6.24%; and that of copepods is 0.0371 mg/L, 14.48%. The density of zooplankton in the upper lake is significantly lower than that in other areas, with an average density of 685.32 ind./L and a protozoan density of 19.2ind./L, accounting for 18.27%. The density of rotifers is 660 ind./L. The density of Cladocera is 2.74 ind./L. The density of copepods is 3.38 ind./L, and the zooplankton is dominated by rotifers, accounting for 96.31%.

Dynamic change of resources:

Compared with 1983, the total number of zooplankton decreased and the biomass increased in 2004. Rotifers are the dominant species of zooplankton, with a significant increase in biomass. The number and biomass of rotifers accounted for 81.16% and 57.39% of the total in 1983, compared with 81.11% and 77.28% in 2016.

(3) Location Relationship with Germplasm Resources Conservation Area

According to Announcement No. 1491 of the Ministry of Agriculture-List of National Aquatic Germplasm Resources Conservation Areas (Fourth Batch), Huama Lake is included in the "List of National Aquatic Germplasm Resources Conservation Areas". According to the Notice on Adjusting the Area Scope and Functional Zoning of Culter in Fushui Lake and Huama Lake National Aquatic Germplasm Resources Conservation Areas (NBCY [2016] No. 9) issued by the Ministry of Agriculture, it is agreed to adjust its functional zoning. The middle lake is still the core area, and the upper lake is cancelled as an experimental area. The four lake branches of the lower lake and the lower lake and the harbor channel between the middle lake and the lower lake are established as an experimental area. Among them, the core area (middle lake) covers an area of 540 hectares and is surrounded by the following 11 inflection points (115°01′58"E, 30°17′08"N; 115°02′08"E, 30°17′40"N; 115°01′26"E, 30°17′20"N; 115°00′53"E, 30°17′17"N; 115°00′34"E, 30°17′40"N;115°01′15"E, 30°18′03"N;115°01′59"E, 30°17′56"N;115°02′12"E, 30°18′35"N;115°02′44"E, 30°18′47"N;115°03′02"E, 30°17′57"N;115°02′40"E, 30°17′01′N. The experimental area (lower lake) covers an area of 562.3 hectares and is surrounded by the following 13 inflection points (114°59′28"E, 30°15′30"N; 114°58′03"E, 30°15′50"N; 114°58′01"E, 30°16′13"N; 114°58′35"E, 30°16′33"N; 114°58′53"E, 30°16′15"N;114°58′55"E,30°16′41"N;114°59′03"E,30°16′11"N;114°59′18"E,30°16′40"N;1 14°59′59"E,30°16′07"N;115°00′50"E,30°16′27"N;115°02′31"E, 30°16′49"N;115°00′34"E,30°15′49"N;115°00′15"E,30°15′24"N). The main protected objects are Hemibarbus maculatus, and other protected objects include aquatic animals such as megalobrama amblycephala, grass carp, black carp, culter alburnus,siniperca chuatsi, ricefield eel, freshwater shrimp, lamprotula leai, hyriopsis cumingii, etc. At the same time, there are national key protected aquatic animals and plants such as lotus, wild water chestnut, rana nigromaculata and green pond frog.

The Project is about 6.4km away from the core area of Huama Lake National Aquatic Germplasm Resources Conservation Area (Middle Lake).

6.3.3 Status Quo of Ecological Environment around Wuchu Avenue (Associated Facility)

Because Wuchu Avenue is close to the Project, the surrounding ecological environment status is the same as that of the Project, it will not be described again.

6.4Current Environment Quality and Assessment

6.4.1 Current Ambient Air Quality and Assessment

6.4.1.1 Routine Monitoring of Ambient Air Quality

The Project is located in Ezhou City. As functionally zoned, the Project site is classified as a Class II zone in terms of ambient air quality, and the standard of Class II in Ambient Air Quality Standards (GB3095-2012) and its amendment shall be implemented.

In order to understand the ambient air quality status of the Project area, for this environmental impact assessment, the annual average concentration data of main pollutants in Ezhou City in the 2022 Hubei Ecological Environment Status Bulletin (http://sthjt.hubei.gov.cn/fbjd/xxgkml/gysyjs/sthj/sthjgb/202306/t20230629_4727171.shtml) issued by the Department of Ecology and Environment of Hubei Province are referred to. The specific monitoring results are shown in the following table.

Table 6.4-1 Ambient Air Quality of Ezhou in 2022

Contaminants	Assessment Indicators	Current concentration (mg/m^3)	Standard value (mg/m^3)	Ratio-to-SC	Maximum excess multiple	Status
SO_2	Annual average mass concentration	0.01	0.06	16.67%	-	Up to standard
NO_2	Annual average mass concentration	0.026	0.04	65.00%	-	Up to standard
PM_{10}	Annual average mass concentration	0.061	0.07	87.14%	-	Up to standard
$PM^2_{.5}$	Annual average mass concentration	0.034	0.035	97.14%	-	Up to standard
CO	95th percentile concentration of daily average	1.1	4	27.50%	-	Up to standard
O_3	Daily maximum 8-hour 90th percentile concentration	0.159	0.16	99.38%	-	Up to standard

It can be seen from the above table that SO_2, NO_2, PM_{10}, $PM^2_{.5}$, CO and O_3 can meet the requirements of secondary concentration limit in the Ambient Air Quality Standards (GB3095-2012).

6.4.1.2 Supplementary Monitoring of Ambient Air Quality

In order to understand the environmental quality status of total volatile organic compounds (TVOC) and methyl bromide, which are characteristic factors of regional air pollution, the supplementary monitoring data in the Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (ESMP) Report for advanced project activities of Hubei Global Air Cargo Logistics Hub Project was used to assess methyl bromide. At the same time, from December 4, 2023 to December 6, 2023, TVOC was monitored again in the downwind direction of the prevailing wind in the season at the project site, and there was a total of 1 monitoring point set up. The monitoring points are shown below:

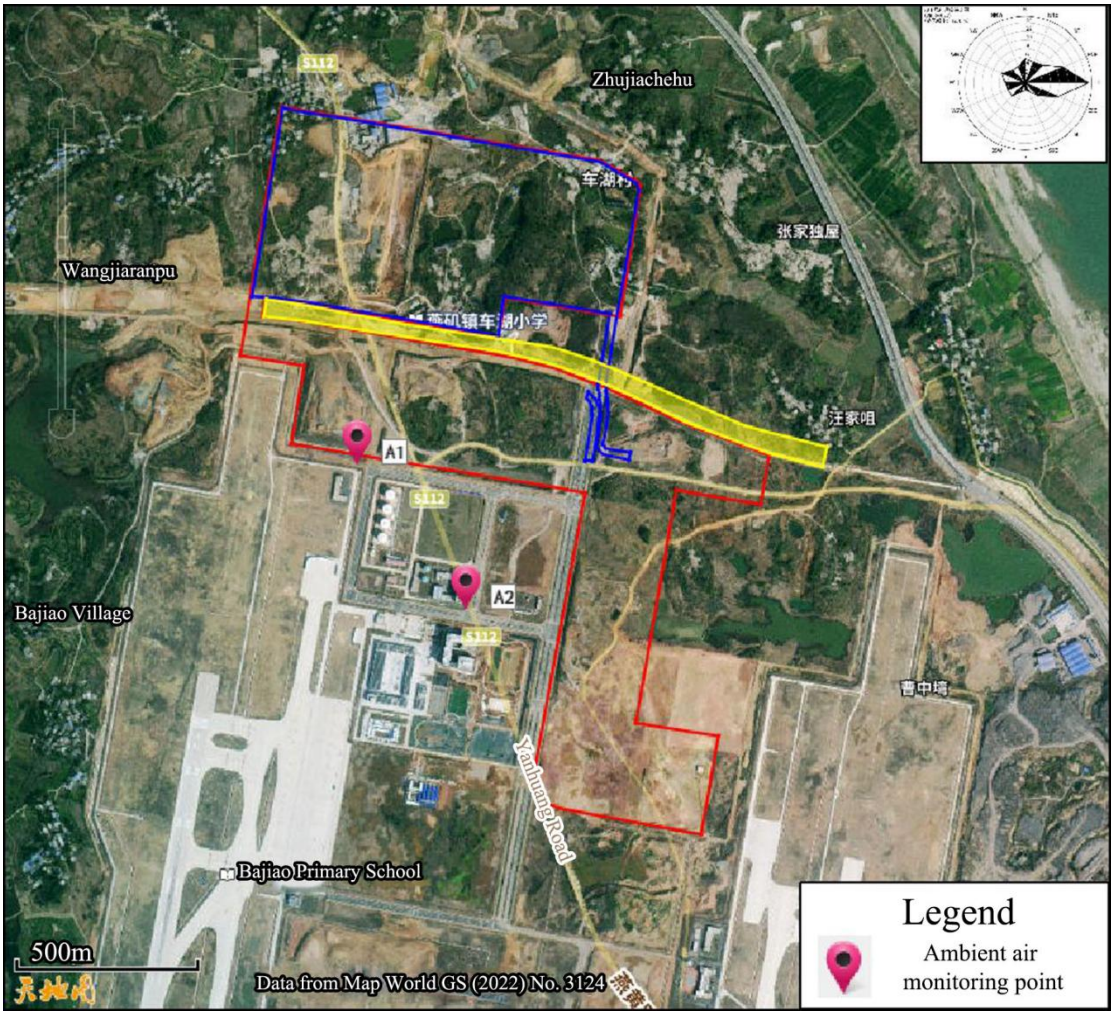


Figure 6.4-1 Supplementary Ambient Air Monitoring Points

The monitoring results are shown in the table below.

Table 6.4-2 List of Monitoring Results

Contaminants	Assessment Indicators	Monitoring date	Current concentration (mg/m^3)	Standard value (mg/m^3)	Ratio-to-SC	Maximum excess multiple	Up to standard Status
TVOC	8h average	2023.12.4	0.005	0.6	0.83%	0	Up to standard
		2023.12.5	0.0012		0.20%	0	Up to standard
		2023.12.6	0.0093		1.55%	0	Up to standard
Methyl bromide	Daily average	/	ND(0.2)	2	0	0	Up to standard

Note: For the standard concentration of TVOC, please refer to the standard limit in Appendix D of Technical Guidelines for Environmental Impact Assessment-Atmospheric Environment (HJ2.2-2018).

It can be seen from the above table that the TVOC concentration can meet the corresponding concentration limit in Appendix D of Technical Guidelines for Environmental Impact Assessment-Atmospheric Environment (HJ2.2-2018). The methyl bromide concentration can meet the corresponding concentration limit in the Occupational Exposure Limits for Hazardous Agents in the Workplace - Part 1: Chemical Hazardous Agents (GBZ2.1-2019).

6.4.2 Current Surface Water Environment Quality and Assessment

6.4.2.1 Routine Monitoring of Surface Water Environment Quality

From the perspective of regional drainage zoning, the wastewater from the Project is discharged into the municipal sewage pipe network, enters the reclaimed water plant in the aerotropolis area, and finally discharged into the Yangtze River (Ezhou section). The state-controlled section is Yanji Section of the main stream of the Yangtze River. According to the Letter of Responsibility for Water Pollution Prevention and Control Objectives in Ezhou City signed by Hubei Provincial People's Government and Ezhou Municipal Government, the standard of Class II in Environmental Quality Standard for Surface Water (GB3838-2002) shall be implemented for Yanji Section in the main stream of the Yangtze River. Rainwater is discharged into Zouma Lake nearby. According to the Classification of Environmental Functions of Surface Water in Hubei Province (EZBF [2000] No. 10), Zouma Lake belongs to the Huama Lake water system and is classified as Class III water, and shall be subject to Class III standard in Environmental Quality Standard for Surface Water (GB3838-2002).

In order to understand the current situation of water environment quality in Yangtze River (Ezhou section) and Huama Lake, the Yangtze River (Ezhou section) and Huama Lake are evaluated using the data in 2022 Hubei Ecological Environment Status Bulletin issued by Department of Ecology and Environment of Hubei Province and relevant data from March to December 2023 of Investigation and Monitoring on Water Ecological Environment of Huama Lake in Ezhou City (the work was started in March 2023). See Tables 6.4-3 and 6.4-4 for details.

Table 6.4-3 Water Quality of the Yangtze River (Ezhou Section) in 2022

River	Specified category	Water quality status	Status	Changes in water quality compared with 2021	Excess items and multiples
Yanji Section in Main Stream of Yangtze River	II	II	Up to standard	Stable	N/A

It can be seen from the above table that the water quality of Yanji Section of Yangtze River (Ezhou section) in 2022 can meet Class II standard in Environmental Quality Standard for Surface Water (GB3838-2002).

Table 6.4-4 List of Monitoring Results of Water Quality Indexes in Huama Lake

Test indexes	Test results			Class III standard limit	Status	Remarks
	Huangshan Lake Center	Huangtian Lake Center	Luosijing Lake Center			
pH (dimensionless)	7.3~8.3	7.1~7.9	7.0~8.5	6-9	Up to standard	/
Dissolved oxygen (mg/L)	6.78~8.01	6.87~7.89	6.58~8.52	≥5	Up to standard	/
Biochemical oxygen demand for five days (mg/L)	2.7~5.6	3.3~4.3	2.5~4.6	≤4	Some data are up to standard	The data of Huangshan Lake in March, August, September, October and November are not up to standard; the data of Huangtian Lake in October is not up to standard; the data of Luosijing Lake in

Test indexes	Test results			Class III standard limit	Status	Remarks
	Huangshan Lake Center	Huangtian Lake Center	Luosijing Lake Center			
						March is not up to standard.
Permanganate index (mg/L)	5.2~7.7	3.8~7.7	3.8~6.4	≤6	Some data are up to standard	The data of Huangshan Lake in May, June, August, September, October and November are not up to standard; the data of Huangtian Lake in June and August are not up to standard; the data of Luosijing Lake in April is not up to standard.
Chemical oxygen demand (mg/L)	18~28	14~24	13~25	≤20	Some data are up to standard	The data of Huangshan Lake in March, May, August, September, October and November are not up to standard; the data of Huangtian Lake in June, July, August and October are not up to standard; the data of Luosijing Lake in March and April are not up to standard.
Ammonia nitrogen (mg/L)	0.106~0.832	0.071~0.884	0.074~0.548	≤1.0	Up to standard	/
Total phosphorus (mg/L)	0.07~0.45	0.07~0.21	0.08~0.21	≤0.05	Not up to standard	/
Total Nitrogen (mg/L)	0.73~1.37	0.49~1.85	0.60~1.24	≤1.0	Some data are up to standard	The data of Huangshan Lake in April, May, June, August, September, October and November are not up to standard; the data of Huangtian Lake in March, April, May and September are not up to standard; the data of Luosijing Lake in March, May, July and September are not up to standard.

It can be seen from the above table that the water quality of Huama Lake cannot meet the requirements of "Class III water body" in Environmental Quality Standard for Surface Water (GB3838-2002). The main over-standard factors are five-day biochemical oxygen demand, permanganate index, chemical oxygen demand, total nitrogen and total phosphorus.

The water quality of Huama Lake exceeded the standard mainly because of agricultural non-point sources and domestic sewage sources in residential areas. With the operation of sewage treatment plant and the continuous improvement of surrounding sewage collection pipe network, the pollution load of Huama Lake will be reduced to a certain extent, and the water quality environment needs to be improved. With the implementation of the Comprehensive Treatment of Hubei International Logistics Core Hub Huama Lake Water System Project, the works such as recovering polder (farmland, fishpond) to lake, river regulation and water system connection have been carried out for the Huama Lake water

system, which has played a positive role in the water environment of Huama Lake, and finally the water quality has been significantly improved.

6.4.2.2 Supplementary Monitoring of Surface Water Environment Quality

In order to understand the current situation of surface water environmental quality in the project area, the relevant monitoring data in June 2023 from the Environmental Impact Report Form for Water Ecological Restoration Project in Zouma Lake Area of Huama Lake Basin are cited. See the table below for specific data.

Table 6.4-5 List of Monitoring Results of Water Quality Indexes in Zouma Lake

Test indexes (Unit)	Test results		Class III standard limit	Water quality index *Si,j* (if greater than 1, the water quality exceeds the standard)	Status
	June 13	June 14			
pH (/)	7.8	7.9	6-9	0.40-0.45	Up to standard
Water temperature (°C)	26.7	26.9	/	/	/
Dissolved oxygen (mg/L)	8.59	8.51	≥5.0	0.117-0.136	Up to standard
Total phosphorus (mg/L)	0.08	0.05	≤0.05	1.00-1.60	Over-standard
Total nitrogen	0.86	0.83	≤0.2	0.4-0.45	Up to standard
Ammonia nitrogen (mg/L)	0.283	0.262	≤1.0	0.283-0.262	Up to standard
Chemical oxygen demand (mg/L)	19	19	≤20	0.95-0.95	Up to standard
Biochemical oxygen demand for five days (mg/L)	3.4	3.4	≤4	0.85-0.85	Up to standard

It can be seen from the above table that the total phosphorus in the water quality monitoring indicators of Zouma Lake exceeds the standard, failing to meet the Class III standard in Environmental Quality Standard for Surface Water (GB3838-2002).

To sum up, the water quality of Yanji Section of Yangtze River (Ezhou section) can meet Class II standard in Environmental Quality Standard for Surface Water (GB3838-2002), and

the water quality of Huama Lake (including Zouma Lake) fails to meet Class III standard in Environmental Quality Standard for Surface Water (GB3838-2002).

6.4.3 Current Acoustic Environment Quality and Assessment

(1) Monitoring points

In order to understand the present acoustic environment quality condition at the project site, this time, the ambient noise of sensitive targets around the plant boundary of the Project was monitored from December 4, 2023 to December 6, 2023 in two periods: day and night (6:00-22:00 and 22:00-6:00), and there was a total of 4 noise monitoring points (all arranged in Class 2 acoustic environment function area). The distribution of monitoring points is shown in Table 6.4-6, and Figure 6.4-2, and the test results are shown in Table 6.4-7.

For Wuchu Avenue, the associated facility of the Project, the monitoring data in Environmental Impact Assessment Report for East Extension Line (Yanhua Road ~ Bonded Zone) of Ezhou Wuchu Avenue Project and Environmental Impact Assessment Report for Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone are used to assess the acoustic environment quality status of sensitive points within 200m outside the road centerline. The distribution of monitoring points is shown in Table 6.4-6, and the distribution of monitoring points is shown in Figure 6.4-2. The monitoring results are shown in Table 6.4-8.

Table 6.4-6 List of Acoustic Environment Monitoring Points

<table>
<tr><th>No.</th><th>Location of Monitoring Point</th><th>Status</th><th>Monitoring Item</th><th>Monitoring Frequency</th></tr>
<tr><td>N1</td><td>Chehu Village</td><td rowspan="4">Supplementary monitoring this time</td><td rowspan="6">Day-time equivalent A-weighted sound level (Ld)
Night-time equivalent A-weighted sound level (Ln)</td><td rowspan="4">Once in the daytime and once at night, for 2 days</td></tr>
<tr><td>N2</td><td>Wangjiazui</td></tr>
<tr><td>N3</td><td>Shangquanziwan</td></tr>
<tr><td>N4</td><td>Polongmiao</td></tr>
<tr><td>B1</td><td>Wangjiazui residential area</td><td rowspan="2">Associated facility—acoustic environment monitoring point of Wuchu Avenue, with reference to the Environmental Impact Assessment Report for Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone</td><td rowspan="2">Once in the daytime and once at night, for 2 days</td></tr>
<tr><td>B2</td><td>Caopuwan residential area</td></tr>
<tr><td>B3</td><td>Residential area, Duwan Village</td><td>Associated facility—acoustic environment monitoring point of Wuchu Avenue, with reference to the Environmental Impact</td><td></td><td>Once in the daytime and once at night, for 1 day</td></tr>
</table>

		Assessment Report for East Extension Line (Yanhua Road ~ Bonded Zone) of Ezhou Wuchu Avenue Project		

Note: For the above residential areas/temples, only N3 Shangquanziwan has not been demolished yet, and the rest have all been demolished.

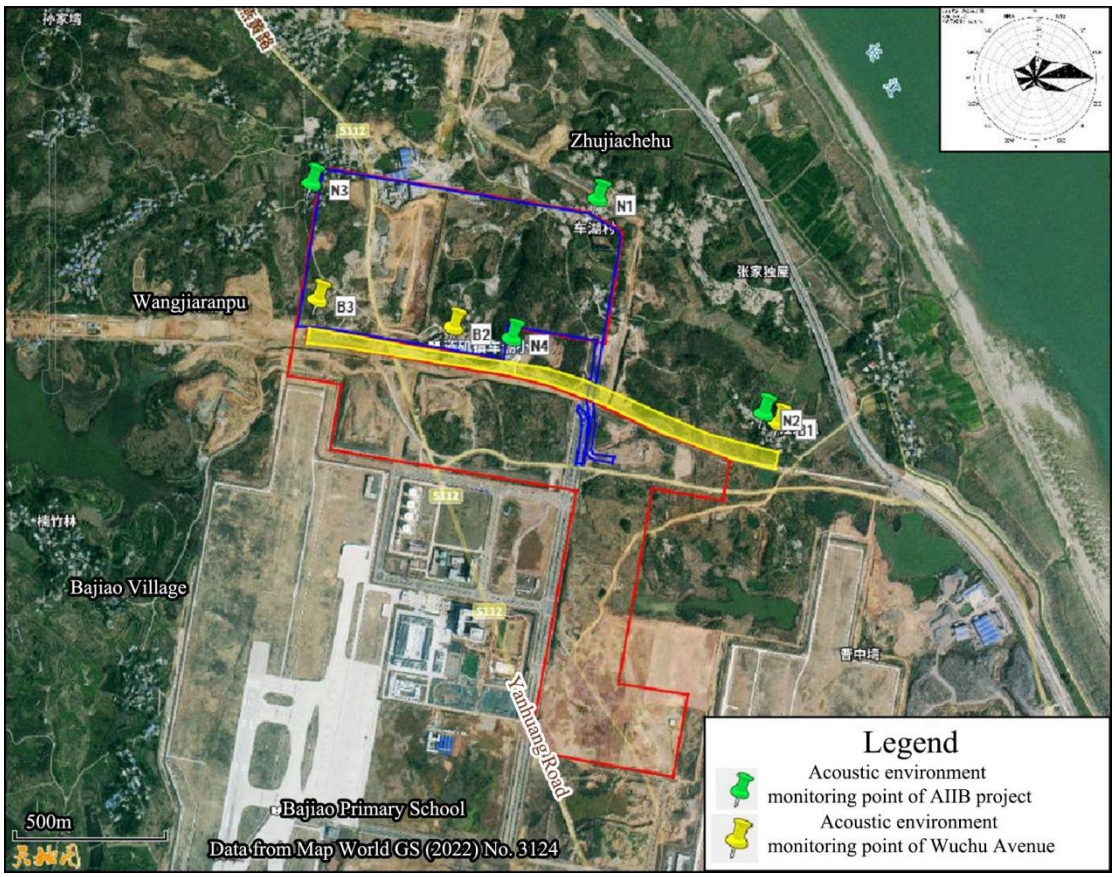


Figure 6.4-2 Distribution of Acoustic Environment Monitoring Points for AIIB Project and Wuchu Avenue Associated Facilities

(2) Assessment standard

Class 2 standard of Environmental Quality Standard for Noise (GB3096-2008) will be implemented for the scope of acoustic environment sensitive points; Class 1 standard of Environmental Quality Standard for Noise (GB3096-2008) for Polongmiao.

(3) Assessment results

The monitoring results of acoustic environment quality are shown in the table below:

Table 6.4-7 Monitoring Results of Acoustic Environment Quality (Unit: dB(A))

Monitoring points	2023.12.4		2023.12.5		2023.12.6		Standard limits		Assessment results
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime	
N1	59.0	43.7	48.2	46.1	/	/	60	50	Up to standard

Monitoring points	2023.12.4		2023.12.5		2023.12.6		Standard limits		Assessment results
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime	
N2	58.7	48.1	57.2	48.0	/	/	60	50	Up to standard
N3	50.4	42.1	48.5	40.7	/	/	60	50	Up to standard
N4	/	/	69.9	49.2	60.7	63.9	55	45	Over-standard

It can be seen from the above table that the acoustic environment quality of noise sensitive points N1 Chehu Village, N2 Wangjiazui and N3 Zhangshuwan around the Project is up to standard in daytime and nighttime, meeting Class 2 standards of Environmental Quality Standard for Noise (GB3096-2008). The acoustic environment quality of N4 Polongmiao in daytime and nighttime exceeds the Class 1 standard of Environmental Quality Standard for Noise (GB3096-2008). It is speculated that the reason for exceeding the standard may be the construction noise at this point, Wuchu Avenue. Upon the completion of construction, the impact on acoustic environment will be mitigated to some extent.

Table 6.4-8 Acoustic Environment Quality Monitoring Results of Wuchu Avenue (Associated Facility) (Unit: dB(A))

Monitoring points	Results						Standard		Status
	April 30, 2021 (daytime)	April 30, 2021 (nighttime)	April 6, 2023 (daytime)	April 6, 2023 (nighttime)	April 7, 2023 (daytime)	April 7, 2023 (nighttime)	Daytime	Nighttime	
Wangjiazui residential area (B1)	/	/	51.0	43.3	49.9	41.3	60	50	
Caopuwan residential area (B2)	/	/	49.9	40.4	52.1	42.2	60	50	
Residential area, Duwan Village (B3)	51.1	42.4	/	/	/	/	60	50	

It can be seen from the above table that the noise sensitive points around the associated facilities of the Project (Wuchu Avenue) meet the Class 2 standard of Environmental Quality Standard for Noise (GB3096-2008).

6.4.4 Current Underground Water Environment Quality and Assessment

The regional groundwater environment is subject to Class III standard of Environmental Quality Standard for Groundwater (GB/T14848-2017). In order to understand the current situation of groundwater environment in the project area, the groundwater environment is assessed with reference to the monitoring results of groundwater in January 2021 in the Environmental Impact Report on Regional Unified Assessment of West Industrial Park in Ezhou Linkong Economic Zone. The specific monitoring points are shown in Table 6.4-9 and Figure 6.4-3.

Table 6.4-9 List of Groundwater Environment Quality Monitoring

Point location	Location of water well	Relative position	Sampling requirements	Monitoring Item

1#	Central Yuba Village, North of West Industrial Park in Linkong Economic Zone	About 2.7 km southwest of the Project	Take a water sample at each sampling point within 1.0m from the well level of phreatic aquifer	K+, Na+, Ca^{2+}, Mg^{2+}, CO_3^{2-}, HCO_3^-, Cl^-, SO_4^{2-}, water temperature, air temperature, color, smell and taste, turbidity, visible substances, pH, ammonia nitrogen, nitrate, nitrite, volatile phenols, cyanide, arsenic, mercury, chromium (hexavalent), total hardness, lead, fluorine, cadmium, iron, manganese, aluminum, total dissolved solids, oxygen consumption, total coliform group and total bacterial count
2#	Xinwan Village, West Industrial Park in Linkong Economic Zone	About 2.9km to the southwest of the Project		
3#	Lijiawan, West Industrial Park in Linkong Economic Zone	About 5km to the southwest of the Project		

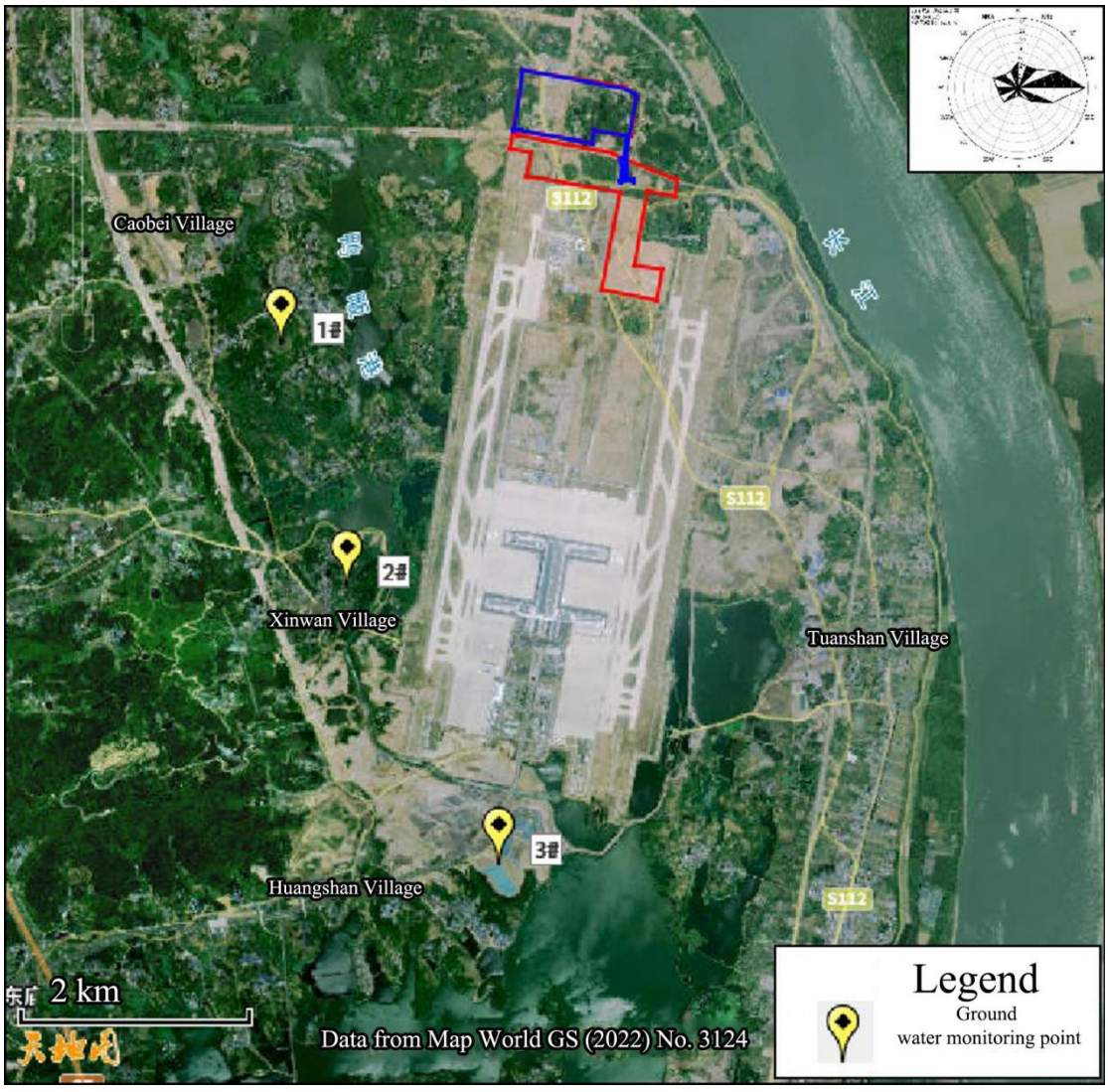


Figure 6.4-3 Distribution of Groundwater Monitoring Points

The monitoring results are summarized as follows:

Table 6.4-10 List of Monitoring Results of Groundwater Environment Quality

Monitoring Item	Groundwater 1#	Groundwater 2#	Groundwater 3#	Standard limit (mg/L)	Is it up to standard?

Monitoring Item	Groundwater 1#	Groundwater 2#	Groundwater 3#	Standard limit (mg/L)	Is it up to standard?
K^+	1.83	5.76	2.01	/	/
Na^+	16.4	8.56	14.4	≤200	Yes
Ca^{2+}	19.4	40.3	36.3	/	/
Mg^{2+}	6.84	9.87	6.12	/	/
CO_3^{2-}	0	0	0	/	/
HCO_3^-	26.6	142.1	92.3	/	/
Chloride	30.9	6.37	15.8	≤250	Yes
Sulphate	19.8	43.4	61.6	≤250	Yes
Water temperature (°C)	5.0	5.1	5.1	/	/
Chromaticity	0	0	0	≤15	Yes
Odor and taste	N/A	N/A	N/A	N/A	Yes
Turbidity (NTU)	1.4	1.6	1.2	≤3	Yes
Visible substances	N/A	N/A	N/A	N/A	Yes
pH value (dimensionless)	7.52	7.35	7.27	6.5≤pH≤8.5	Yes
Ammonia nitrogen	0.052	0.138	0.070	≤0.50	Yes
Nitrate	16.5	2.90	5.36	≤20.0	Yes
Nitrite	ND(0.016)	ND(0.016)	ND(0.016)	≤1.00	Yes
Volatile phenol	ND(0.0003)	ND(0.0003)	ND(0.0003)	≤0.002	Yes
Cyanide	ND(0.004)	ND(0.004)	ND(0.004)	≤0.05	Yes
Arsenic	0.0012	0.0005	ND(0.0003)	≤0.01	Yes
Mercury	ND(0.00004)	ND(0.00004)	ND(0.00004)	≤0.001	Yes
Hexavalent chrome	ND(0.004)	ND(0.004)	ND(0.004)	≤0.05	Yes
Total hardness	188	158	271	≤450	Yes
Lead	ND(0.00009)	ND(0.00009)	ND(0.00009)	≤0.01	Yes
Fluoride	0.149	0.278	0.069	≤1.0	Yes
Cadmium	ND(0.00005)	ND(0.00005)	ND(0.00005)	≤0.005	Yes
Ferrum	ND(0.01)	ND(0.01)	ND(0.01)	≤0.3	Yes
Manganese	ND(0.01)	ND(0.01)	0.04	≤0.10	Yes
Aluminum	ND(0.009)	ND(0.009)	ND(0.009)	≤0.20	Yes
Total dissolved solids	476	208	344	≤1000	Yes
Oxygen demand	1.4	1.3	1.1	≤3.0	Yes
Total coliform group	< 2	2	2	≤3.0	Yes

Monitoring Item	Groundwater 1#	Groundwater 2#	Groundwater 3#	Standard limit (mg/L)	Is it up to standard?
(CFU/100mL)					
Total bacterial count (CFU/mL)	72	83	80	≤100	Yes
Water level (m)	/	/	/	/	/

Note: ND for below the detection limit

It can be seen from the above table that all monitoring factors at each monitoring point basically meet the requirements of Class III standard in Environmental Quality Standard for Groundwater (GB/T14848-2017), and the groundwater environment quality within this area is good.

6.4.5 Current Soil Environment Quality and Assessment

In order to understand the current situation of soil environment in the project area and provide the background value, a monitoring point was set up in the Dangerous Goods Warehouse area where pollution may occur, and Wuhan Huazheng Environmental Testing Technology Co., Ltd. was entrusted to carry out sampling monitoring on December 4, 2023. The soil environment quality of Phase I is evaluated using the data of soil monitoring points in the EIA Report for Port Operation Area Project in Ezhou Airport Comprehensive Bonded Zone. The monitoring points are shown in the table below, and the layout of monitoring points is shown in Figure 6.4-4.

Table 6.4-11 List of Soil Environment Monitoring Points

No.	Location of Monitoring Point	Monitoring Item	Reference standards
S1	Dangerous Goods Warehouse area	pH, 45 items in GB36600-2018	Screening Values for Class II Land in Table 1 of Risk Control Standard for Soil Contamination of Development Land (GB36600-2018)
S2	Fumigation chamber		
S3	Special Transportation Depot		
S4	Secondary warehouse		

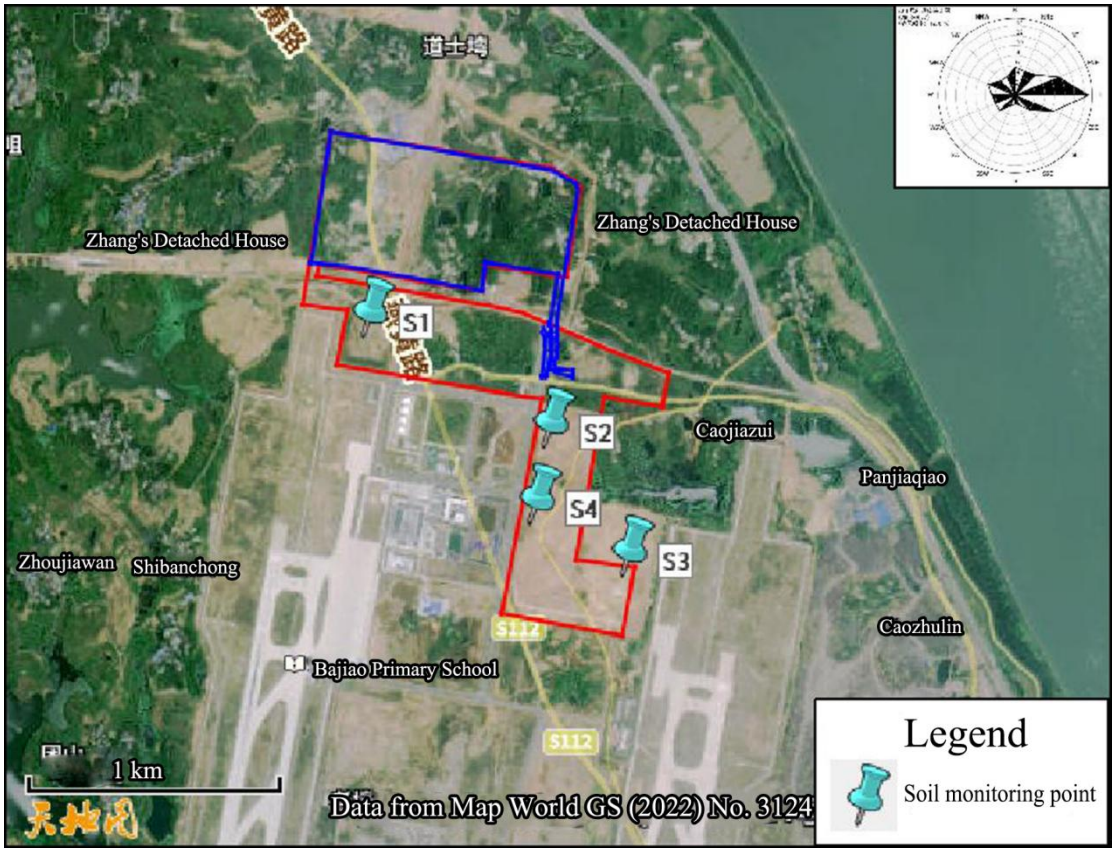


Figure 6.4-4 Distribution of Soil Monitoring Points

The monitoring results are shown in the table below.

Table 6.4-12 List of Soil Monitoring Results (Unit: mg/kg)

Test items	Test results				
	Dangerous Goods Warehouse S1	Fumigation chamber □1	Secondary warehouse □2	Special Transportation Depot □3	Standard limit
Sampling depth (m)	0 ~ 0.2m	0 ~ 0.2m	0 ~ 0.2m	0 ~ 0.2m	/
pH (dimensionless)	8.62	8.58	8.87	8.46	/
Arsenic (mg/kg)	1.71	16	9.33	6.2	60a
Cadmium (mg/kg)	0.12	0.07	0.3	0.05	65
Chromium (hexavalent) (mg/kg)	ND	ND(0.5)	ND(0.5)	ND(0.5)	5.7
Copper (mg/kg)	12	36	37	34	18000
Lead (mg/kg)	34	23.4	28.5	18	800
Mercury (mg/kg)	0.025	0.116	0.12	0.146	38
Nickel (mg/kg)	12	42	49	32	900
Carbon tetrachloride (mg/kg)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	2.8
Chloroform (mg/kg)	ND□(0.0011)	ND□(0.0011)	ND(0.0011)	ND(0.0011)	0.9
Chloromethane (mg/kg)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	37

Test items	Test results				
	Dangerous Goods Warehouse S1	Fumigation chamber □1	Secondary warehouse □2	Special Transportation Depot □3	Standard limit
1,1-dichloroethane (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	9
1,2-dichloroethane (mg/kg)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	5
1,1-dichloroethylene (mg/kg)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	66
Cis-1,2-dichloroethylene (mg/kg)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	596
Trans-1,2-dichloroethylene (mg/kg)	ND(0.0014)	ND(0.0014)	ND(0.0014)	ND(0.0014)	54
Dichloromethane (mg/kg)	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND(0.0015)	616
1,2-dichloropropane (mg/kg)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	5
1,1,1,2-tetrachloroethane (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	10
1,1,2,2-Tetrachloroethane (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	6.8
Tetrachloroethylene (mg/kg)	ND(0.0014)	ND(0.0014)	ND(0.0014)	0.0024	53
1,1,1-Trichloroethane (mg/kg)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	840
1,1,2-Trichloroethane (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	2.8
Trichloroethylene (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0□0012)	2.8
1,2,3-Trichloropropane (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	0.5
Chloroethylene (mg/kg)	ND(0.0010)	ND(0.0010)	ND(0.0010)	ND(0.0010)	0.43
Benzene (mg/kg)	ND(0.0019)	ND(0.0019)	ND(0.0019)	ND(0.0019)	4
Chlorobenzene (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	270
1,2-dichlorobenzene (mg/kg)	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND(0.00□5)	560
1,4-dichlorobenzene (mg/kg)	ND(0.0015)	ND(0.0015)	ND(0.0015)	ND(0.0015)	20
Ethylbenzene (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	28
Styrene (mg/kg)	ND(0.0011)	ND(0.0011)	ND(0.0011)	ND(0.0011)	1290
Toluene (mg/kg)	ND(0.0013)	ND(0.0013)	ND(0.0013)	ND(0.0013)	1200
M-xylene + p-xylene (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	570
O-xylene (mg/kg)	ND(0.0012)	ND(0.0012)	ND(0.0012)	ND(0.0012)	640
Nitrobenzene (mg/kg)	ND(0.09)	ND(0.09)	ND(0.09)	ND(0.09)	76
Aniline (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	260
2-Chlorophenol (mg/kg)	ND(0.06)	ND(0.06)	ND(0.06)	ND(0.06)	2256
Benzo[a]anthracene (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	15
Benzo[a]pyrene (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND□0.1)	1.5
Benzo[b]fluoranthene (mg/kg)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	15
Benzo[k]fluoranthene (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	151

Test items	Test results				
	Dangerous Goods Warehouse S1	Fumigation chamber □1	Secondary warehouse □2	Special Transportation Depot □3	Standard limit
Chrysene (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	1293
Dibenzo[a, h]anthracene (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	1.5
Indeno(1,2,3-cd) pyrene (mg/kg)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	15
Naphthalene (mg/kg)	ND(0.09)	ND(0.09)	ND(0.0□)	ND(0.09)	70

According to the monitoring and evaluation results, all monitoring factors at soil monitoring points meet the screening values of Class II land in Soil Environmental Quality Risk Control Standard for Soil Contamination of Development Land (Trial) (GB36600-2018).

7 Environmental Impact Analysis and Mitigation Measures

7.1 Project Affected Scope and Sensitive Receivers

To determine the scope of impact assessment, two concepts of "project affected area" and "sensitive receiver" are introduced.

The project affected area is defined as the total area likely to be adversely affected by the project. Determination principles are as follows:

(1) To prevent noise pollution during the construction period and operation period of the Project, the area within 200m from the boundary of the construction site and the land occupied by the Project and the area within 200m on both sides of the centerline of the associated facility - Wuchu Avenue are defined as the project affected area;

(2) To prevent air pollution during the construction period and operation period of the Project, the area within 200m from the boundary of the construction site and the land occupied by the Project is defined as the project affected area;

(3) To prevent the impact on the ecosystem during the construction period and operation period of the Project, the area within 100m from the boundary of the construction site and the land occupied by the Project and the area within 300m on both sides of the centerline of the associated facility - Wuchu Avenue are defined as the project affected area.

Sensitive receivers are defined as residential areas and environments that may be affected by project construction and/or operation. Receivers include (1) communities (residential areas) or environments that may be polluted by construction or operation noise and air pollution; (2) public service facilities vulnerable to interference or pollution; (3) plants, zootope, and agricultural land.

Based on the above definitions and principles, the existing sensitive receivers within the project affected scope are summarized as follows.

Table 7.1-1 Distribution of Sensitive Receivers within Project Affected Scope

Project Name	Affected scope	Protected object		Relative orientation	Minimum distance (m)	Population size	Nature	Protection level
Hubei Global Air Cargo Logis	200m	Chehu Village	Shaojiaxiwan	North west China	200	51 households	Residential area	Ambient Air Quality Standards (GB3095-2012), Class II standard, Environmental Quality Standard for Noise (GB3096-2008), Class 2
		Duwan Village	Yanjiapuwan	North west China	Close	80 households	Residential area	

Project Name	Affected scope	Protected object		Relative orientation	Minimum distance (m)	Population size	Nature	Protection level
tics Hub Project			Shangquanziwan	North west China	140	42 households	Residential area	standard and Class 1 standard (Polongmiao)
Wuchu Avenue	200m on both sides of the centerline of the road	/	/	/	/	/	/	Sensitive receivers have been demolished
	300m on both sides of the centerline of the road	No ingestion and habitat activities or fixed nests of national key protected wild animals and Hubei provincial key protected animals are found. No national key protected wild plants are found within the assessment scope.						

The distribution of sensitive receivers within the project affected scope is shown in the following figure.

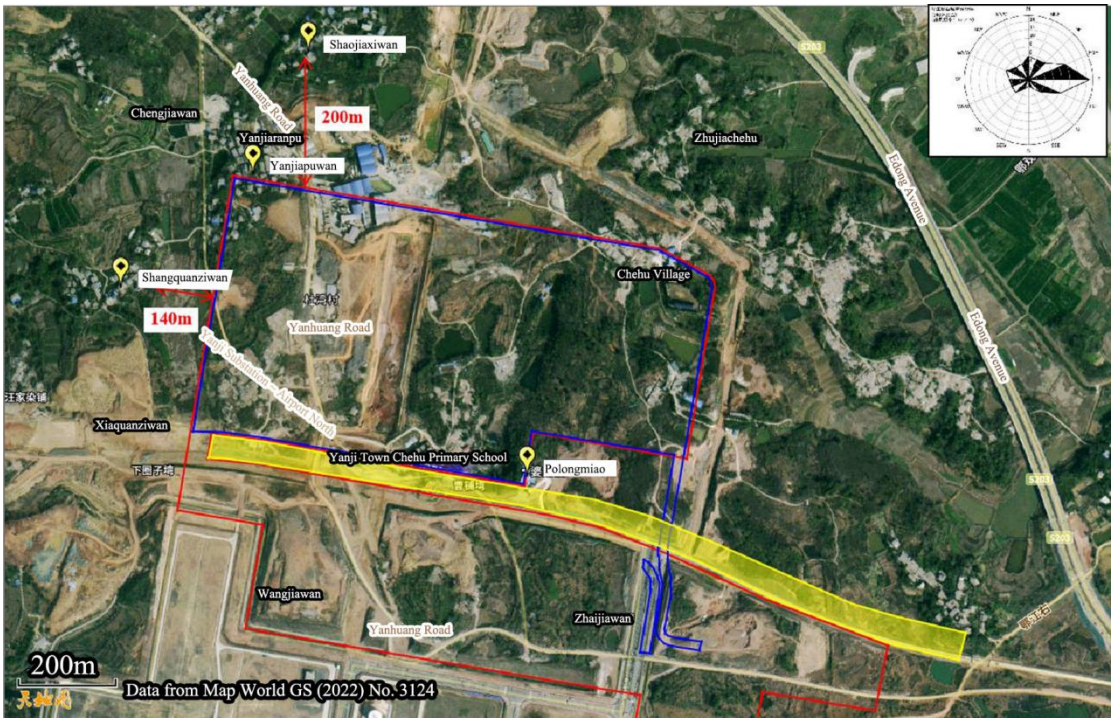


Figure 7.1-1 Distribution of Sensitive Receivers within Project Affected Scope

7.2 Environmental Impact Analysis and Mitigation Measures during the Construction Period

Bidding for associated facilities - some works of the Phase I Project (including Type-B Bonded Logistics Center, International Cargo Terminal, Special Transportation Depot, Quarantine Treatment Center, International Express Center, Customs Inspection Center, Customs Kiosk 1#, and Customs Kiosk 3#) was completed in September 2023. The works commenced in the same month and are expected to be completed in November 2024. Bidding for the associated facility - Wuchu Avenue was completed in May 2023. The works was commenced in June 2023 and completed at the end of June 2024. The environmental and social management requirements for the construction period of the above contents have been included in the construction contract, and due diligence has been carried out on the implementation of the environmental and social management requirements. See the *Environmental and Social Management Due Diligence Report for the Hubei Global Air Cargo Logistics Hub Project* for details.

This chapter mainly analyzes the construction contents of AIIB Project and Associated Facilities - Phase I Project that have not yet commenced bidding. Since the two parts only involve civil engineering during the construction period and have basically the same impact on the environment, they are henceforth collectively referred to as "the Project". Subsequently, their impacts during the construction period will be jointly analyzed.

7.2.1 Impact Analysis of Construction Camp

7.2.1.1 Construction

The Project is planned to be constructed in phases and sections, and the peak number of workers required during the construction period is about 200.

Construction will be integrated with the development of individual buildings and structures. The construction camp will be built within the boundary without occupying land outside the boundary. The main facilities in the construction camp include office buildings, dormitories, canteens, bathing facilities (including bathrooms, toilets, and washbasin facilities), staff activity areas, and parking spaces.

Dormitory conditions: The dormitories are arranged as four-person rooms, with separate sections designated for male and female workers. The dormitories are equipped with air conditioning facilities.

Sanitary conditions: The bathing facilities are located in a communal area, with separate sections for men's showers and toilets, as well as women's showers and toilets. These sections are arranged in individual rooms. In addition, a common washing area and drying area are set up to meet the daily hygiene needs of construction personnel. The ratio of male and female facilities is designed as 4:1.

Dining conditions: According to the distribution of dormitory areas, staff canteens and retail stores are set up in sections to meet the dining needs of construction personnel.

Entertainment conditions: A special staff activity area is set up in the construction camp, and sports facilities such as table tennis tables are provided for recreational use by construction personnel.

The water consumption during the construction period is as follows:

Table 7.2-1 List of Domestic Water Consumption in Construction Camp

Items	Per capita daily water consumption (L/d)	Number of people	Total water consumption (m^3/d)
Water	110	200	22

7.2.1.2 Environmental Impact Analysis

Wastewater: The domestic sewage from the construction camp will have a certain impact on the surrounding surface water, groundwater, and soil if it is discharged at will. As the area where the Project is located has been covered with the municipal sewage pipe network, fixed domestic sewage collection and treatment facilities will be built in the construction camp. Domestic sewage has a definite drainage direction and can be discharged after centralized treatment, so it will not have an obvious impact on the surrounding environment.

Waste gas: The waste gas from the construction camp is mainly canteen cooking fume. After the standard cooking fume purification device is used and the cooking fume outlets are reasonably equipped, the cooking fume waste gas can be emitted up to standard. In addition, since the construction camp is within the boundary of the Project and there are no other residential sensitive points within 200m around it, it will not have an adverse impact on the surrounding environment and sensitive targets.

Domestic waste: During the construction period of the Project, with construction personnel of all kinds concentrated, the output of domestic waste to be generated during the construction period will be 0.1t/d as per 0.5kg/person·d. Sufficient temporary waste containers will be set up in the construction camp. Domestic waste will be collected and managed by classification. It will be regularly transported and disposed of by the urban management department of the Ezhou Linkong Economic Zone, without being directly discharged. Therefore, it will not have an obvious impact on the surrounding environment.

7.2.1.3 Mitigation Measures

a. Domestic sewage treatment facilities: The construction camp is equipped with septic tanks; the canteen and kitchen are equipped with oil-water separators. The Project site has covered the municipal sewage pipe network, and is located within the service scope of the reclaimed water plant in the aerotropolis area. After oil separation, the canteen wastewater and domestic sewage are discharged together into the septic tanks of the construction camp for three-stage sedimentation tank treatment. The sewage from the construction camp is discharged into the reclaimed water plant in the aerotropolis area through the municipal sewage pipe network for centralized treatment. The up-to-standard

treated sewage will then be discharged to the Yangtze River.

b. Domestic waste treatment facilities: Domestic waste collection bins are provided at designated points in the areas such as office buildings, dormitories and canteens of the construction camp. The environmental sanitation department of the Linkong Economic Zone will regularly remove domestic wastes and transport them to the site of the Ecological Disposal Project for Domestic Wastes of Ezhou City of Huaxin Environmental Engineering (Ezhou) Co., Ltd. in Baihong Village, Yanji Town for disposal.

c. Canteen cooking fume treatment facilities: The camp includes a canteen. It is required that after being treated by high-efficiency electrostatic cooking fume purifiers, the cooking fumes will meet the requirements of the *Emission Standard of Cooking Fume (Trial)* (GB 18483-2001) and be emitted through a flue above the building roof.

7.2.2 Atmospheric Environment

7.2.2.1 Pollution Sources

The atmospheric environmental impact during the construction period of the Project mainly comes from construction dust and tail gas from vehicles and construction machinery.

(1) Construction dust

The construction dust mainly comes from earthwork excavation and filling, site leveling, loading, unloading and stacking of building materials, transport of vehicles, concrete mixing, etc. In terms of the Project, earthwork excavation and vehicle transportation are involved, and the dust will affect the local atmospheric environment. The main pollution factor is TSP.

The amount of construction dust is related to many factors, and the amount of dust generated by excavators during operation is related to the pit excavation depth, height of grab buckets of excavators relative to the ground, wind velocity, soil granularity, soil moisture content, etc. For the muck storage yard, the amount of dust is also related to the stacking method, threshold wind velocity and protective measures for the yard. The research results and analogy surveys at home and abroad show that the main factors affecting the amount of dust are as follows: protective measures, wind velocity, soil humidity, excavation method or soil stacking method, etc. In addition, the amount of dust on the road is related to the running speed of vehicles. The faster the speed is, the greater the amount of dust will be.

(2) Tail gas from vehicles and construction machinery

During construction, transport trucks, dump trucks, excavators, forklifts, bulldozers, and other transport vehicles and construction machinery coming to and leaving from the construction site will produce tail gas from vehicles and construction machinery. The pollutants in such waste gas are mainly carbon monoxide (CO), hydrocarbons (HC), and nitrogen oxides (NOx).

7.2.2.2 Environmental Impact Analysis

(1) Construction dust

During construction, the links with the greatest dust impact are excavation, soil stacking in the open air, and vehicle transportation.

1) Excavation

The experience shows that when the earthwork excavation of the Project is 400t/d, the dust (TSP) has a great impact on the atmospheric environment. Generally, its impact will extend to a range of about 500m. The concentration of TSP at a close range can exceed the Class II standard by several times to more than ten times, but it can be reduced to the Class II standard at a range of about 600m.

2) Soil stacking in the open air

Another kind of construction dust is soil stacking in the open air, which is affected by the wind velocity during operation. The amount of dust is related to the wind force and climate to some extent. In the free wind farm, the construction dust can exceed the Class II standard in the *Ambient Air Quality Standards* (GB3095-2012) within 150m and have an adverse impact on the atmospheric environment; generally, there will be no great impact beyond 150m.

3) Vehicle transportation

During the construction period, the dust generated by vehicle transportation accounts for about 60% of the total dust. Generally, the impact scope of the dust generated on the construction site and construction roads under the effect of natural wind is within 100m. During the construction period, watering the roads on which vehicles run for 4~-5 times per day can reduce the flying dust by 70% and effectively control the impact of construction dust on the surrounding environment.

(2) Tail gas from vehicles and construction equipment

Such waste gas mainly comes from large machinery and vehicles, which is characterized by scattered emission. The impact exists locally and lasts for a short time, and will disappear after the completion of construction. According to the monitoring results of similar project construction sites, at a distance of 50m from the site, the hourly average concentrations of CO and NO2 in the atmospheric environment are 0.20mg/m^3 and 0.13mg/m^3 respectively; the daily average concentrations are 0.13mg/m^3 and 0.062mg/m^3 respectively, which meet the requirements of Class II standard in the Ambient Air Quality Standards (GB3095-2012). The mechanical construction operation has little impact on the atmospheric environment within the assessment scope. The main pollutants of the tail gas from automobiles on the construction site include HC, SO2, and NOx. The emission concentration of tail gas outlets of automobiles is about HC: 4.4g/L, SO2: 3.24g/L, and NOx: 44.4g/L.

After the tail gas is emitted by construction machinery and automobiles, it will be diluted and diffused rapidly by air, which basically will not have too much impact on the ambient air quality at sensitive points.

7.2.2.3 Mitigation Measures

(1) Mitigation measures for the impact of construction dust

The Construction Contractor shall strictly abide by the *Management Measures for Prevention and Control of Dust Pollution in Ezhou City* (EZZF [2008] No. 21) and other relevant regulations during construction. The details are as follows:

① Continuous and closed enclosures shall be set up around the construction site, with a height of not less than 1.8m. Anti-overflow seats shall be provided at the bottom of the enclosures. Joints between the enclosures, as well as between the enclosures and the anti-overflow seats, shall be closed;

② The ground and carriageways of the living areas, office areas, processing yards in operation areas and material storage yards within the construction site shall be hardened, or materials with the equivalent functions shall be laid on such ground and carriageways, supplemented by wet operations;

③ The operations such as earthwork excavation, filling and transfer as well as the demolition of houses or other buildings (structures) shall not be carried out in weather with wind force above Grade 5 according to the meteorological forecast;

④ For the removal and transportation of construction materials and wastes in buildings (structures), transport vehicles shall not leave the workplace until they are free of silt and washed clean, and containers or pipelines shall be adopted for transportation. It is forbidden to throw them from high places;

⑤ If the items such as construction wastes cannot be removed and transported away within 24 hours, a temporary stacking yard shall be provided at the construction site, and dust prevention measures such as enclosures and covering shall be taken for the temporary stacking yard;

⑥ For the construction operations producing a large amount of slurry, corresponding slurry pits and ditches shall be provided to ensure that the slurry does not overflow, and waste slurry shall be transported in a sealed manner;

⑦ Cement or other fine-grained building materials that are easy to fly shall be stored in a sealed manner or covered;

⑧ When ready-mixed concrete and mortar are used on the construction site according to regulations, dust prevention measures such as sealing, fencing, watering, and flushing shall be taken;

⑨ Permanent dust prevention measures such as building closed or semi-closed awnings and wind-break walls shall be taken for the material stacking yard of the concrete mixing station. Sand and stone temporarily piled up outside the site shall be covered with a dust screen or dust cloth.

In addition, transport vehicles shall run at a low speed on the construction site and daily maintenance of vehicles shall be strengthened.

(2) Mitigation measures for the impact of construction waste gas

① Strengthen the overhaul and maintenance of construction vehicles and machinery. It is strictly prohibited to use vehicles with overdue service life and excessive tail gas.

② Use electric equipment or high-quality fuel as much as possible to reduce harmful gas emissions from equipment and vehicles.

③ Strengthen the personnel management of the Construction Contractor and carry out HSE-compliant construction.

7.2.3 Water Environment

7.2.3.1 Pollution Sources and Environmental Impact Analysis

The wastewater generated during the construction of the Project mainly includes construction wastewater, rainwater containing silt from surface runoff on the construction site, water gushing in the foundation pit, and domestic sewage from construction personnel.

(1) Construction wastewater

During the construction period, site cleaning and the implementation of construction and installation will generate a certain amount of construction wastewater. According to the nature and chemical composition of construction wastewater, the main pollutants are suspended solids and a small amount of petroleum.

(2) Rainwater containing silt from surface runoff on the construction site and water gushing in the foundation pit

Such sewage mainly includes the rainwater containing silt from surface runoff that may be generated when the rainwater scours the bare surfaces as a result of earth-rock excavation, as well as the topsoil stacking areas, stockyards, prefabrication yards, slopes, etc. in summer when the rainfall is abundant, as well as groundwater gushing out during on-site foundation pit excavation. The main pollution factor is suspended solids.

(3) Domestic sewage from construction personnel

There are approximately 200 on-site construction personnel during the construction period. Given that the daily water consumption per person is 110L, the daily domestic water consumption during the construction period amounts to 22m^3. Considering a consumption rate of 15%, the output of domestic sewage is 18.70m^3/d. Such sewage mainly contains COD, BOD, SS, NH_3-N, and animal and vegetable oil.

If the above wastewater is directly discharged into surrounding surface water bodies it will affect the quality of rivers and lakes.

7.2.3.2 Mitigation Measures

(1) A sedimentation tank will be set up for the treatment of construction wastewater. The construction wastewater will be reused for on-site dust suppression and washing of machinery and vehicles after being treated by the three-stage sedimentation tank.

(2) Cover topsoil stockpiles, material storage yards, and other sites, set up intercepting ditches around the site, and set up grit chambers at low-lying areas. Surface runoff during the rainy season shall be reused after sedimentation treatment, and the portion that cannot be reused shall be discharged after obtaining permission from relevant departments. It is prohibited to discharge water containing large amounts of silt or untreated wastewater into municipal pipe networks or water bodies.

(3) Dewatering wells will be set to deal with water gushing in foundation pits, or water will be pumped to the grit chamber and then reused for on-site dust suppression or greening after sedimentation in the grit chamber.

(4) For domestic sewage, temporary septic tanks, oil-water separators, and other domestic sewage treatment facilities will be set up for the treatment of the sewage, which will then be discharged into the surrounding municipal pipe network.

The above effective measures taken can reduce the impacts of the wastewater during the construction period on the surrounding water environment.

7.2.4 Acoustic Environment

7.2.4.1 Pollution Sources

During the construction of the Project, the noise mainly comes from construction equipment and transport vehicles. The construction noise sources are mainly loaders, excavators, bulldozers, and other construction machinery and equipment; the transport noise comes from transport vehicles.

7.2.4.2 Environmental Impact Analysis

Through analogy investigation, the noise source intensity generated by some construction machinery and equipment proposed for the Project during the construction period is shown in Table 7.2-2. The distance attenuation prediction mode of point sound sources is adopted for the noise impact prediction during the construction period to predict the noise value after the noise of construction machinery is attenuated at different distances and analyze the impact of noise on the surrounding environment during the construction period accordingly. The adopted sound level attenuation pattern is as follows:

$$LA(r) = LA(r0) - 20lg(r/r0)$$

Where,

LA(r) - sound level A at a distance of r from the sound source, dB (A);

LA(r0) - sound level A from the sound source r0, dB (A);

r - distance between prediction point and sound source, (m);

r0 - distance from reference position to sound source, (m);

The standard distance of noise attenuation during day and night for each noise source can be obtained by predicting the contribution value of mechanical noise after attenuation at different distances during the construction period according to the above model.

Table 7.2-2 List of Noise Source Intensity during the Construction Period (Unit: dB(A))

S/N	Equipment name	Noise source intensity	Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011)		Standard distance (m)	
			Daytime	Nighttime	Daytime	Nighttime
1	Excavator	95	70	55	35	100
2	Bulldozer	85	70	55	20	40
3	Loader	90	70	55	20	60
4	Transport vehicle	80	70	55	10	20

It can be seen from the comparison between the calculation results of noise source prediction in the above table and the *Emission Standard of Environment Noise for Boundary of Construction Site* (GB12523-2011) that due to the high noise value of loaders, excavators, and bulldozers, the standard limit can be met when the maximum distance from the noise source exceeds 35m in the daytime and 100m at night. The only sensitive receiver remaining within 100m of the project area is Yanjiapuwan, which has not yet been fully demolished. The Employer shall prohibit construction at night to avoid disturbing residents with noise.

7.2.4.3 Mitigation Measures

Strict measures will be taken in the Project to control construction noise and reduce its impact. Specific measures are as follows:

(1) Reasonable arrangement of construction time

Simultaneous construction of a large number of high-noise equipment shall be avoided as far as possible during the preparation of the construction plan. In addition, the construction period shall be shortened as far as possible on the premise of ensuring the project quality. High-noise construction shall be arranged in the daytime as far as possible to reduce the construction at night. Except for emergency repair and rescue, no bulldozer, excavator, grader, road roller or other similar machinery shall be used for night construction (from 22:00 to 6:00 the next day). If noise pollution around the city cannot be avoided during night construction due to the continuity of the production process or other special reasons, the construction must be reported to relevant government departments for approval in advance and announced to surrounding residents.

(2) Reasonable layout of construction site

It is necessary to avoid arranging a large number of power mechanical equipment in the same place; otherwise, the local sound level will be excessive.

(3) Reasonable arrangement of operation time for transport vehicles

The speed shall be strictly controlled and honking shall be prohibited after transport vehicles enter the vicinity of the construction area.

(4) Reduction of sound level of equipment

Low-noise equipment shall be selected as far as possible, such as hydraulic machinery (instead of fuel machinery) and high-frequency oscillator; For fixed loading and unloading equipment and earth-moving machinery, such as excavators and bulldozers, the noise can be reduced by exhaust pipe silencers and isolation of vibrating parts of engines; Power mechanical equipment shall be regularly repaired and maintained. The sound level of poorly maintained equipment often increases during operation due to vibration of loose parts or damage to silencers.

(5) Reduction of man-made noise

Operate mechanical equipment according to regulations. During the disassembly of formwork and support, comply with operation regulations to reduce collision noise; use modern equipment (instead of whistles) to direct operations as much as possible.

With the implementation of the above corresponding measures and scientific and strict management, based on the investigation of many HSE-compliant construction sites in China, the noise pollution affecting the external environment during the construction period is minimal. Moreover, this impact is only temporary and will cease immediately once the construction operations are completed.

(6) Strengthening of construction management

During the construction period, the construction method with low noise and vibration shall be adopted as far as possible for foundation and structural construction on the premise of not affecting the construction quality; The foundation of the equipment with a fixed base shall be treated separately to reduce the transmission of ground vibration and structural noise; The operation shall be standardized and the maintenance of equipment shall be strengthened to maintain normal operation of the equipment; Noise equipment with less movement can be set in the sound insulation enclosure made of corrugated plates.

The declaration and registration system of the construction noise shall be strictly implemented. A declaration shall be submitted to the local ecological environment department within 15 days after the commencement of the Project. The *Approval Form for Noise Management on Construction Sites* shall be filled in and approved before commencement. It is necessary to avoid disturbing residents with noise, make the noise at the boundary of the construction site conform to relevant regulations in the *Emission Standard of Environment Noise for Boundary of Construction Site* (GB12523-2011), and make the vibration conform to relevant regulations in the *Standard of Vibration in Urban Area Environment* (GB10070-88).

By taking the above measures, the Construction Contractor can minimize the impact of noise on the surrounding acoustic environment during the construction period.

7.2.5 Solid Waste

Solid waste pollution sources during the construction period mainly include domestic waste from construction workers, and construction waste consisting of building debris, excavated earth and rock, as well as oily waste materials.

Domestic waste of construction personnel is mainly generated in the construction camp, and will not have a noticeable impact on the surrounding environment.

Construction waste primarily refers to the substantial amount of waste building materials generated during ground excavation, road construction, pipeline laying, material transportation, foundation works, and housing construction. These waste building materials include sand, gravel, lime, concrete, wood, and waste mud. Construction waste will be sorted out by special personnel and useful steel bars, wood, cables, etc. will be recycled. Unusable construction waste will be disposed of at designated places in Ezhou City. A designated temporary storage area will be established to temporarily store the hazardous wastes before the wastes are transferred to certified facilities for proper treatment.

According to the *Construction Drawing Design of Earth-rock Works in Phase I of Comprehensive Bonded Zone of Huangshan Navigation-obstructing Mountain Height Reduction and Continuation Project (East) in Clearance Area of Ezhou Huahu Airport*, the excavation volume of earth-rock in the Project is about 2,407,300 m^3, and the earth generated during the construction of temporary roads is about 76,600 m^3. The total amount of earth-rock to be transported for filling is about 2,483,900 m^3. The earth is about 1,026,200 m^3 and the rock is about 1,457,700 m^3. For the rock, the loose coefficient of earth and rock after backfilling and compaction is 0.85 and 1.31 respectively, that is, 872,300 m^3 of soil storage yard and 1,909,600 m^3 of rock dump are required, totaling 2,781,900 m^3 of backfilling site.

The earth-rock shall be preferentially transported to the adjacent backfilling areas of Bajiao Village and Woertang, with a distance of within 2km (from the center point of the excavation and loading area to the center point of the storage yard). The design filling height of the backfilling area of Bajiao Village is +33.0m and the capacity is about 3,349,000 m^3. The design filling height of the backfilling area of the storage yard in Woertang is +22.0m and the capacity is about 648,400 m^3. The preliminary estimated capacity of the storage yard in the West Industrial Park is 903,100 m^3. The above parameters can meet the requirements of the Project.

7.2.6 Ecological Environment

(1) Impact on vegetation

The Project is located in the vicinity of Ezhou Huahu Airport. With the increase in population and urbanization, land has been heavily impacted by human development activities. After decades of changes, natural native zonal vegetation has become scarce. Within the project vicinity and site selection range, the original vegetation is almost occupied by farmland, with only small patches of artificial forest (primarily shelterbelts).

Types of original vegetation within the project site selection range are mainly farmland,

shrubs, and arbors. The impact on vegetation in the assessment area during construction is mainly manifested as earth-rock filling and excavation, site leveling, etc. which change the original earth structure, destroy the original vegetation, and cause loss of biomass and productivity.

No nationally protected wild plants, ancient trees, and renowned trees were found in the assessment area. The lost plants are common species within the assessment scope, with a wide growth range and strong adaptability. The project construction will not have a significant impact on the integrity of the regional ecosystem or the habitats of important species. There is no risk of plant population disappearance or extinction due to land occupation by the Project. Besides, the project construction will not have a significant impact on plant diversity in the assessment area. In the later stage of construction, green belt construction will be carried out according to the engineering design scheme to further reduce the impact on the regional ecological environment.

(2) Impact on mammals

There are few mammals in the project area, including 3 orders, 3 families and 6 species, mainly grass hare, mus musculus, rattus flavipectus, rattus norvegicus, yellow weasel, yellow-bellied weasel, etc. Wild animals under national and provincial key protection are not found here. They are mainly active near shrub lands and residential areas in the assessment area. The land occupied by the Project will compress the living space of animals in this area and reduce the number and appearance frequency of the bird species involved.

During the construction period, the impact on mammals mainly pertains to the destruction of habitats where animals forage, including the noise generated by felling and blasting of agricultural and forestry vegetation in the construction area, the operations in the spoil yard, the interference caused by the construction personnel and construction machinery, etc., which will change the assessment area and its surrounding environment. The most affected species are rodents that thrive in cultivated land, shrubs, and forests. However, the populations of some rodent species that coexist with humans, such as house mice and brown rats, may increase.

After the completion of the Project, with the recovery of vegetation, improvement of ecological environment, and decrease of human disturbance, many migrated mammals will return to their original habitats.

(3) Impact on amphibians

There are 1 order, 4 families and 7 species of amphibians recorded in the project area, including 6 species of key protected wild animals in Hubei Province, such as bufo bufo gargarigans, green pond frog, rana guentheri, rana nigromaculata and microhyla ornata, which are mainly found in Huama Lake, canal and wetland around the Project.

During the construction period, mechanical noise and human activities disrupt the original habitats of amphibians and reptiles, forcing them to move to non-construction areas, leading to habitat compression. In addition, although amphibians and reptiles tend to avoid construction disturbances, their relatively weak migration capabilities mean that they may still be at risk of being crushed during the construction process. The construction process may result in a slight decrease in the number of individuals and populations of amphibians in

the construction area. However, it is not expected to cause significant losses in numbers or species extinction.

The Project does not occupy water bodies or wetlands, and the construction area is not the primary habitat for amphibians. Therefore, the construction activities will not pose a threat to the survival of amphibians in the area. After the construction activities are completed, the habitats and population of amphibians will also be restored.

(4) Impact on water and soil loss

The excavation during the construction of the Project will disrupt or disturb the original surface vegetation, ground material composition, and topography, so that the topsoil in this area is loose and bare or forms a loose accumulation body, losing the anti-scouring and soil conservation ability of the original vegetation. Under the influence of natural factors such as rainfall, new water and soil loss will be caused.

During actual construction, the temporary land for the Project is controlled within the scope of land acquisition, and no temporary land will be arranged outside the boundary line. At the same time, the following water and soil loss prevention measures shall be taken:

a. Topsoil stripping will be carried out in the construction area, and the exposed surface formed in the excavation will be covered with dust screens.

b. The loosely-stacked construction materials will be covered with dust screens to protect them against rainfall scouring and reduce water and soil loss.

c. Enclosures and temporary drainage ditches will be designed around the construction site and construction camp, and a grit chamber will be designed at the outlet of the drainage ditch.

d. Vegetation will be restored in time after construction.

Billboards and warning signs: Water and soil conservation billboards and warning signs will be set up at the entrance and exit of the construction camp.

Generally, through the above measures, the impact of water and soil loss during the construction period will be reduced.

7.2.7 Occupational Health and Safety

(1) Main impact factors

Using a large number of heavy construction machinery, tools, and materials, which will cause physical hazards, including noise, vibration, and dust; handling heavy objects and equipment, falling objects from high places; the risk of accidental falling during the operations on steel frames and around the foundation pit at the construction site; potential fire hazards of construction materials and in the construction camp, for which corresponding plans for occupational health and safe production management are needed.

(2) Occupational health and safety mitigation measures

1) A water supply system will be established in the construction camp to ensure a clean and sufficient fresh water supply; a sufficient number of portable toilets will be set up and kept clean and sanitary; waste bins will be set up and cleaned regularly to prevent disease outbreaks.

2) Personal protective equipment that meets domestic requirements will be provided, such as safety boots, helmets, gloves, protective clothing, goggles, and earplugs;

3) Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish an emergency hotline with Ezhou Central Hospital (Linkong Branch) in the project area, and provide each construction camp with a fully-equipped first aid station.

4) A professional safety management team will be established, a construction safety system will be formulated, and adequate funding for safety measures will be guaranteed;

5) Safety and health management plans (including emergency plans for safety accidents) will be formulated and submitted to the Supervisor/Employer for approval;

6) A full-time safety and health department will be established and full-time personnel will be assigned to be responsible for the occupational health, work safety, and working and living environment inspections for workers;

7) The equipment will be regularly maintained and inspected to ensure its normal operation, and the maintenance and inspection records will be kept and signed by relevant personnel. A system for the identification and rectification of potential safety hazards will be formulated and improved. Any identification and rectification will be truthfully documented, and a report will be immediately made to the on-site work safety management personnel. The recipient of the report will promptly address the issue.

8) Nationally regulated safety signs, danger warning signs and other signs and slogans will be hung in the construction area to prevent residents from entering the building protection scope and dangerous areas.

7.2.8 Preservation of Cultural Relics

According to the *Investigation Report on Cultural Relics in Comprehensive Bonded Zone at Ezhou Linkong Economic Zone of Hubei Province* and site visit, no known cultural heritage or archaeological sites were found at the project site. However, construction activities may disturb unknown underground cultural relics. To address this issue, corresponding procedures will be established to protect material cultural resources discovered during the construction phase. Handling procedures will be initiated as soon as material cultural resources are discovered.

(1) If any material cultural resources are found, the construction activities will be stopped

immediately and corresponding protective measures will be taken;

(2) In accordance with the laws of China, it is strictly prohibited to destroy, damage, deface, or conceal material cultural resources;

(3) The Cultural Relics Protection Bureau will be informed and consulted in time;

(4) Construction activities can only continue after a thorough investigation and permission from the local cultural relics bureau.

7.3 Environmental Impact Analysis and Mitigation Measures during the Operation Period of the Project

This chapter mainly analyzes the environmental impact of AIIB Project and Associated Facilities - Phase I Project during the operation period, and proposes targeted mitigation measures. Given that both AIIB Project and Associated Facilities - Phase I Project belong to the Hubei Global Air Cargo Logistics Hub Project, and most buildings and structures have the same functions and similar environmental impacts during the operation period, it is proposed to jointly analyze the environmental impact of buildings and structures with the same function. The specific division is as follows:

Table 7.3-1 Environmental Impact Assessment Methods for Buildings and Structures of Hubei Global Air Cargo Logistics Hub Project

Project category		Proposed assessment method
AIIB Project	Associated Facilities - Phase I Project	
Customs infrastructure (including Customs Inspection Warehouse, Customs Kiosk 2#, and Customs Perimeter Fencing)	Customs Inspection Center	The objects to be assessed, including Customs Inspection Center, International Cargo Terminal, International Express Center, Special Transportation Depot, Quarantine Treatment Center, and Customs Kiosk, will be subject to a joint assessment as customs infrastructure
	1# and 3# Customs Kiosks	
	International Cargo Terminal	
	International Express Center	
	Special Transportation Depot	
	Quarantine Treatment Center	
Bonded warehousing and processing (including Bonded Processing Warehouse and Bonded Logistics Warehouse)	Type-B Bonded Logistics Center	The objects to be assessed, including Bonded Processing Warehouse, Bonded Logistics Warehouse, and Dangerous Goods Warehouse, will be subject to a joint assessment as bonded warehousing and processing facilities
	Bonded Processing Plant	
	Bonded Logistics Warehouse	
	Dangerous Goods Warehouse	
Trade and cargo service facilities (including Duty Free Service Center and Comprehensive Office Building), etc.	Business Logistics Center	The objects to be assessed, including Duty Free Service Center, Comprehensive Office Building, and Trade and Logistics Building, will be subject to a joint assessment as trade and cargo service facilities
Low-carbon intelligent facilities (including photovoltaic facilities, intelligent operation system, and comprehensive information	/	The objects to be assessed are mainly photovoltaic facilities and are only involved in the AIIB Project

Project category		Proposed assessment method
AIIB Project	Associated Facilities - Phase I Project	
platform)		
Earthworks	/	The environmental impact is primarily concentrated during the construction period, with no assessment required during the operation period.
Supporting facilities (including Elevated Connecting Road 1#, Elevated Connecting Bridge 2#, Planned Road No.2 - Planned Road No.5, and outdoor works)	Garbage Disposal Station	Joint assessment
Capacity Building		No civil activities are involved, and no assessment is required.

7.3.1 Consumption of Resources and Energy

According to the *Feasibility Study Report for the AIIB-funded Hubei Global Air Cargo Logistics Hub Project*, the physical consumption and total comprehensive energy consumption (converted as standard coal) of energies involved in the operation process are shown in the following table:

Table 7.3-2 List of Energy Consumption for the Project

S/N		Description	Unit	Annual consumption	Converted as standard coal (tce)	Remarks
Hubei Global Air Cargo Logistics Hub Project	1	Water	10,000 t/a	58.10	149.37	Coefficient of conversion to standard coal: 0.2571kgce/t
	2	Electricity	10,000 kW·h/a	3923.01	4821.38	Coefficient of conversion to standard coal: 0.1229kgce/(kW·h)
	3	Total			4970.75	

7.3.2 Analysis of Generation and Discharge of Pollutants

7.3.2.1 Customs Infrastructure

(1) Customs Inspection Center

A centralized inspection mode is adopted for the Customs Inspection Center where inbound and outbound cargo are inspected. The inspection center is primarily designated for the inspection of imported and exported goods, cross-border e-commerce parcels, designated goods, and pharmaceuticals.

For the sorted small batches of damaged and rotten fruits, it is proposed to carry out harmless treatment using miniature harmless treatment equipment, employing processes such as high-temperature treatment, decomposition, cutting, grinding, sterilization, and drying. For

large quantities of damaged fruits, a qualified third-party quarantine treatment company (Wuhan Zhongli Wailun Cargo Handling Co., Ltd.) will be entrusted to conduct batch disinfection, transfer, and destruction for harmless treatment.

Analysis of generation and discharge of pollutants:

Inspection can be conducted by scanning equipment or in laboratories. No pollutants will be generated during inspection by scanning equipment, while certain wastes will be generated during inspection in laboratories, including:

Waste gas: volatile acid gases from hydrochloric acid, volatile organic compounds and aerosols containing microorganisms

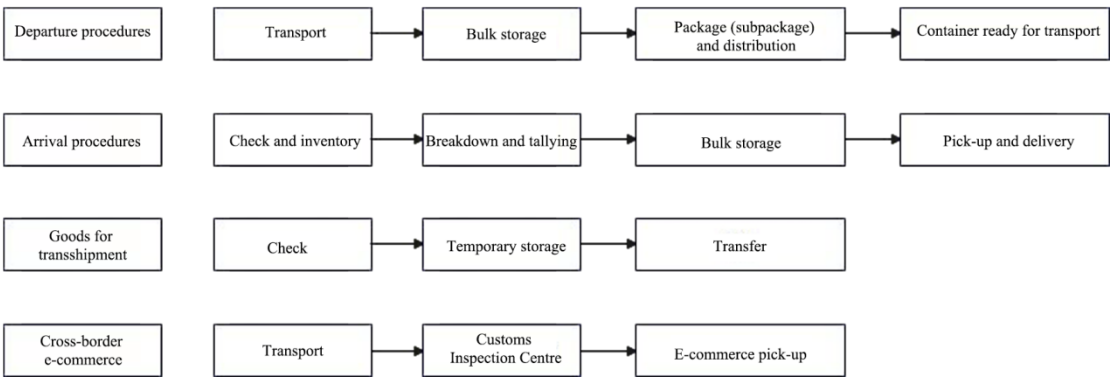
Wastewater: domestic sewage from staff and general laboratory wastewater;

Noise: equipment noise;

Solid waste: domestic waste; general industrial solid waste such as waste laboratory samples and waste packaging materials without toxic and harmful substances; hazardous waste such as laboratory wastes, laboratory liquid wastes, waste reagents and related packaging materials containing toxic and hazardous substances.

(2) International Cargo Terminal and International Express Center

The International Cargo Terminal and the International Express Center have similar functions, providing ground handling services for air cargo, including professional loading and unloading, handling, sorting, metering, packaging, tallying, and warehousing. The types of cargo handled primarily include international general cargo, cross-border e-commerce goods, valuables, live animals, and fruits. The main processing links are as follows:



Analysis of generation and discharge of pollutants:

Waste gas: tail gas from transport vehicles, waste gas from animal room, etc.;

Wastewater: domestic sewage from staff and animal wastewater generated from live animal consignments;

Noise: Noise generated by transport vehicles and equipment;

Solid waste: domestic waste produced by the staff and general solid waste such as waste packaging materials produced during sorting and packaging.

(3) Special Transportation Depot

Main function of Special Transportation Depot: Store nine categories of dangerous goods that do not contain items 3 and 4 substances of Class A and meet the requirements for safe transportation by air, including air-flammable solids, flammable liquids, flammable gases, corrosive goods, toxic goods, oxidizing goods and miscellaneous dangerous goods, explosives, and radioactive materials.

In principle, special cargoes are received and dispatched based on the principle of "transport upon arrival". That is, they are received and dispatched in strict accordance with flight information and requirements. Only when the aircraft fails temporarily can they be sent to the Special Transportation Depot for temporary storage. For any outbound cargo that cannot be transported after the allowed temporary storage period, the consignor will be required to retrieve the cargo.

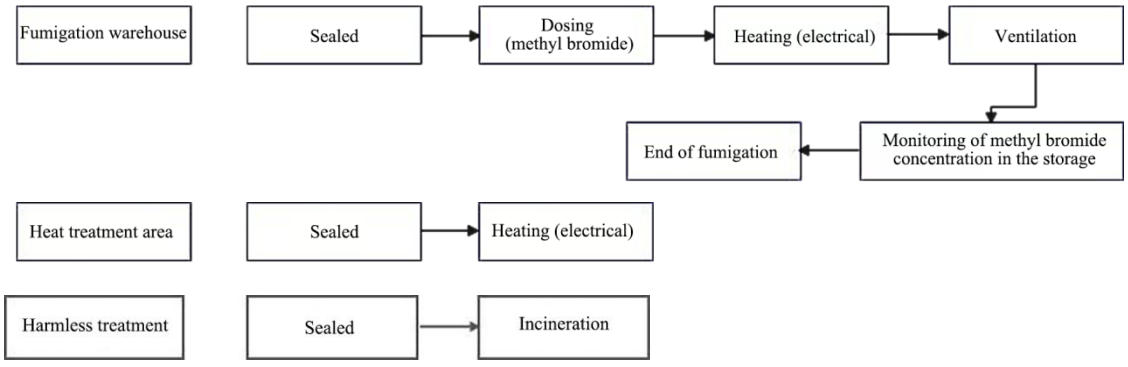
Analysis of generation and discharge of pollutants:

Each piece of special cargo is fully packaged and can be directly delivered without the need for further treatment. It is temporarily stored in the Special Transportation Depot for a short period of time and under normal circumstances, no pollutants are generated.

The main environmental impacts come from potential cargo leaks, fires, and other environmental risks caused by unforeseen factors, as well as secondary environmental impacts resulting from these incidents.

(4) Quarantine Treatment Center

TheQuarantine Treatment Center mainly includes a fumigation chamber, heat treatment area, and harmless treatment area, which are mainly used for quarantine treatment of inbound goods or articles with biosafety risks. For articles passing the quarantine, they will be sent to the fumigation chamber or heat treatment area for sterilization and disinfection. They will be heated under high temperatures in the heat treatment area, or inbound and outbound plants and other articles that may carry plant diseases and insect pests will be fumigated with methyl bromide in the fumigation chamber; Unqualified articles (including dead animals) will be sent to the harmless treatment area for incineration. The main process links are as follows:



Analysis of generation and discharge of pollutants:

Waste gas: waste gas from fumigation and waste gas from incineration;

Noise: noise from incinerators, high-temperature processors and other equipment;

Solid waste: domestic waste; hazardous waste such as fly ash from incinerators, waste activated carbon, waste packaging materials for methyl bromide, and waste disinfectants and their packaging materials; general industrial solid wastes such as incinerator slags.

(5) Customs Kiosk

Customs kiosks are primarily used for regulating vehicles entering and exiting. Electronic methods are employed for information collection, monitoring, and release management.

Analysis of generation and discharge of pollutants:

Wastewater: domestic wastewater produced by the staff;

Solid waste: domestic waste produced by the staff.

7.3.2.2 Bonded Logistics and Processing

(1) Bonded Processing Warehouse

The Bonded Processing Warehouse is mainly used for processing, assembly, manufacturing, and providing related supporting services for international inbound cargo.

Analysis of generation and discharge of pollutants:

Waste gas: processing waste gas, maintenance waste gas and other production waste gas;

Wastewater: domestic sewage from staff and production wastewater from inspection, maintenance, processing and other bonded processing;

Noise: noise generated by logistics transportation equipment and bonded processing machinery;

Solid waste: waste packaging materials produced during sorting, packaging and order inspection; inspection solid waste, maintenance solid waste, etc. generated during the bonded processing process (oily waste; domestic waste produced by the staff.

(2) Bonded Logistics Warehouse

The main purpose of the Bonded Warehouse is to provide bonded warehousing, bonded distribution, and international transit services for international inbound cargos, as well as related services such as simple processing related to circulation and value-added services for stored cargos.

Analysis of generation and discharge of pollutants:

Wastewater: domestic wastewater produced by the staff;

Noise: noise generated by transport vehicles and logistics equipment;

Solid waste: waste packaging materials produced during sorting, packaging and order inspection; domestic waste produced by the staff.

(3) Dangerous Goods Warehouse

The Dangerous Goods Warehouse is mainly used to store dangerous goods transported by air, including 9 classes of dangerous goods:

Class ① explosives;

Class ② gases, including flammable gas, non-flammable non-toxic gas and toxic gas;

Class ③ flammable liquid;

Class ④ flammable solids, substances liable to spontaneous combustion and substances emitting flammable gases when exposed to water;

Class ⑤ oxidizing substances and organic peroxides;

Class ⑥ toxic substances and infectious substances;

Class ⑦ radioactive substances;

Class ⑧ corrosives;

Class ⑨ miscellaneous dangerous goods.

The Dangerous Goods Warehouse shall be divided into 9 areas according to the types of dangerous goods, with sufficient safe distances considered. It shall be far away from buildings, more than 50m from important buildings and more than 30m from other buildings, and arranged in the downwind direction of the site area.

Analysis of generation and discharge of pollutants:

Dangerous goods are only stored in the warehouse for a short period of time without additional treatment. Under normal circumstances, no pollutants are generated.

The main environmental impacts come from potential leakage of dangerous goods, fire and explosion, and other environmental risks caused by unforeseen factors, as well as secondary environmental impacts resulting from these incidents.

7.3.2.3 Trade and Cargo Service Facilities

Trade and cargo service facilities mainly include Duty Free Service Center, Comprehensive Office Building, and Trade and Logistics Building. The three buildings are mainly used for office and living.

Analysis of generation and discharge of pollutants:

Waste gas: canteen cooking fume;

Wastewater: domestic sewage and catering wastewater;

Solid waste: domestic waste produced by the staff.

7.3.2.4 Low-carbon Intelligent Facilities

Low-carbon intelligent facilities mainly involve the construction of photovoltaic facilities, intelligent operation system, and comprehensive information platform. The photovoltaic facilities are mainly arranged on the roofs of buildings and structures such as logistics warehouse + customs inspection warehouse, express center, international express center, duty free service center, and comprehensive office building involved in the AIIB Project and Phase I Project. A total of 71,777 roof solar panels are proposed to be installed, with an installed capacity of 39,477 kW and a PV grid-connected energy output of about 34,568,342 kWh.

Analysis of generation and discharge of pollutants:

Wastewater: cleaning wastewater of solar panels, considering a cleaning water usage rate of 0.5L/m^2, a total laying area of 185,432m^2, and a cleaning frequency of 4 times per year, with a wastewater generation coefficient of 0.9, results in an output of cleaning wastewater of 333.78m^3/a;

Noise: vibration and other working noise generated by inverters and booster station transformers during operation in the process of solar power generation;

Solid waste: The waste battery panels generated during regular maintenance belong to general industrial solid waste, and will be subsequently recycled by the manufacturer. Waste electric melting and waste reactors generated during maintenance of solar panels belong to hazardous waste with a category of HW10 Polychlorinated (Brominated) Biphenyl Wastes and a waste code of 900-010-10, and will be entrusted to certified facilities for disposal.

Light pollution: It may affect birds' flying and surrounding personnel due to light reflection.

7.3.2.5 Supporting Facilities

The generation and discharge of pollutants at the Garbage Disposal Station are mainly analyzed. The main purpose of the Garbage Disposal Station is to transfer domestic wastes generated in the Project. After the domestic wastes in the project area are collected, the urban management department of the Linkong Economic Zone will regularly remove those wastes and transport them to the site of the Ecological Disposal Project for Domestic Wastes of Ezhou City of Huaxin Environmental Engineering (Ezhou) Co., Ltd. in Baihong Village, Yanji Town for harmless disposal.

Analysis of generation and discharge of pollutants:

Waste gas: odor, including H2S and NH3, generated during waste transfer;

Wastewater: landfill leachate and ground cleaning wastewater.

7.3.2.6 Summary of Generation of Pollutants

Waste gas:

Upon analysis, the sources of waste gas are animal room, quarantine treatment, laboratories, vehicles, and waste transfer station, as well as a certain amount of odor produced by septic tanks and other sewage pretreatment facilities of the Project.

The main waste gas pollutants are as follows:

Table 7.3-3 List of Generation of Waste Gas

Pollution category	Production process	Pollution Source	Main pollution factors
Waste gas	Inspection and test	Waste gas from experiments in test rooms	Hydrochloric acid, volatile organic compounds and microbial aerosol
	Animal room	Animal room	Hydrogen sulfide and ammonia gas
	Quarantine treatment	Fumigation chamber	Methyl bromide and volatile organic compounds
		Harmless incinerator	Sulfur dioxide, nitrogen oxides and particles
	Bonded processing	Processing waste gas and maintenance waste gas	Volatile organic compounds, particulate matter, etc.
	Operation of automobiles	Tail gas from automobiles	Carbon monoxide, nitrogen oxides and volatile organic compounds
	Waste transfer	Waste transfer station	Hydrogen sulfide and ammonia gas
	Sewage treatment	Septic tanks and other sewage pretreatment facilities	Hydrogen sulfide and ammonia gas

Wastewater:

Upon analysis, the wastewater generated includes domestic sewage from personnel, wastewater from animal room, and laboratory wastewater. Besides, it includes water for greening, road flushing, warehouse flushing, and other purposes during the operation of the Project.

According to the *Feasibility Study Report for the AIIB-funded Hubei Global Air Cargo Logistics Hub Project*, the maximum daily water consumption of the Project is 1,591.7 m^3/d, of which the maximum water consumption for greening is 176m^3/d (excluding reused rainwater), the maximum water consumption for road and garage flushing is 218m^3/d, and the combined maximum water consumption for personnel living, office, ground washing in operation areas, inspections, experiments, etc. totals 1,053m^3/d. Additionally, unforeseen water consumption amounts to 144.7m^3/d.

No wastewater will be produced subsequently from the water for greening; The rest of the wastewater is discharged into the sewage pipe network after being treated by septic tanks and other pretreatment facilities in the Project.

According to the maximum daily water consumption, given that the daily average water consumption is calculated as 80% of the maximum water consumption and the drainage volume is calculated as 85% of the water consumption, the output of daily average sewage of the Project is approximately 1,082.36m^3/d.

The main pollutants in sewage are as follows:

Table 7.3-4 List of Generation of Wastewater

Pollution category	Generation process/pollution source	Main pollution factors
Wastewater	Daily office and living, animal room, and laboratory	COD, BOD, total suspended solids (SS), ammonia nitrogen, total nitrogen, and total phosphorus
	Ground flushing water	COD and SS
	Waste transfer	COD, BOD, SS, and ammonia nitrogen

Noise:

Upon analysis, the sources of ground noise are transportation and equipment.

Table 7.3-5 List of Generation of Noise

Pollution category	Generation process/pollution source	Main pollution factors
Noise	Logistics equipment, process treatment equipment, vehicles, etc.	Leq (A)

Solid waste:

Upon analysis, the sources of solid wastes are office and living of personnel, sorting and inspection of cargo, quarantine treatment, bonded processing and photovoltaic power generation, as well as sludge produced by septic tanks and other sewage pretreatment equipment.

According to the feasibility study report of the Project, the number of staff is calculated as 10,000. If the waste output per unit population is calculated as 1.0kg/person·d, the output of domestic waste during the operation period will be approximately 10t/d, i.e. approximately 3,650t/a; As 5,000 employees or so dine in the canteen, the output of kitchen waste will be 182.5 t/a if calculated as per 0.1 kg/person·d; The amount of sludge from septic tanks is calculated as per 0.4 L/person·d, the sewage retention time is 12h, and the cleaning cycle is 180 days, totaling about 242 t/a. The grease output of oil-water separators is approximately 2.56 t/a. The categories of solid wastes are as follows:

Table 7.3-6 List of Generation of Solid Waste

Pollution category	Production process	Category	Main pollution factors
Solid waste	Daily office and canteen catering	Domestic waste	Domestic waste* and kitchen waste
	Sewage treatment facilities	General solid waste	Grease from oil-water separators, sludge from septic tanks, and other sewage treatment facilities
	Sorting, disassembly and assembly of cargo	General solid waste	Waste packaging materials
	Inspection of cargo	General solid waste	Waste laboratory samples and waste packaging materials without toxic and harmful substances
		Hazardous	Laboratory wastes, laboratory liquid wastes,

		waste	waste reagents and related packaging materials containing toxic and hazardous substances
	Quarantine treatment	General solid waste	Incinerator slag
		Hazardous waste	Fly ash from incinerators, waste activated carbon, waste packaging materials for methyl bromide, and waste disinfectants and their packaging materials
	Bonded processing	General solid waste	Waste packaging materials produced during sorting and packaging
		Hazardous waste	Oily waste materials generated during overhaul and maintenance
	PV power generation	General solid waste	Waste battery panel
		Hazardous waste	Waste electric melting and waste reactors generated during maintenance of solar panels

*According to the feasibility study report of the Project, the number of staff is calculated as 10,000. If the waste output per unit population is calculated as 1.0kg/person·d, the domestic waste from personnel will be about 10t/d.

7.3.3 Main Environmental Impacts of the Project and Mitigation Measures

The impact of the Project on the environment during the operation period is mainly manifested in waste gas, wastewater, noise, solid waste, and environmental risks, without affecting ecology.

7.3.3.1 Waste Gas

The following pollution control measures are taken for waste gas pollutants generated in the Project:

(1) Waste gas from experiments in the Customs Inspection Center

Fume hoods, gas collection hoods + multi-stage activated carbon adsorption devices + 20m high exhaust funnels are adopted for chemical laboratories; The waste gas from experiments is collected by fume hoods and gas collection hoods, discharged into the waste gas pipeline in the building, and finally treated by multi-stage activated carbon adsorption devices. The tail gas is discharged through 20m high exhaust funnels.

After activated carbon adsorption treatment, the emission concentration of volatile organic compounds (calculated by non-methane hydrocarbon) and hydrogen chloride can meet the requirements of emission limit of non-methane hydrocarbon (120mg/m^3) and hydrogen chloride (100mg/m^3) specified in the *Integrated Emission Standard of Air Pollutant*s (GB 16297-1996).

Biosafety cabinets + high-efficiency filters + 20m high exhaust funnels are adopted for biology laboratories. The waste gas from biological experiments is collected by biosafety cabinets and then filtered by the rear high-efficiency filters to adsorb the aerosol generated by experiments. The construction of biological laboratories meets the *Laboratories - General Requirements for Biosafety* (GB19489-2008).

(2) Waste gas from animal room

Live animal cargoes at the International Cargo Terminal are stored in separate areas, with an independent ventilation system. The waste gas is deodorized by rear UV photolysis facilities and then discharged through 15m high exhaust funnels. The concentration of H_2S, NH_3, and odor in the waste gas can meet the limit requirements of the *Emission Standards for Odor Pollutants* (GB14554-93).

(3) Waste gas from quarantine treatment

The fumigation room of the Quarantine Treatment Center is provided with an exhaust inlet at one end and an air supply outlet at the other end. Multi-stage activated carbon adsorption boxes and induced draft fans are set between the exhaust inlet and the air supply outlet. The tail gas is discharged through 15m high exhaust funnels.

The waste gas from the harmless incinerator is discharged through 15m high exhaust funnels after deacidification by water bath curtain, cooling dust removal + bag dust removal, and activated carbon treatment.

The emission concentration of methyl bromide in the treated fumigation chamber can meet the requirement of emission limit (20mg/m^3) of methyl bromide in the *Integrated Emission Standard of Air Pollutants in Shanghai* (DB31/933-2015); The emission concentration of volatile organic compounds (calculated by non-methane hydrocarbon) can meet the requirements of emission limit of non-methane hydrocarbon (120mg/m^3) specified in the *Integrated Emission Standard of Air Pollutants* (GB 16297-1996); The treated waste gas from incinerators can meet the special emission concentration limit of air pollutants in Table 3 of the *Emission Standard of Air Pollutants for Coal-burning Oil-burning Gas-fired Boiler* (GB13271-2014).

(4) Waste gas from bonded processing

Multi-stage activated carbon adsorption devices + 15m high exhaust funnels are adopted in the Bonded Processing Center. Closed operation rooms, gas collection hoods, and other waste gas collection measures are adopted in areas involving the emission of volatile organic compounds such as package printing, spraying, and maintenance in the processing center. The collected processing waste gas is discharged into the waste gas pipeline in the building, and led to the activated carbon adsorption device on the roof for treatment. The tail gas is discharged through 15m high exhaust funnels.

(5) Canteen cooking fume

All canteens of the Project shall be equipped with range hoods and oil fume outlets in accordance with the *Emission Standard of Cooking Fume (Trial)* (GB18483-2001).

(6) Tail gas from vehicles

All vehicles entering and leaving the project site must be provided with inspection certificates by the vehicle owner. The tail gas from vehicles shall meet the requirements of the *Limits and Measurement Methods for Emissions from Light-Duty Vehicles (China Stage VI)* (GB18352.6-2016) and *Limits and Measurement Methods for Emissions from Heavy-Duty Diesel Vehicles (China Stage VI)* (GB17691-2018). At the same time, green

belts are set up around roads and parking lots within the scope of the Project to further reduce the impact of tail gas from vehicles on the air.

(7) Sewage treatment and odor from waste transfer station

Septic tanks are primary sewage pretreatment facilities that produce odor in the Project. They are underground facilities, built far away from personnel activity areas, and the impact of odor on the surrounding area is reduced by strengthening the surrounding greening.

During the operation of the waste transfer station of the Project, the odor generated due to the accumulation of domestic waste is reduced every day through regular transport and ground flushing. The waste transfer station is far away from densely populated areas of the Project, and green belts are set around to further reduce odor impact.

(8) Summary

The project site is characterized by favorable atmospheric diffusion conditions and few sensitive receivers. After reasonable treatment, the waste gas will be discharged in compliance with standards, resulting in minimal impact on the atmospheric environment.

7.3.3.2 Wastewater

The following pollution control measures are taken for waste gas pollutants generated in the Project:

(1) Domestic sewage and cleaning wastewater from general warehouse

Domestic sewage from personnel and cleaning wastewater from general warehouse are discharged into the nearby septic tank for pretreatment by the sewage pipe network in each structure of the Project, and then discharged into the municipal sewage pipe network after reaching Class III standard specified in the *Integrated Wastewater Discharge Standard* (GB 8978-1996).

(2) Catering wastewater

Canteens of the Project are equipped with oil-water separators. After oil separation treatment, catering wastewater will be discharged into septic tanks together with domestic sewage of the structure where it is located for pretreatment, and then discharged into the municipal sewage pipe network after reaching Class III standard specified in the *Integrated Wastewater Discharge Standard* (GB 8978-1996).

(3) Wastewater from animal room and laboratory

The animal room of the International Cargo Terminal and the Customs Inspection Center are equipped with integrated sewage treatment equipment respectively. Animal wastewater and laboratory wastewater are disinfected and precipitated before being discharged into the sewage pipe network of the structure where they are located, and then discharged into the municipal sewage pipe network after being pretreated by septic tanks to reach the Class III standard specified in the *Integrated Wastewater Discharge Standard* (GB 8978-1996).

(4) Wastewater from bonded processing

The Bonded Processing Center is equipped with a buried oil separation and sedimentation tank. Oily wastewater generated during processing and maintenance are treated for oil separation and sedimentation, and then discharged into the municipal sewage pipe network after reaching the Class III standard specified in the *Integrated Wastewater Discharge Standard* (GB 8978-1996).

(5) Waste transfer station

The waste transfer station is equipped with integrated sewage pretreatment facilities, and the treatment process of "oil removal + sedimentation + anaerobic + biochemical treatment" is adopted to pretreat waste leachate and cleaning wastewater from the transfer station. The waste leachate and leaning wastewater from the transfer station will be discharged into the municipal sewage pipe network after reaching the Class III standard specified in the *Integrated Wastewater Discharge Standard* (GB 8978-1996).

(6) Final discharge destination and environmental impact of wastewater in the Project

The Project is located within the service scope of the reclaimed water plant in the aerotropolis area, and the surrounding sewage pipe network has been completed, meeting the access conditions.

The reclaimed water plant in the aerotropolis area is completed, with a treatment scale of 25,000 m^3/d. The current actual treatment capacity is approximately 5,000 m^3/d, and the remaining treatment capacity is 20,000 m^3/d. The total sewage discharge during the operation period of the Project is approximately 1,082.36m^3/d, so the reclaimed water plant in the aerotropolis area has sufficient treatment capacity to receive the sewage generated by the Project.

The sewage of the Project is discharged into the Yangtze River (Ezhou section) after being further treated by the reclaimed water plant in the aerotropolis area to reach the Class I A standard of the *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB 18918-2002). The wastewater is discharged as per national standards, and will not have an obvious adverse impact on the water environment of the Yangtze River.

7.3.3.3 Noise

(1) Ground noise

During the operation period, the ground noise of the Project mainly comes from utility equipment such as transport vehicles, loading and unloading equipment, processing machinery, and heating and cooling equipment. The intensity of the above noise sources is generally 75dB(A)~85dB(A). To reduce the adverse impact of noise, it is proposed to take the following control measures for noise pollution:

1) Set clear speed limit and horn prohibition signs at the entrances and exits, and strengthen the management of incoming and outgoing vehicles to maintain smooth traffic flow.

2) Select low-noise equipment during equipment selection and set up vibration reduction foundations to reduce noise impact from the source.

3) Adopt measures such as mufflers, sound insulation, and soundproof covers to reduce the adverse environmental impact of noise through transmission paths;

3) Place noise-generating equipment indoors to achieve noise reduction through building sound insulation;

4) Set up green landscape around roads and buildings to absorb noise through greenery.

After the above measures are taken, the noise source intensity can generally be reduced to 50dB(A)~70dB(A).

(2) Aircraft noise

1) There are still 4 villages (Xinwan Village, Jiazheng Village, Duwan Village and Chehu Village) with 826 households not moved out from the area where the aircraft noise Lwecpn generated by cargo flights of the Project exceeds 75dB.

2) The areas where the aircraft noise Lwecpn generated by cargo flights of the Project exceeds 75dB are included in the area where the accumulated aircraft noise Lwecpn of Huahu Airport exceeds 75dB. The impact area of aircraft noise of the Huahu Airport will not be increased due to the operation of the Project, and accordingly, residential areas demolished due to environmental protection issues will not be increased due to the operation of the Project.

See the *Aircraft Noise Management Framework* for details.

(3) Superimposed impact of aircraft noise and ground traffic noise

According to the *Environmental Impact Report on Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone*, the noise prediction results for the associated facility, Wuchu Avenue, indicate that the impact range of ground traffic noise extends within 200 m on both sides from the centerline of Wuchu Avenue. All residential areas within this impact range fall within the relocation scope due to aircraft noise from Ezhou Huahu International Airport. As of now, all these residential areas have been relocated. Therefore, there are no sensitive receivers within the overlapping impact area of ground traffic noise and aircraft noise. If new sensitive receivers are planned within the impact area of ground traffic noise on both sides of the road, it is necessary to conduct a predictive analysis of the combined impact of ground traffic noise and aircraft noise, and implement appropriate mitigation measures.

See the *Aircraft Noise Management Framework* for details.

7.3.3.4 Solid Waste

The following pollution control measures are taken for waste gas pollutants generated in the Project:

(1) Domestic waste

Sufficient waste containers shall be set up in personnel activity areas of the Project. Domestic

waste shall be collected and transported to the Project's waste transfer station by cleaners every day.

The environmental sanitation department of the Linkong Economic Zone shall regularly transport domestic waste from the waste transfer station of the Project every day, and send domestic waste to Ezhou Municipal Domestic Waste Ecological Treatment Project of Huaxin Environmental Engineering (Ezhou) Co., Ltd. in Baihong Village, Yanji Town for harmless treatment.

(2) Kitchen waste

According to the *Notice of the Municipal People's Government on Printing and Distributing Management Measures for Kitchen Waste in Ezhou City* (EZZG [2023] No.1), a qualified unit will be entrusted for kitchen waste collection, transportation, and disposal.

(3) Sludge from sewage treatment

The oil and grease from the oil-water separator and sludge from the septic tanks will be regularly pumped and disposed of by the Ezhou Sanitation Department. Since oily waste, waste liquids, and other toxic and hazardous substances from each unit are treated as hazardous waste and outsourced for disposal, they will not enter the integrated wastewater treatment facilities of each unit. The sludge from the wastewater treatment of each unit is classified as general industrial solid waste and will be regularly collected and transported by the operating unit to a municipal landfill.

(4) General solid waste

Except for the sewage treatment station, the general solid waste produced in the Project mainly includes waste laboratory samples and waste packaging materials without toxic and harmful substances, incinerator slags, and waste battery panels. Waste packaging materials and waste battery panels are recycled by the manufacturer, and incinerator slags are planned for comprehensive utilization through external sale.

(5) Hazardous waste

The hazardous waste of the Project mainly includes waste activated carbon (hazardous waste category HW49), laboratory wastes (liquid wastes, waste packaging materials, and waste reagents) (hazardous waste category HW49), oily waste materials (solid waste from inspection, solid waste from maintenance, and oily sludge) (hazardous waste category HW08), waste electric melting, and waste reactors (hazardous waste category HW10).

The hazardous waste generated in the Project is temporarily stored by the generation unit. Temporary storage facilities must meet the Standard for Pollution Control on Hazardous Waste Storage (GB 18597—2023), and then delivered to a qualified unit for safe disposal.

According to the *List of Units with Hubei Hazardous Waste Business License* (October 31, 2023) that was published by the Department of Ecology and Environment of Hubei Province, there is no HW08 and HW49 waste disposal units in Ezhou City. Considering that the Linkong Economic Zone is close to Wuhan and Huangshi, Wuhan Environmental Investment & Development Co., Ltd. (the Permit No.: S42-01-14-0128), Wuhan Phoenix Green Trading Co., Ltd. (the Permit No.: S42-01-07-0016), Everbright Greentech Solid Waste Disposal

(Huangshi) Co., Ltd. (the Permit No.: S42-02-04-0033) and other units with the qualification of disposing HW08 and HW49 wastes can be entrusted for safe disposal.

(6) Summary

Solid wastes of the Project have been provided with reliable disposal methods, without external discharge, thus having no impact on the external environment.

7.3.3.5 Environmental Risk

The environmental risks of the Project mainly come from (1) environmental risks such as **leakage, fire, and explosion** and secondary environmental impacts caused by unexpected factors of hazardous substances used in fumigation chambers, laboratories of the Customs Inspection Center, and Special Transportation Depot of the Project; (2) environmental risks such as **leakage, fire, and explosion** and secondary environmental impacts caused by unexpected factors of dangerous goods in the Dangerous Goods Warehouse of the Project.

Due to the transportation of dangerous goods via Wuchu Avenue, the environmental risks associated with the transportation process will be included in the section for risks associated with Wuchu Avenue during the operation period for analysis.

The hazardous substances involved in the Project are as follows:

(1) Fumigation chamber: methyl bromide;

(2) Laboratory of the Customs Inspection Center: hydrochloric acid, sulfuric acid, nitric acid, perchloric acid, ammonia water, n-hexane, acetone, petroleum ether, 40% formalin, methanol, diethyl ether, ethyl acetate, formic acid, and other chemical agents;

(3) Special Transportation Depot: Store nine categories of dangerous goods that do not contain items 3 and 4 substances of Class A and meet the requirements for safe transportation by air under special circumstances, including air-flammable solids, flammable liquids, flammable gases, corrosive goods, toxic goods, oxidizing goods and miscellaneous dangerous goods, explosives, and radioactive materials;

(4) Dangerous Goods Warehouse: 9 categories of dangerous goods to be transported by air, including Class ① explosives; Class ② gases, including flammable gas, non-flammable non-toxic gas and toxic gas; Class ③ flammable liquid; Class ④ flammable solids, substances liable to spontaneous combustion and substances emitting flammable gases when exposed to water; Class ⑤ oxidizing substances and organic peroxides; Class ⑥ toxic substances and infectious substances; Class ⑦ radioactive substances; Class ⑧ corrosives; Class ⑨ miscellaneous dangerous goods.

It is proposed to take the following risk prevention measures in terms of design and emergency to avoid environmental risks such as leakage, fire and explosion of the above hazardous substances:

(1) Design

1) Hazardous substances shall be stored in different areas by classification;

2) Dangerous goods and chemicals are transported by special vehicles into and out of a separately built dangerous goods warehouse or designated laboratory. Dangerous goods may be stored in storage rooms for dangerous goods of the whole ULD (referring to the unit load device used to carry cargo by air), kept on trailers. Chemical agents should be stored in designated reagent cabinets within the laboratory.

3) The fumigation chamber, special transportation depot, customs inspection center laboratory, and dangerous goods warehouse shall meet the advanced environmental protection and safety requirements at home and abroad, meet the requirements of sun protection, moisture prevention, ventilation, lightning protection, fire prevention, and anti-static electricity, and be provided with obvious warning signs.

4) Smoke alarms and fire warning facilities shall be provided to realize accident early warning and rapid response, and shall be managed by special personnel.

5) The quality, quantity, packaging, and leakage of hazardous chemicals and chemical materials shall be strictly inspected during warehousing; The warehoused hazardous chemicals shall be regularly inspected during the storage period. If any quality change, package damage, or leakage is found, it shall be handled in time; Dangerous goods and chemical agents shall be loaded, unloaded, and transported as per relevant regulations for gentle loading and unloading. It is strictly prohibited to fall, hit, strike, drag, dump and roll them;

6) A management record for dangerous goods and chemicals shall be established. Dangerous goods and chemicals shall be inspected, accepted, and registered before warehousing and delivery in terms of quantity, packaging, danger signs, etc., and can only be warehoused and delivered after verification;

7) Special personnel shall be assigned to regularly inspect the fumigation chamber, special transportation depot, customs inspection center laboratory, and dangerous goods warehouse, and make inspection records;

8) The management personnel and employees for dangerous goods and chemicals shall be regularly trained to improve their management, operation level, and prevention awareness.

(2) Management

1) The project owner shall establish a dangerous goods management system, appoint dedicated personnel for dangerous goods management, and provide regular training for management staff;

2) Establish a dangerous goods risk investigation system, regularly inspect dangerous goods storage areas, maintain records, and promptly report any identified risks to environmental and social specialists;

3) Establish a dangerous goods environmental emergency response system. For the special transportation depot, dangerous goods warehouse, and other areas with environmental risks,

the *Emergency Plan for Environmental Emergencies* shall be prepared and emergency drills shall be conducted regularly.

(3) Emergency response

1) Different emergency supplies shall be provided for the storage areas of Class 9 dangerous goods transported by air (chemical agents shall be stored according to their properties with reference to corresponding dangerous goods):

For Class 1 explosives, the warehouse is equipped with fire alarm detector, automatic dry powder extinguisher, automatic water sprinkler extinguisher, exhaust fan, cofferdam, accident wastewater collection well, foam extinguisher, and sand;

For Class 2 gases, including flammable gas, non-flammable non-toxic gas and toxic gas, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, automatic water sprinkler extinguisher, exhaust fan, cofferdam, accident wastewater collection well, foam extinguisher, and sand;

For Class 3 flammable liquid, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, exhaust fan, cofferdam, foam extinguisher, and sand;

For Class 4 flammable solids, substances liable to spontaneous combustion and substances emitting flammable gases when exposed to water, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, exhaust fan, cofferdam, foam extinguisher, and sand;

For Class 5 oxidizing substances and organic peroxides, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, exhaust fan, cofferdam, foam extinguisher, and sand;

For Class 6 toxic substances and infectious substances, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, exhaust fan, cofferdam, foam extinguisher, and sand;

For Class 7 radioactive substances, the warehouse is equipped with radiation detector, automatic dry powder extinguisher, filtration and ventilation facilities, cofferdam, foam extinguisher, and sand. The walls and doors must be firm enough to reduce the radiation level of radioactive materials to a certain extent;

For Class 8 corrosives, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, automatic water sprinkler extinguisher, exhaust fan, cofferdam, accident wastewater collection well, foam extinguisher, and sand;

For Class 9 miscellaneous dangerous goods, the warehouse is equipped with gas detector, fire alarm detector, automatic dry powder extinguisher, automatic water sprinkler extinguisher, exhaust fan, cofferdam, accident wastewater collection well, foam extinguisher, and sand;

2) With a safety protection distance of 50m in the vicinity, the Dangerous Goods Warehouse

will be a separate courtyard surrounded by protective nets. Open flame and smoking are strictly prohibited in the warehouse and its nearby areas.

3) The Dangerous Goods Warehouse shall be equipped with protective clothing, gas masks, and other necessary items to ensure timely and effective emergency measures and personal protection in case of dangerous goods leakage or accidents, minimizing the risk of sudden environmental incidents. Protective masks mainly include filtered gas masks and isolated oxygen or air masks. The dangerous goods warehouse shall be equipped with personal protective articles. Protective articles frequently used by individuals mainly include work clothes, work caps, boots and shoes, rubber gloves, and masks;

4) An emergency pool with a volume of not less than 1550m^2 shall be set up, and the accident wastewater generated by water sprinkler extinguishers shall flow into the accident pool through the accident wastewater collection well in the warehouse.

7.3.3.6 Light Pollution

The solar cell module bracket adopted for PV power generation of the Project is a fixed type, designed with a tilt angle of 10° for installation. The brackets are approximately 1.5m high to minimize the reflection of sunlight to the greatest extent so as to improve its power generation efficiency. In addition, polycrystalline silicon solar cells are proposed to be used in the Project, which has an outer layer of special tempered glass. The tempered glass is characterized by firmness as well as resistance to wind, frost, rain, snow, gravel, and hail. It has an extremely high light transmittance of over 95%. According to the relevant provisions of the current national standard *Optical and Thermal Performance of Glass Curtain Wall* (GB/T18091-2000), glass curtain walls set up on both sides of urban main roads, overpasses, and viaducts shall be made of low-emissivity glass with a reflectivity of less than 16%. According to this standard, the polycrystalline silicon plates of photovoltaic arrays with high light transmittance have very little reflected light with a low reflectivity of only 5%, and will not cause obvious light pollution, ensuring that drivers on city roads near the photovoltaic power station will not experience glare, and bird flight patterns or aircraft safety will not be affected.

7.3.3.7 Occupational Health and Safety

According to the characteristics of production activities during the operation period of the Project, main occupational health and safety risks include potential safety risks to personnel caused by logistics and operation of processing equipment and potential health risks to personnel caused by equipment noise and exposure to chemicals used in working links such as inspection and experiments.

To mitigate potential health and safety risks to workers, the following measures are proposed:

(1) Prepare the environmental and social management plans for the operation phase, and regularly provide workers with relevant training.

(2) Provide workers with free personal protective equipment, including goggles, gloves, and safety shoes; provide noise insulation equipment for workers in high-noise environments.

(3) Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish an emergency hotline with Ezhou Central Hospital (Linkong Branch) located in the project area.

(4) Train workers in occupational health and safety, and emergency response. Train personnel in positions in contact with chemicals and hazardous wastes in special occupational health and safety, appropriate to the content of their job responsibilities.

(5) Restrict the access of the public to the project operation area.

7.4Environmental Impact Analysis and Mitigation Measures during the Operation Period of Wuchu Avenue

7.4.1 Analysis of Generation and Discharge of Pollutants

The pollution sources during the operation period of Wuchu Avenue mainly include automobile tail gas emitted by motor vehicles, traffic noise, rainwater runoff on pavement, domestic waste along the road, and the impact of road barrier on the ecological environment along the road. The pollution process during the operation period is shown in the following figure.

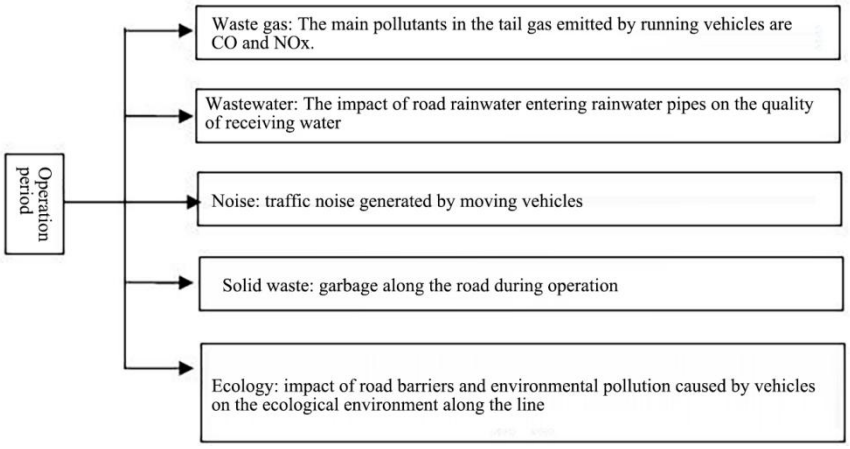


Figure 7.4-1 Pollutant Generation Links during the Operation Period of the Project

7.4.2 Main Environmental Impacts and Mitigation Measures

7.4.2.1 Waste Gas

(1) Main environmental impacts

The waste gas during the operation period mainly comes from the tail gas emitted by vehicles running on the road, including main pollutants such as NO_2, CO, etc. The Project is planned to be put into operation in 2024. Pollutants from automobiles shall comply with China VI vehicle emission standards as required. The single vehicle emission factors of vehicles refer

to the maximum limits of China VI vehicle emission standards in Table 30. See the following table for the single vehicle emission factors of vehicles.

Table 7.4-1 Recommended Emission Factors of Pollutants in Tail Gas from Single Vehicle Unit: g/km•Nr.

Vehicle type	NOx	CO
Small vehicle	0.06	0.7
Medium vehicle	0.075	0.88
Large vehicle	0.082	1

The impact of air pollutants increases with the increase of pollution source intensity. The larger the traffic flow, the greater the emission of tail gas from automobiles. The daily average emission source intensity of NOx in each road section is calculated respectively according to the predicted traffic volume, vehicle type ratio, day-night ratio, hourly peak ratio, and calculated vehicle speed in each forecast year, and the daily average emission source intensity of NO_2 is converted according to the correlation coefficient. The emission of pollutants is shown in the following table.

Table 7.4-2 Emission Source Intensity of Pollutants in Tail Gas from Automobiles Unit: g/s

Short term (2024)		Medium term (2034)		Long term (2043)	
NO_2	CO	NO_2	CO	NO_2	CO
0.735	9.648	1.959	25.726	3.118	40.966

Note: The emission of NO2 is calculated according to the proportion of NOx, Q(NO2)/Q(NOx)=0.9

The maximum tail gas from automobiles during the operation period of the Project is NO_2:3.118 g/s and CO:40.966 g/s. Compared with similar projects, it can meet the requirements of Class II standard in the *Ambient Air Quality Standards* (GB3095-2012).

After the Project is opened to traffic, ethanol gasoline will be adopted for most vehicles. Relevant data show that ethanol gasoline for vehicles (containing 10% fuel ethanol) can reduce CO and HC in tail gas from automobiles by 30%+ and 10% respectively, thus significantly reducing the concentration of pollutants such as nitrogen oxides and hydrocarbons in tail gas from automobiles. Therefore, the Project has little impact on ambient air during the operation period.

(2) Mitigation measures

The Employer shall take measures such as improving the regional road network and diverting vehicles as soon as possible by strengthening the greening on both sides of the road, strengthening road management during the operation period, restricting poorly maintained and overloaded vehicles from using the road, and reducing the occurrence of slow-moving traffic to reduce the impact of tail gas from automobiles during the operation period. The specific countermeasures to mitigate air pollution are as follows:

① Strengthen traffic management, enforce strict vehicle management systems, and strictly implement national motor vehicle emission standards. Prohibit vehicles with excessive exhaust emissions and vehicles carrying bulk materials without covering measures from accessing the road.

② Improve road maintenance and cleaning to keep road conditions good and reduce dust and pollution in tail gas from automobiles.

③ Complete the construction of green belts as soon as the main works are finished, combining points, lines, and surfaces with a mix of trees, shrubs, flowers, and grasses. Use plants' adsorption capabilities to reduce the impact of vehicle exhaust on the plots on both sides of the project. Strengthen the maintenance of the green belts along the line, reduce dead branches and diseased plants, and maintain the pollution reduction function of the greenery.

7.4.2.2 Wastewater

(1) Main environmental impacts

During the operation period, surface water environmental pollution is mainly manifested as rainwater runoff on pavement. The rainwater on the road pavement will enter the receiving water through municipal drainage pipe network. This situation will have a certain impact on the water quality, mainly in the early stage, generating pollutants such as SS and petroleum.

Based on the analogy research data, when the pavement pollution load is relatively consistent, the concentration of pollutants such as suspended solids and oil substances in the pavement runoff is relatively high within 30 minutes from the beginning of rainfall to the formation of the surface runoff. After half an hour, the concentration decreases rapidly with the extension of rainfall duration. After 40 minutes of rainfall, the pavement is basically washed clean.

When an automobile is poorly maintained, breaks down, or gets into an accident, it may leak gasoline and engine oil, polluting the pavement. Besides, silt carried by the vehicle's tires may remain on the pavement and enter the rainwater collection pipeline after being washed by rainwater. According to the relevant measured results and literature of road rainwater in Hubei Province, the concentration of SS and petroleum, both of which are main pollutants, in the rainwater runoff on pavement is approximately 220mg/L and 7mg/L respectively.

A new rainwater pipe network will be built for the road. Rainwater is discharged into the Huama Lake through the rainwater pipe network, and finally into the Yangtze River (Ezhou section). After sedimentation or degradation of suspended solids and silt in water, the concentration of pollutants will gradually decrease. During the operation period, the runoff from the roads makes a minor contribution to various pollutants in nearby water bodies. With the elapse of rainfall time, the impact of rain will gradually diminish, and the Huama Lake, where rainwater ultimately drains, will not be significantly impacted.

(2) Mitigation measures

① Set up rainwater and sewage pipelines for the road surface and roadbed according to the road environmental protection design specifications. Road surface drainage shall avoid direct connection with water bodies.

② To protect the water quality of the Huama Lake water system along the route, prohibit vehicles with oil leaks, trucks without protective tarps, or overloaded vehicles from accessing the road to prevent oil leakage or cargo spillage from causing water pollution and safety hazards. Vehicles transporting coal, lime, cement, and other easily dusting bulk materials

must be covered with tarpaulins to prevent runoff sewage formed by material scattering from affecting the water quality.

③ Regularly inspect and clean the road rainwater drainage system to ensure smooth flow and maintain good condition.

④ Warning signs such as speed limit and no overtaking shall be set up at conspicuous positions on both sides of the route to remind passing drivers and passengers to strengthen their awareness of environmental protection. Vehicles carrying dangerous goods shall pass at a limited speed, so as to prevent the accidental pollution of liquid hazardous chemicals or petroleum from affecting the water quality of sewage receiving waters.

7.4.2.3 Noise

(1) Main environmental impacts

The acoustic environmental impact during the operation period of the Project mainly comes from traffic noise generated by vehicles passing through the road.

According to the special noise assessment in the Form of Environmental Impact Report on Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone, during the noise assessment period, sensitive receivers within 200m on both sides of the center line of Wuchu Avenue include 7 residential areas such as Wangjiazui, Caopuwan, Yanjiaranpu, Daoshiwan, Shaojiawan 1, Sunjiawan and Shaojiawan 2.

According to the standard system adopted in the Project, Class 4a standard limits specified in the *Environmental Quality Standard for Noise* (GB3096-2008) shall be implemented within 35m on both sides of Wuchu Avenue. Among the 7 residential areas, except for residential areas of Yanjiaranpu and Sunjiawan, the other 5 residential areas are located within 35m on both sides of Wuchu Avenue, which shall comply with Class 4a standard specified in the *Environmental Quality Standard for Noise* (GB3096-2008); residential areas of Yanjiaranpu and Sunjiawan shall comply with Class 2 standard specified in the *Environmental Quality Standard for Noise* (GB3096-2008).

According to the prediction results, without considering the blocking and reflection effects of buildings on both sides of the road, the up-to-standard distance of noises of Class 4a functional area, Class 3 functional area, and Class 2 functional area on both sides of Wuchu Avenue are 26.1m, 30.7m, and 75.8m respectively in the mid-term operation period (2030). Besides, the nighttime of Class 4a functional area in the front row of Wangjiazui residential area, the nighttime of Class 4a functional area in the front row of Caopuwan residential area, and the daytime and nighttime of Class 2 functional zones in the rear row of Caopuwan residential area cannot meet the Class 2 standard in the *Environmental Quality Standard for Noise* (GB3096-2008) in the mid-term operation period; the nighttime of Class 4a functional area in the front row of Wangjiazui residential area, the nighttime of Class 4a functional area and the daytime and nighttime of Class 2 functional area in Caopuwan residential area cannot meet their corresponding standards in the long-term operation period of the Project. This indicates that the noise caused by the Project may have an impact on the residential areas in the late operation period.

As the above residential areas are within the demolition scope affected by the aircraft noise at Ezhou Huahu Airport, up to now, the residential areas within 200m on both sides of the centerline of Wuchu Avenue have been demolished, and no sensitive receivers are left. Therefore, it is not necessary to consider the impact of traffic noise on residential areas.

According to the plan, industrial land is planned on both sides of this road, and the acoustic environment function area is classified as Class 3 area. According to the *Acoustic Environment Functional Zoning of Ezhou City*, Class 4a standards specified in the *Environmental Quality Standard for Noise* (GB3096-2008) shall be implemented within 20m on both sides of the road when there are Class 3 functional areas on both sides of the road. According to the prediction results, noises within 30.7m on both sides of Wuchu Avenue cannot meet Class 3 standard specified in the Environmental Quality Standard for Noise (GB3096-2008), and relevant mitigation measures shall be taken.

(2) Mitigation measures

To further ensure the acoustic environment quality along the roads of the Project, based on the actual situation of these roads, control of noises from vehicles, management system of road traffic, and measures for maintenance and repair management of pavement are proposed for the impact of traffic noise of the Project. The details are as follows:

① Select road materials like sound-absorbing pavement to reduce the impact of traffic noise on the surrounding areas.

② The green belt acts as a barrier to noise to some extent. When the height of trees is more than 4.5m and the depth (width) is 30m, the noise attenuation effect can reach 5dB(A). Therefore, it is recommended to plant greenery on both sides of the road to achieve noise reduction and prevention.

③ Strengthen road traffic management by restricting vehicles with poor performance from accessing the road, strictly limiting driving speeds throughout the road, especially preventing speeding at night strengthen the management of motor vehicle whistling (whistling is prohibited in the whole line). Set up speed limit and no-honking signs on both sides of the road to effectively control traffic noise pollution.

④ Strengthen road maintenance and promptly repair damaged road surfaces to maintain smoothness and avoid increased traffic noise due to poor road conditions.

⑤ Implement a regular monitoring system for predicted noise-exceeding points along the route. When noise exceeds standards, take effective noise protection measures based on the actual environmental characteristics of the actual monitoring results to ensure the acoustic environment meets the requirements.

7.4.2.4 Solid Waste

The solid waste generated by roads during the operation period mainly comes from road sweeping waste, with a small discharge amount. Waste collection containers are set on both sides of the road. After the waste is collected, zero discharge of solid waste can be realized, which meets the requirements of environmental management.

In the future, it is necessary to strengthen road sanitation management by sweeping road surfaces daily, promptly cleaning waste cans and containers on both sides of the road, and having all collected waste uniformly transported to the city waste disposal site by the local sanitation department.

7.4.2.5 Ecological Environment

Wuchu Avenue does not involve blocking the migration passage for wild animals, and its impact on the ecology is mainly concentrated in the construction period. Except for the risk state, there will be basically no negative impact on the ecology during the operation period.

Given that the Huama Lake water system is distributed around the Project, to further reduce potential impacts on the aquatic ecosystem during operation, implement the following mitigation measures:

① Develop an emergency response plan for potential leakage accidents during the transportation of toxic and hazardous substances. In the event of an accident, promptly handle the situation according to the plan to prevent toxic and hazardous substances from entering water bodies and causing pollution.

② Keep the pavement clean, organize maintenance personnel to clean up dust and other pollutants accumulated on both sides of the road in time, and mitigate pollution caused by pollutants entering water bodies due to runoff scouring.

③ Wastewater containing SS generated from road maintenance and flushing shall be recycled or discharged after sand setting in a water collecting tank.

7.4.2.6 Environmental Risk

(1) Main Impact

During the operational period, the risks of the Project primarily arise from the transportation of various hazardous chemicals and dangerous cargo; the categories of risk incidents include leaks of hazardous substances and fires (explosions) as a result of traffic accidents involving transport vehicles.

The Project is located in Ezhou Linkong Economic Zone. After completion, it will be an important part of the road network of the Linkong Economic Zone. If the environment is seriously polluted due to traffic accidents when drivers are driving vehicles transporting dangerous cargos, it may lead to the following results: 1) Toxic and harmful liquids flow into the new rural port and finally enter Huama Lake. It will have an obvious adverse impact on the environmental quality of the surface water and aquatic animals and plants in the polluted area, thus having an adverse impact on the Huama Lake National Aquatic Germplasm Resources Conservation Area; 2) Toxic and harmful gases generated by fire (explosion) caused by flammable and explosive chemicals are discharged into the atmosphere. It has a great adverse impact on the health of residents along the line.

(2) Mitigation Measures

To minimize the environmental risks of regional ecological environment and Huama Lake water system caused by major traffic accidents that may occur during the operation period or emergencies such as leakage of vehicles carrying dangerous chemicals, fire (explosion), etc., the following mitigation measures shall be taken for the Project:

(1) Vehicles and personnel engaged in the transport of dangerous goods shall refer to the *Specifications for Highway Transportation of Dangerous Cargo* and *Regulations on Safety Management of Dangerous Chemicals*. From road inspection, transportation on the way, parking to accident handling and other links, it is necessary to strengthen management and resolutely prohibit and eliminate vehicles transporting dangerous goods with incomplete "three certificates" from driving on the road, so as to prevent the occurrence of dangerous goods transport accidents and control the expansion of emergencies.

(2) Dangerous goods on roads are inspected. Check whether the personnel directly engaged in road transport of dangerous cargo hold the *Operation Certificate for Road Transport of Dangerous Goods* approved by the competent department; vehicles and equipment shall comply with the provisions on hanging specified signs and marker lamps; vehicles, containers, loading and unloading machinery and tools must meet the prescribed conditions. Check and verify the consignment note filled out by the consignor and relevant information provided.

(3) Vehicles carrying dangerous goods are forbidden on foggy and snowy days, while other vehicles shall have a speed limit.

(4) Vehicles transporting dangerous goods running on the road section shall be monitored. Warning signs such as speed limit and no overtaking shall be set up at conspicuous positions on both sides of the route, and electronic warning signs shall be set up to remind passing drivers and passengers to keep a certain distance and speed; Vehicles carrying dangerous goods shall pass at a limited speed, so as to prevent the accidental pollution of liquid hazardous chemicals or petroleum from affecting the water quality of regional waters.

(5) In case of burning, explosion, pollution, poisoning, and other accidents during transport, the driver must take corresponding emergency measures according to the nature of dangerous cargo carried and the specified requirements to prevent the situation from expanding, report to relevant local departments in time, and jointly take measures with relevant departments to eliminate hazards.

(6) Emergency plans shall be prepared, emergency materials shall be allocated, and emergency drills shall be strengthened.

The environmental risks of the Project are acceptable on the premise of strengthening management during the operation period of the Project and establishing and improving corresponding risk prevention management and emergency measures.

8 Social Impact Analysis and Mitigation Measures

8.1 Social Impact Assessment Task

According to AIIB's *Environmental and Social Framework* (ESF), the objective of the social impact assessment is to avoid or minimize adverse environmental and social (ES) risks and impacts; Where unavoidable, identify these risks and impacts and develop and implement the necessary mitigation measures in accordance with the relevant laws and regulations of the People's Republic of China and the Bank's Environmental and Social Policy (ESP). Therefore, the social impact assessment of the Project is carried out to identify the positive and negative impacts of the Project through social participation methods such as data collection, field investigation, questionnaire survey, symposium, in-depth interviews, and agency interviews. The project will also develop social management plans to mitigate potential social risks, improve project design, safeguard the basic rights and interests of relevant stakeholders, and promote fair participation of all stakeholders in the project.

The main tasks of this social impact assessment are:

(1) Identify the main stakeholders of the project and understand the interests and needs of each stakeholder through extensive participation;

(2) Conduct appropriate investigations into the applicability of ESS 3 to ethnic minorities;

(3) Understand the possible social impacts of the Project, including positive and negative impacts, and identify the potential social risks of the Project according to the relevant requirements of AIIB's Environmental and Social Framework;

Assess impacts on communities around the project, such as temporary access restrictions, and construction disturbances to traffic and other utilities. Study impacts on residential and commercial units to understand short- and medium-term disruptions caused by construction.

Analyze worker health and safety, and the impact of worker influx on the community, and develop management measures to manage interactions between the community and workers

Analyze the risks to community health and safety during the construction and operation phases.

(4) Identify different levels of stakeholders, describe their key expectations, and analyze impacts, issues, and concerns associated with each of its stakeholder

subgroups.

(5) Identify the risks and impacts faced by vulnerable groups, understand the attitudes of women and low-income groups towards the Project, identify the impacts of the Project on them, and formulate risk mitigation measures.

(6) Assess the potential positive and negative social impacts of the project interventions on different stakeholder subgroups or beneficiaries, assess and prioritize impacts based on their significance, and propose measures to minimize negative impacts and maximize benefits from positive impacts.

(7) Strengthen the extensive participation of the public, put forward suggestions on project optimization design, and establish an information disclosure and grievance redress mechanism.

(8) Identify the possible adverse risks and impacts of the project, formulate mitigation measures to reduce these risks and impacts, and promote the realization of the project objectives. Use gender-disaggregated data and analysis and consider strengthening the design of projects to promote equality of opportunity and the socio-economic empowerment of women, particularly in the provision of services and employment.

8.2 Object and Scope of Social Impact Assessment

8.2.1 Object of Social Impact Assessment

The social impact assessment is conducted for both the major and minor stakeholders of the Project. Among them, primary stakeholders are the direct beneficiaries within the influence scope of the Project and the groups negatively affected by the project construction, including villagers, vulnerable groups, people affected by land acquisition, school teachers and students in Gutang Village of Yangye Town in Echeng District and Bajiao Village, Chehu Village and Duwan Village of Yanji Town.

Secondary stakeholders include the Planning Headquarters of Ezhou Linkong Group Co., Ltd., the Operation Department of Huahu Airport, the Management Committee of Linkong Economic Zone and its internal organizations, Organization and Human Resources Bureau, Social Affairs Bureau, Rural Revitalization Bureau, Urban Construction Bureau (Housing Acquisition and Demolition Compensation Office), Natural Resources and Planning Branch, People's Governments of Yangye Town and Yanji Town, as well as design consulting units (such as feasibility study/EIA units), supervision units, contractors, media, etc. Meanwhile, attention will be paid to the livelihood development and public participation of vulnerable groups and women.

8.2.2 Scope of Social Impact Assessment

The scope of social impact assessment covers the affected areas of AIIB investment projects and associated facilities. Specifically, it includes 2 townships and 4 specifically affected villages within the Hubei Global Air Cargo Logistics Hub Project and

associated facilities-Wuchu Avenue, as well as stakeholder groups such as affected villages/communities and enterprises and public institutions in the surrounding area.

8.3 Main Matters of Social Impact Assessment

The social matters to be focused on in this social impact assessment mainly include:

(1) Identify primary and secondary stakeholders and understand their attitudes and needs towards the project. including the needs of engineering construction, engineering operation, employment and income increase, infrastructure, information disclosure, public participation, worker management, gender equality, health and safety, emergency management, etc.;

(2) Identify the potential social impacts of the project, including social benefits and social risks. For example, the main sensitive points and main concerns of residents/villagers, the possible impact of land acquisition and demolition during construction and implementation, the willingness of residents around the project area to participate and community health and safety, the identification of ethnic minorities, the impact of migrant workers on the local area, the evaluation of the employment system of the construction contractor, and the occupational health and safety system;

(3) Analyze the labor situation and its working conditions in the project area, including worker management and GBV management;

(4) Analyze the impact of the project on ethnic minorities and identify whether it is necessary to formulate ethnic minority development plans;

(5) Analyze the impact of the project on women and the needs of women in the project area for the project, and identify whether there is any gender difference;

(6) Information disclosure and public participation in the Project, including the awareness, support, and participation degree of the APs in the Project;

(7) Project grievance mechanism and records, including grievance process and specific cases;

(8) Incorporate social factors into the project plan design, and propose measures to avoid or reduce negative impacts;

(9) Formulate the social management action plan of the Project, so that urban and rural residents in the project area can understand the Project as much as possible and participate in the implementation of the Project.

8.4 Methodology of Social Impact Assessment

From December 4 to 8, 2023, the Environmental and Social Impact Assessment Investigation Team (including the EIA Investigation Team and Social Investigation

Team) conducted field investigations on resettlement, land acquisition and social impact assessment within the scope of influence of the Project in close cooperation with Ezhou Linkong Group Co., Ltd., Management Committee of Linkong Economic Zone, relevant government departments, communities/village groups and individuals. From April 8 to 12, 2024, the Environmental and Social Impact Assessment Investigation Team (including the EIA Investigation Team and Social Investigation Team) conducted supplementary investigations on resettlement, land acquisition and social impact assessment within the scope of influence of the Project in close cooperation with Ezhou Linkong Group Co., Ltd., Linkong Economic Zone Management Committee, relevant government departments, communities/village groups and individuals.

(1) Agency interviews. Conducted discussions or interviews with seven relevant institutions and departments involved in the project area, including the Planning Headquarters of Ezhou Linkong Group Co., Ltd., Operation Department of Huahu Airport and internal organizations of Management Committee of Linkong Economic Zone, such as Organization and Human Resources Bureau, Social Affairs Bureau, Rural Revitalization Bureau, Urban Construction Bureau (Housing Acquisition and Demolition Compensation Office), Natural Resources and Planning Branch, ,and collected information and data closely related to the Project. The details of the interviews are given in the table below.

Table 8.4-1 List of Interviews with Agencies in Project Areas and Counties

/	Interviews	Details of interviewed department
Project Area	7	Planning Headquarters of Ezhou Linkong Group Co., Ltd., Operation Department of Huahu Airport, internal organizations of Management Committee of Linkong Economic Zone, including Organization and Human Resources Bureau, Social Affairs Bureau, Rural Revitalization Bureau, Urban Construction Bureau (Housing Acquisition and Demolition Compensation Office), Natural Resources and Planning Branch
Total	7	

(2) Field investigation. The ESIA team conducted field inspections of the towns, streets, communities/villages affected by the Project, as well as the surrounding areas, road conditions, infrastructure status, and the construction status of early-stage project sites. A more practical and objective understanding of the impact of the Project on the production and life of surrounding residents and the land acquisition situation; Socio-economic living conditions of urban and rural residents and affected people in the project beneficiary area, as well as their suggestions, main concerns and demands on the project and supporting facilities. See the following figure for field investigation of each project area, and see the following table for details of field investigation.

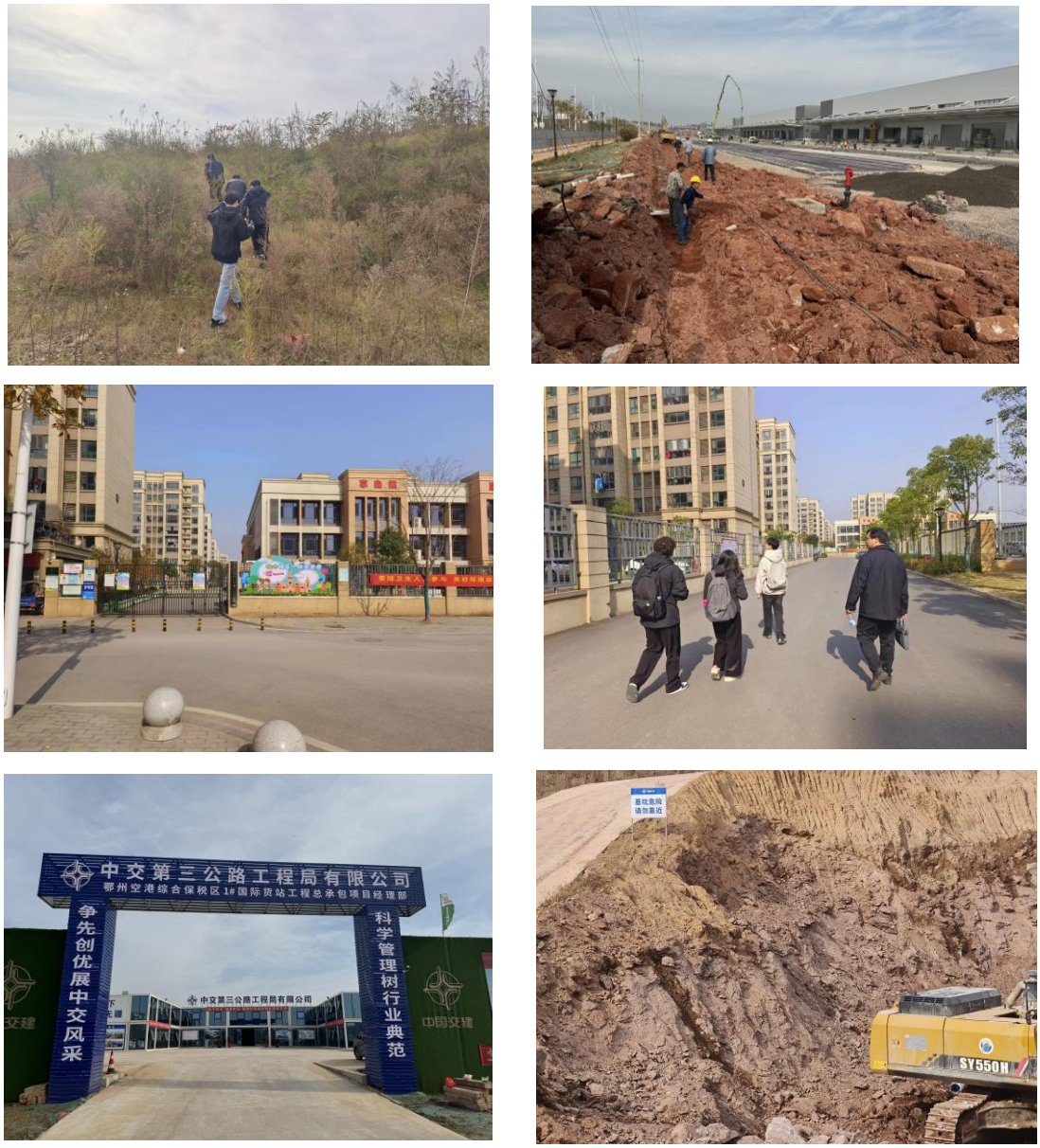


Figure 8.4-1 Field Survey Map of SIA Team

Table 8.4-2 Field Investigation of Each Project Area

Municipal	District	Subdistricts in the project area	Visits to communities/village groups
Ezhou City	Linkong Economic Zone	Yangye Town	Gutang Village
		Yanji Town	Bajiao Village, Chehu Village and Duwan Village

(3) Focus group discussions. To gain a comprehensive understanding of the needs and suggestions of the affected population in the project area (including urban and rural residents, women, low-income groups, and vulnerable groups), an assessment was conducted regarding the beneficiaries' assessment of the current social environment near their residences, their expectations for the Project, and their concerns and recommendations regarding its implementation. The SIA team adopted the focus group discussion method in the field investigation, and conducted 14 resident focus group discussions in different townships and villages in the project area, with a total of 157 participants. There were 68 were women, accounting for 43.31%, 42 elderly,

accounting for 26.75%, 30 disabled, accounting for 19.1%, and 52 low income earners, accounting for 33.1%.

Figure 8.4-2 Focus Group Discussion

(4) Key informant interviews. The SIA team conducted interviews with key informants of the three levels of the project site, i.e. district, township and village, respectively to more fully understand stakeholders' attitudes towards the project and provide better suggestions for project design and project implementation. The interview was mainly carried out for 38 key information personnel in the project area, including the Project Management Office of Ezhou Linkong Group, residents in the project area affected by land acquisition and demolition, staffs from surrounding communities of the Project, on-site workers for project construction, on-site workers of associated facility - Wuchu Avenue, staffs of Huahu Airport, etc.

Figure 8.4-3 Interviews with Key Informants

(5) Questionnaire. According to the probability and scale proportional sampling (PPS sampling) method, with 95% confidence and maximum absolute error d of 5%, the SIA team calculated that the sample size of the questionnaire survey of the Project was about 238, and the actual completion of 250 surveys met the statistical requirements. During the field investigation, the SIA team completed a total of 250 one-to-one face-to-face questionnaires in the project area. After statistical inspection and screening, 2200 valid questionnaires were found, and the effective rate of the questionnaires was 88%.

Figure 8.4-4 Questionnaire Survey Site

8.5Social Impact Analysis

The preparation unit of the environmental and social impact assessment (hereinafter referred to as the "ESIA preparation unit", the same below) completed a total of 250 questionnaires in 2 townships within the scope of project implementation from December 4 to 8, 2023. After statistical inspection and screening, there were 220 valid questionnaires, and the validity rate of the questionnaires was 88%. Respondents included 186 males and 114 females of different ages, education levels, and occupations. At the same time, the ESIA preparation unit held 14 resident-focus symposiums with 157 participants, of which 68 were women, accounting for 43.37%.

8.5.1 Social Benefits

According to the field investigation, the direct beneficiaries of the Project include Chehu Village, Bajiao Village and Duwan Village in Yanji Town and Gutang Village in Yangye Town in Ezhou Linkong Economic Zone, indirect beneficiaries include Ezhou City, and radiation beneficiaries include Hubei Province. See the following table for the specific data.

Table 8.5-1 List of Beneficiaries of the Project

	Direct beneficiary	Indirect beneficiary	Radiation beneficiary
Total population (10,000)	1.67	111.5063	6142.8
Female (10,000)	0.78	52.7704	2952.0
Percentage of women (%)	46.71%	47.33%	48.06%

Data source: The population data is from the project feasibility study report and the statistical report on national economic and social development in the project area.

Combined with the analysis results of field investigation and 220 questionnaires, it is found that the implementation of the Project will mainly produce the following negative impacts: (1) 55% of the residents believe that the project construction will promote the construction of logistics distribution centers and express stations; (2) 89.55% of the residents believe that the project construction will bring jobs; (3) 73.64% of the residents believe that the project construction will promote the development of agricultural product logistics; (4) 78.18% of the residents believe that the Project will reduce the purchase cost of imported goods; (5) 61.36% of the residents believe that the implementation of the Project is conducive to improving the safety and health level of local residents.

Table 8.5-2 Residents' Cognition of Potential Social Benefits from the Project

Indicator category	Possible social benefits during the implementation of the Project				
Cognition of residents	Promote the construction of logistics distribution centers and	Bring jobs	Promote the development of agricultural product logistics	Reduce the purchase cost of imported goods	Improve the safety and health of local residents

Indicator category	Possible social benefits during the implementation of the Project				
	express stations				
Sample size	121	197	162	172	135
Proportion	55%	89.55%	73.64%	78.18%	61.36%

8.5.1.1 Promote the Construction of Regional Logistics Distribution Centers and Express Stations

From January 1 to December 5, 2023, there were 13,850 transport sorties in Huahu Airport, with a passenger throughput of 398,300 and a cargo throughput of 192,500 tons. According to the *Master Plan for Ezhou Civil Airport*, it is expected that Huahu Airport will meet an annual passenger throughput of 1.5 million person-times and a cargo throughput of 3.3 million tons in 2030, and reach 20 million person-times and 7.6 million tons/year in 2050. As an important supporting facility for the Huahu Airport, the Project will drive the construction of logistics transfer stations and express stations in Ezhou City as the cargo throughput and transportation demand increase, thereby improving the spatial layout and functionality of the logistics infrastructure.

At present, logistics companies such as SF Express, ZTO Express, YTO Express, STO Express, China Post, ANE and JD have regional distribution centers in Ezhou City. Among them, both Ezhou Distribution Center of Aneng Logistics (Wudu Avenue Store) and Ezhou Branch of China Post Group Co., Ltd. are located in Echeng District. In the future, Ezhou will attract more express brands to set up regional headquarters or distribution centers here. At that time, Ezhou will become a city with more concentrated express distribution and transfer centers. In addition, there are 521 express business outlets, 6 provincial regional distribution centers, 446 sets of intelligent express cabinets and 135 Cainiao post stations in the city. All 303 administrative villages in the city have completed the construction task of village-level delivery service outlets, including 116 business outlets in Echeng District. It is expected that after the implementation of the Project, the number of express outlets in the airport economic zone will be increased by 2-3 times. The development of delivery logistics in this region will be promoted.

In addition, the respondents' satisfaction with the Project can also confirm the positive benefits brought by the Project. As shown in the following figure, only 3.32% of the respondents are dissatisfied with the construction of the Project, 61.88% of them are very satisfied with the construction of the Project, 23.76% of them are satisfied with the construction of the Project, and 11.05% of them are basically satisfied with the construction of the Project.

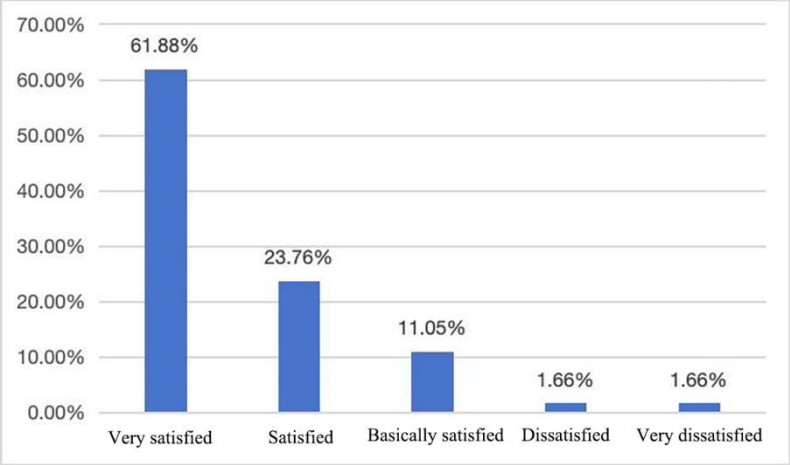


Figure 8.5-1 Survey Results of Satisfaction with the Project Construction

8.5.1.2 Improve Low-carbon Awareness of Residents in the Project Area

As part of the Project, the green logistics park will become a showcase for green development achievements upon completion. The construction and operation of the green logistics park will not only guide employees within the park to adopt green commuting, paperless offices, and waste sorting, but also provide an environment for employees to practice the green lifestyle. Meanwhile, the influence of the park will extend to surrounding communities, spreading the concept of green and low-carbon life to nearby areas. This will enhance the awareness of low-carbon life among residents around the project area, promoting the adoption of green consumption and production habits.

8.5.1.3 Provision of Abundant Employment Opportunities for Surrounding Residents

Direct employment opportunities. The construction of the Project will bring direct employment opportunities to residents around the Project, including jobs provided by the PMO, Operator and Construction Contractor. The Construction Contractor will provide some temporary jobs with low technical requirements, including about 900 unskilled workers in construction, cleaning, logistics, transportation, catering security and others. Their salaries are mostly 150-300 yuan/day, and the time is relatively flexible. The PMO will provide jobs such as document processing and project management, and 606 corresponding jobs will be provided after the operator settles in. At the same time, in order to protect women's rights and interests, employers will give priority to female employees, and the proportion of female workers shall not be less than 20%.

Table 8.5-3 Estimated Number of New Direct Jobs

Employer	Number of labors					
	Construction period			Operation period		
	Total (person)	Female		Total (person)	Female	
		Number (person)	Proportion		Number (person)	Proportion

Construction Contractor	879	190	21.62%	220	48	21.82%
PMO	22	8	36.36%	30	9	30.00%
Operator	--	--	--	356	86	24.16%
Total	901	198	21.98%	606	143	23.59%

Indirect employment opportunities. In September 2023, the logistics prosperity index of Ezhou was 56.73%, and the logistics business demand of enterprises with agricultural products, fast moving consumer goods (FMCG) and bulk commodities as their main businesses showed seasonal growth. The implementation of the Project will promote the development of local industries, including the agricultural product processing industry and logistics industry. Firstly, the agricultural products, including Wuchang fish, Tuzhen blueberries, and Zhaoshan grapefruit, are distributed in the surrounding area of the Project. It is anticipated that after the Project is implemented, it will provide over 500 new jobs for local residents. Secondly, the logistics industry, involving logistics personnel and supporting infrastructure such as service points and distribution centers, will be promoted by the Project. The development of service industries like delivery services, catering, and accommodation will be driven by the Project. It is estimated that 5,000 indirect jobs will be provided, especially in rural revitalization and rural mail operation. At the same time, the increase in visitor flow can not only give surrounding residents the opportunity to rent houses and obtain rental income, but also promote the development of collective property economy in surrounding villages. As of December 2023, the number of employed residents in the project area has reached 78,048, including 22,594 in Yanji Town and 16,482 in Yangye Town. Based on the future planning of project construction, in the operation stage of the project, with the settlement of more industrial clusters, the number of jobs will increase significantly. Both professional and low-skilled jobs require a large number of labor forces, and the surrounding residents can be employed nearby according to their own actual situation.

Table 8.5-4 Estimated Number of New Indirect Jobs

Industry	Yangye Town			Yanji Town		
	Total (Nr.)	Female		Total (Nr.)	Female	
		Number (person)	Proportion		Number (person)	Proportion
Agricultural product processing industry	220	87	39.55%	280	95	33.92&
Logistics	2150	540	25.12%	2850	660	23.16%
Total	2370	627	26.46%	3130	755	24.12%

Figure 8.5-2 Development of Surrounding Industries in the Project Area

8.5.1.4 Broadening Employment and Entrepreneurship Opportunities for Women in the Surrounding Area

According to the data of the 7th national population census bulletin, the female population in Ezhou City is 517,500, accounting for 47.94%. The number of employed women in the city exceeds 280,000, accounting for 44% of all employed people. The female population in the project area is 32,445, including 13,545 in Yangye Town and 18,900 in Yanji Town. During the construction period of the Project, temporary jobs such as road cleaning and green planting can be provided for women in the surrounding project area to improve their flexible employment and increase their non-agricultural income. After the Project is completed, it will create opportunities for women in the surrounding area to embrace new types of employment, such as intelligent logistics sorting, logistics transportation, and other related work. Additionally, the project will provide training on low-carbon awareness, employment, entrepreneurship, and business counseling for women in the surrounding area, enhancing their overall quality and empowering women for employment and entrepreneurship initiatives. In addition, women in the surrounding project area can rely on local characteristic agricultural industries to engage in new formats such as e-commerce live streaming marketing, and continuously broaden employment and entrepreneurship channels.

8.5.1.5 Promoting the Development of Local Agricultural Product Logistics

In 2022, the total output value of agriculture, forestry, animal husbandry and fishery in Ezhou City reached RMB 1,994.112 million. There were 53 leading enterprises of agricultural industrialization at or above the municipal level and 139 demonstration new-type agricultural business entities, with a high processing capacity for commercialization of agricultural products in producing areas. This year, agricultural products such as Ezhou Wuchang fish, Liangzihu District crayfish and lotus sprout are

sold to all parts of the country by air freight through Huahu Airport, promoting the integration of agricultural products with modern logistics industry. There are rich varieties of agricultural products around the project area. Choy Sum is an important and well-known agricultural product in Ezhou, whose origin includes 10 villages such as Maocao Village in Xinmiao Town and Yanji, Longshan, Qingshan, Yangling, Moshan, Chihu, Mashan, Shatang and Chehu in Yanji Town, Echeng District. Bean Vermicelli is an intangible cultural heritage treasure of Huqiao Village, Shawo Township, Linkong Economic Zone. In September 2023, the Huqiao Bean Vermicelli Industrial Center was officially opened with an annual output of one million kg. Wuchang fish farming in Ezhou City has a large scale, with an area of 403,400 mu and an annual output of more than 700,000 tons, making it the seventh largest freshwater fish breed in China.

After the completion of the Project, a variety of agricultural products such as Red Rape, Bean Vermicelli, and Wuchang fish will be transported out and supplied efficiently. This will address the "last mile" issue of agricultural products from villages to urban areas, reduce transportation costs for agricultural products, improve post-harvest processing, packaging, storage, transportation, and distribution logistics, and drive the development of agricultural product logistics.

Table 8.5-5 Examples of Characteristic Agricultural Products in and around the Project Area

District (County)	Town/Township	Characteristic agricultural products
Linkong Economic Zone	Xinmiao Town	Red Rape, smoked fish
	Yanji Town	Red Rape
	Shawo Township	Bean silk
	Yangye Town	Eggplant, "Baisha" Vegetables and "Baiyuchun" Radish
Liangzihu District	Zhaoshan Town	Hu Pomelo, Wuchang fish and hairy crab
	Tu Town	Tu Town sweet potatoes and blueberries

Figure 8.5-3 Agricultural Products Processing Industry around the Project Area

8.5.1.6 Reducing the Purchase Cost of Imported Goods for Residents

According to statistics, Ezhou's imports reached RMB 960 million in the first half of 2022, with a year-on-year increase of 136.4%, ranking first in the province. Cross-border e-commerce has emerged rapidly and become an indispensable part of China's consumer market. The new customs supervision of bonded imports has promoted the development of cross-border imports. The Project will involve the construction of multiple bonded warehousing and processing centers and customs infrastructure. With these facilities in place, residents of Ezhou City and the surrounding areas can expand their cross-border online shopping options. Instead of relying solely on overseas direct purchases or having items shipped through other domestic cities, they will have the convenience of receiving imported goods directly from local bonded warehouses. This direct access is expected to significantly reduce the cost of goods for consumers.

In addition, efficient customs can speed up logistics operations and shorten the entire supply chain cycle, which not only improves the satisfaction of logistics enterprises, but also directly reduces the transportation cost of residents purchasing goods. For example, Thailand's durian, Chile's cherries, affordable luxury cosmetics and health care products can be delivered to the whole country in one day and to the world overnight. With the continuous improvement of residents' consumption level, the diversified demands for fruits in the domestic market have increased significantly. From 2018 to 2022, the total import volume of fruits has increased by 91.7%, making Hubei become the world's second largest fruit importer. The operation of Hubei Global Air Cargo Logistics Hub Project will effectively reduce the price and logistics cost of imported fruits and provide convenience for residents to buy imported fruits.

Table 8.5-6 Total Value of China's Imported Fruits in 2017-2022

Year	Total value of imported fruits (USD 100 million)
2018	86.8
2019	116.7
2020	121.0
2021	159.2
2022	166.5

Data source: China Customs

8.5.1.7 Improving the Safety and Health of Local Residents

From January to November 2023, Ezhou completed a total import and export value of RMB 5.65 billion, with a year-on-year increase of 43.3%. The growth rate is 40.7% higher than that of the whole province, ranking second in the province. As of December 16, 2023, Huahu Airport had 936 inbound and outbound flights, with a total of about 40,000 tons of cargo. Upon the completion of the customs infrastructure, there will be an increase in quarantine inspections for inbound goods (items) to prevent significant infectious diseases, major animal and plant epidemics, the influx of invasive species, and other biological security risks under customs supervision. The aim is to avoid and reduce potential harm to domestic ecosystems, biodiversity, agriculture, forestry, animal husbandry, fisheries, and the health of residents. At the same time, residents can inquire about all-round information such as the country or region of origin, production date, batch number, circulation path and disinfection certificate of goods through the traceability code to prevent fake and shoddy products and "imported waste" from threatening their health and safety.

In addition, according to China Customs statistics, the average annual compound growth rate reached 12.3% during the decade from 2013 to 2022. In 2022, China imported USD 139.62 billion of food, with a year-on-year increase of 3.1%. The top five imported foods were meat, grain, aquatic products, dairy products and fruits, with import volume exceeding USD 10 billion.

In 2022, Ezhou imported a total of 41,800 tons of cold chain food. For example, the increase in imports such as Chile cherries, Argentina beef, Ecuador prawns, France red wine and New Zealand milk effectively improves the local diversified food supply system, meets the diverse nutritional needs of human body, and improves the health level of residents in the project area and surrounding areas.

Figure 8.5-4 Construction Site of Ezhou Customs

8.5.2 Social Risks

Combined with the analysis results of field investigation and 220 questionnaires, it is found that the implementation of the Project will mainly have the following negative impacts: (1) 54.09% of the residents think that the project construction will bring land acquisition; (2) 72% of the residents think that the project construction will bring dust, noise and other impacts; (3) 80.09% of the residents think that the project construction

will cause traffic safety risks; (4) 67.27% of the residents think that the influx of external population during the construction and operation period of the Project will pose a risk of disease transmission.

Table 8.5-1Residents' Cognition of Negative Impacts in Project Construction and Operation

Indicator category	Possible negative impacts occurring during the implementation of the Project			
Cognition of residents	Impact of land acquisition	Impact of dust and noise	Traffic safety risks	Disease transmission risk
Sample size	119	159	178	148
Proportion	54.09%	72%	80.09%	67.27%

8.5.2.1 Land Acquisition Risk

1598.3 mu of rural collective land is to be acquired for Hubei Global Air Cargo Logistics Hub Project, including 665.2 mu for Phase I and 933.1 mu for Phase II. The impact of land acquisition involves 2 villages in 1 township in Ezhou Linkong Economic Zone, affecting a total of 386 households and 1503 people. Among these, 1144.6 mu will be acquired from Duwan Village, affecting 348 households and 1345 persons, and 453.7 mu will be acquired from Chehu Village, affecting 38 households and 158 persons. See Table 8.5-8 for details. According to the social and economic investigation, a comparative analysis is made on the amount of cultivated land before and after land acquisition in the affected villages. The per capita cultivated land in each village after land acquisition is more than 0.6 mu. The agricultural crops in the project area are mainly rice, wheat and sporadic vegetables. Because it is close to the urban area of Ezhou City, the main income sources of the affected households are local workers and migrant workers. There are few families that rely solely on agricultural planting income, and most of the acquired land is barren. Therefore, the impact of land acquisition on affected households is low. The labor force in the village mainly works outside or in Ezhou to obtain income from migrant workers. Some women and elderly people plant some sporadic vegetables for self-use by taking advantage of climate and soil advantages. There is no scale or patchy vegetable and food crop planting on the cultivated land to be acquired for the Project, which will not have a great impact on this part of income. Therefore, the land acquisition caused by the project construction has little impact on the economic income of the affected villages.

Table 8.5-8 Impact of Permanent Acquisition of Rural Collective Land (by Construction Content)

Project area	Construction Content	Town/Township	Village	Total	Including				Affected population	
					Cultivated land	Garden land	Forest land	Other land	Number of household	Number of people

					Subtotal	Paddy field	Irrigated land	Dry land	Orchard	Subtotal	Arbor forest land	Shrub land	Other forest land			
Phase-I Project	Bonded Warehousing and Processing	Yanji Town	Duwan Village	77.3	10	4.7	5.2	0.1	0.1	9.6	1	0	8.6	57.6	14	54
			Chehu Village	55.6	2.1	1.7	0.4	0	0.8	7.6		0.6	7	45.1	2	9
			Subtotal	*132.9*	*12.1*	*6.4*	*5.6*	*0.1*	*0.9*	*17.2*	*1*	*0.6*	*15.6*	*102.7*	*16*	*63*
	Supporting Facilities	Yanji Town	Duwan Village	309.7	40.2	18.8	20.9	0.5	0.2	38.7	4.1	0	34.6	230.6	56	217
			Chehu Village	222.6	8.5	6.9	1.6	0	3	30.5	0.1	2.2	28.2	180.6	8	34
			Subtotal	*532.3*	*48.7*	*25.7*	*22.5*	*0.5*	*3.2*	*69.2*	*4.2*	*2.2*	*62.8*	*411.2*	*64*	*251*
	Total			665.2	60.8	32.1	28.1	0.6	4.1	86.4	5.2	2.8	78.4	513.9	80	314
Phase-II Project	Duty Free Service Center, Comprehensive Office	Yanji Town	Duwan Village	17.4	8.6	7.2	1.4	0	0	6.5	0	0	6.5	2.3	12	46
	Customs kiosk, customs inspection center	Yanji Town	Duwan Village	44.5	0.3	0	0.3	0	0	3.7	0	0	3.7	40.5	1	2
	Bonded logistics warehouse, processing warehouse	Yanji Town	Duwan Village	521.5	198.8	81.6	117.2	0	1.9	91.5	45.3	0	46.2	229.3	208	806
		Yanji Town	Chehu Village	138.1	9.3	5.4	3.9	0	38.1	64.3	0.3	0	64	26.4	9	38
		Subtotal		*659.6*	*208.1*	*87*	*121.1*	*0*	*40*	*155.8*	*45.6*	*0*	*110.2*	*255.7*	*217*	*844*

	Supporting Facilities	Yanji Town	Duwan Village	174.2	54.2	37	16.6	0.6	0.9	18.7	7.3	0	11.4	100.4	57	220
		Yanji Town	Chehu Village	37.4	19.3	6.7	12.6	0	0.6	9.6	0.6	0	9	7.9	19	77
		Subtotal		*211.6*	*73.5*	*43.7*	*29.2*	*0.6*	*1.5*	*28.3*	*7.9*	*0*	*20.4*	*108.3*	*76*	*297*
	Total			933.1	290.5	137.9	152	0.6	41.5	194.3	53.5	0	140.8	406.8	306	1189
Total				1598.3	351.3	170	180.1	1.2	45.6	280.7	58.7	2.8	219.2	920.7	386	1503
Proportion				100.0%	22.0%	10.6%	11.3%	0.1%	2.9%	17.6%	3.7%	0.2%	13.7%	57.6%		

Data source: provided by the PMO and field investigation summary of SIA team

For the associated facility of Hubei Global Air Cargo Logistics Hub Project — Phase I Project, 425.2 mu of rural collective land has been acquired within its land use scope, which is included in the land acquisition activities of the 12th batch of 2020, the 81st batch of 2020, the 27th batch of 2021, the 16th batch of 2023, the 60th batch of 2023 and the land acquisition activities to the south of Wuchu Avenue (including 32 batches) (a total of 1,979.54 mu, affecting 978 households and 4,207 people). 90.99 mu of collective land is acquired for the Wuchu Avenue Project (associated facility), all of which are collective land in Chehu Village and Duwan Village under Yanji Town in Ezhou Linkong Economic Zone, affecting 105 households and 443 people. Including associated facility of the Hubei Global Air Cargo Logistics Hub Project, Phase I Project and Wuchu Avenue Road Project, the completed land acquisition activities involved a total of 2,070.53 mu of land, affecting 1,083 households and 4,650 people. The house demolition within the scope of the Hubei Global Air Cargo Logistics Hub Project supported by the AIIB loan and the house demolition caused by land acquisition activities including the land required for associated projects are located in Duwan Village and Chehu Village of Yanji Town (since it is carried out at the same time as the demolition activities in the master plan of Ezhou Linkong Economic Zone and Huahu Airport, the associated projects cannot be separated), with a total residential housing demolition area of 170,945.75 m^2. A total of 713 households and 2,776 people are affected. According to this due diligence, for the house demolition involved in the AIIB project and the land and house demolition involved in the associated facility of the Hubei Global Air Cargo Logistics Hub Project — Phase I Project and Wuchu Avenue Project, acquisition and compensation have been completed in 2021- early 2024. The households affected by demolition have obtained one or above resettlement houses, and the remaining resettlement houses are planned to be delivered in 2026. Compensation has been paid to the affected farmers in full and on time. According to the social audit, the construction of roads and channels not only facilitates the travel of villagers, but also facilitates the transportation of products and going out for work. The economic income of villagers has increased compared with that before. Villagers are very satisfied with this project and have high expectations and support for the following supporting project of Huahu Airport. Relevant information on the Project and land acquisition compensation has been released in a timely manner, the affected population have effectively participated in the consultation activities in land acquisition

compensation, and no complaints or dissatisfaction have been received during the social audit.

According to the field investigation, there are some outstanding issues in the Project, including: 1) Part of the 60th batch of construction land in 2023 belongs to the commencement land of the Project in early stage. Due to the slow handling of land acquisition procedures, the approval for construction land has not been obtained yet; 2) The households affected by demolition have obtained one or more resettlement houses from 2022 to April 2024, but the resettlement community for subsequent allocation is still under construction, and 261 sets of resettlement houses have not been delivered; 3) As there is a temple (Polong Temple) within the scope of project construction land, it needs to be demolished and reconstructed at the selected site according to laws and regulations. After negotiation between the Project Management Office and the local government, the Polong Temple has been demolished in early 2024, and the selection of site for reconstruction is under way. The reconstruction work is expected to start by the end of 2024. Therefore, a treatment plan for the outstanding issues has been formulated and included in the monitoring and evaluation. Subsequently, the external resettlement and social monitoring agency needs to confirm the acquisition of land use approval, and pay attention to the progress of resettlement housing delivery and the reconstruction of Polong Temple.

Figure 8.5-5 Current Situation of Land to be Permanently Expropriated

8.5.2.2 Traffic Safety Risks

(1) Risk analysis

The Project involves many civil works, including subprojects such as customs service infrastructure, bonded warehousing and processing. During the construction of the Project, disturbance may be caused to surrounding communities, such as environmental impact, traffic congestion and safety risks. The transportation of construction materials and large engineering vehicles to and from the construction site may pose risks to along-the-way communities, such as noise, dust, and waste scattered in the area. In addition, the continuous increase of large mechanical vehicles for construction operations and construction material transport vehicles will cause damage to pavements around communities, which may result in sudden road traffic safety risks.

Customs infrastructure and other facilities are located on the north side of the airport, and the construction sites are more than 5km away from the community (village). According to the field investigation, most of the transport vehicles of the advanced project activities transported building materials through Yanhuang Road and East Section of Wuchu Avenue of Provincial Highway (S203), avoiding community

gathering points and having relatively little impact on surrounding community residents, as shown in Figure 8.5-6. The S203 provincial road, serving as a main urban thoroughfare, has sufficient green buffer zones and safety warning measures built between the road boundaries and the residential areas along its route.

Figure 8.5-6 Surrounding Communities of the Project

Although the transport vehicles are now kept away from community gathering points and do not pass through social sensitive points such as schools and hospitals, there will be a significant increase in transport vehicles and large engineering vehicles in later period. Especially during the construction of civil works, the increase in transport vehicles for building materials may still cause dust, noise, waste scattering and road traffic safety risks to surrounding or along-the-way communities. In addition, during the operation period of the Project, with the increase of operators and freight vehicles, conflicts and disputes such as vehicle collision accidents and random parking will also increase, which will also cause disordered traffic order, such as random parking, which may bring certain traffic safety risks. According to the current management of construction vehicles and transport vehicles, no vehicle safety accidents have occurred in surrounding villages of the Project.

Table 8.5-9 Number of Vehicles in Surrounding Villages of the Airport

Community (village)	Population (person)	Distance from the airport (km)	Number of motor vehicles (vehicles)	Estimated increase of motor vehicles (vehicles)
Gutang Village	5034	14	1258	450
Bajiao Village	4449	12	1100	320
Chehu Village	4004	10	1013	300
Duwan Village	3326	8	830	230
Total	16813	--	4201	1300

Figure 8.5-7 Project Construction Site

(2) Mitigation measures

In combination with the community health and safety risks that may be generated by the Project, the optimization measures mainly focus on the adjustment and management of vehicle driving routes. It is recommended to plan the driving routes of transport vehicles to mitigate the impact of transport vehicles on community traffic safety and disturbance to communities during the construction and operation period of the Project. They mainly include: 1) Increase traffic safety publicity, publicize and implement various transportation safety laws, regulations and provisions. 2) Plan the driving route of transport vehicles to avoid community gathering points as much as possible and reduce the disturbance of transport vehicles to communities. 3) Driver management: Work with certificates according to national requirements, abide by traffic regulations and operating procedures, resist violations, and ensure safe driving. 4) Vehicle safety management: Implement the national and company vehicle management rules and regulations, and ensure vehicle annual inspections, technical filing, and use management. 5) Establish a community communication mechanism, strengthen the communication with surrounding communities and respond to residents' questions in time.

8.5.2.3 Community Health and Safety Risks

(1) Risk analysis

During the construction period of the Project, it is expected that a total of about 1,000 people will be imported from other places, including about 720 male workers and about 280 female workers. The Construction Contractor will build a construction camp in the project construction area, including standardized dormitories and office buildings, canteens and bathrooms. For example, the construction camp of the advanced project activities is built in the construction area of the International Cargo Terminal, including the office building of the Project Department, workers' dormitory and others, which is about 8km away from Yanji Town and Yangye Town. Although most of the migrant workers live in the dormitory provided by the Construction Contractor after mobilizing, they will go to Yanji Town or Yangye Town to buy daily necessities and living necessities, which may have an impact on the surrounding residents. The increased interaction between migrant workers and local residents may lead to social conflicts and issues due to differences in language or social-cultural customs during communication. Moreover, close interactions between migrant workers and local

residents may easily lead to health risks such as the spread of communicable or epidemic diseases. In the field investigation, residents expressed concern that the mobility of migrant workers may increase the spread of local epidemic diseases, such as AIDS and H1N1 influenza.

In addition, during the construction and operation of the Project, the noise, dust and tail gas caused by transport vehicles and driving may have a certain impact on the living environment and personal safety production of residents in communities along the transportation route.

Construction Camp of the Advanced Project Activities

Map of Community Shops in Yanji Town

Figure 8.5-8 Construction Camp and Community Shops in Yanji Town of the Early Start-up Project

(2) Mitigation measures

In order to reduce the impact of migrant workers on local residents, mitigation measures mainly include: 1) Do a good job in community management, adopt duty shift system, and register foreigners entering the community in time to ensure the safety of people within the community. 2) Encourage townships and village communities to proactively engage in the promotion of local social and cultural customs through materials such as brochures and posters. 3) Intensify health education efforts, including the dissemination of information on the prevention of AIDS and other communicable diseases, which must be incorporated into contractual agreements. 4) Strengthen the traffic management of project transport vehicles, and slow down and prohibit whistling when vehicles pass through sensitive places such as residential areas, schools and hospitals along the route or near them. Regularly maintain transport vehicles to minimize potential accidents caused by equipment failure.

8.5.2.4 Worker Management Risk

The potential labor management risks of the Project will mainly have an impact on direct workers (directly employed by PMO of Ezhou Linkong Group and Project Implementation Units), contractor's workers (contractor's workers for civil engineering construction of the Project), and supplier's workers (supplier's workers for solar panel supply chain).

(1) Risk analysis during the construction period

During the construction period, the Project mainly involves worker management risks of direct workers and contractor workers, such as protection of worker rights and interests, safety risk of mechanical equipment operation, etc. According to the estimation of PMO and relevant agencies, there are about 30 direct workers and 1,000 contractor workers during the construction period. The Project is expected to input about 1,000 labors from other places, including about 720 male workers and about 280 female workers. Male workers are mainly engaged in skilled work (including carpenters, electric welders, concreters, etc.), while female workers are mainly engaged in unskilled work (including cleaners, cooks, handymen, masons,etc.). Depending on the activities, scale and nature of the Project, the main worker risks that may be encountered include:

·Mechanical equipment operation safety risk: Accidents may occur when construction personnel operate relevant tools during construction;

·Mechanical construction noise: Loud, repetitive and excessive noise may cause long-term hearing problems of workers. Noise may also distract workers from the task at hand, increasing the risk of accidents;

·Sudden or emergency accidents: Sudden situations and quality safety accidents may be caused due to incomplete HSE-compliant construction and quality and safety management measures during construction;

·High-temperature operation risk: heatstroke will pose a health risk to the Contractor's workers during high-temperature operation;

·Salary and welfare: The Construction Contractor fails to strictly implement relevant laws and regulations or sign labor contracts, so that the rights and interests of workers cannot be guaranteed and salaries are in arrears;

·Sexual harassment and gender-based violence risk: There is a gender difference among contractor workers. Men and women live differently, which may cause physical or psychological violence to women.

The Project Management Office (PMO), Project Implementation Unit (PIU) and Contractors shall strictly abide by the relevant laws and regulations of the People's Republic of China on labor safety, prohibit forced labor and child labor, and ensure that relevant personnel for project implementation are treated fairly in accordance with the labor management measures and regulations of Ezhou City, and provide them with a safe and healthy working environment. The project construction will be carried out within the scope of Ezhou Linkong Economic Zone. The working hours of all workers will be implemented in accordance with the provisions of the Labor Law of the People's Republic of China, that is, the daily working time will not exceed eight hours and the average weekly working time will not exceed forty-four hours. The risk of forced labor and child labor is very low.

Figure 8.5-9 Current Situation of Worker Management during the Construction Period

(2) Risk Analysis during the Operation Period

During the operation period of the Project, it mainly involves labor management risks for direct workers and supplier's workers. The main worker risks that may be encountered include:

·Safety risks of mechanical equipment operation: Injury by forklift during warehousing and logistics operations, injury by falling objects from high altitudes, rollover due to improper operation of driving equipment, etc.;

·Sudden or emergency accidents: Errors in the operation of equipment, resulting in risks to worker health and life;

·Risk of occupational hazards: Long-term operation in the low-temperature storage environment is prone to cause occupational disease risks such as neurological diseases, vascular diseases and rheumatic diseases.

·Occupational health and safety risks: Employees of imported cold-chain food may be infected with exotic viruses during important links such as storage, transportation, warehousing, loading and unloading.

·Risk of sexual harassment and gender-based violence: There may be gender-based worker discrimination, and the rights and interests of female employees such as pregnancy and maternity leave cannot be guaranteed.

Ezhou Airport Group Co., Ltd. has established and improved the worker rights protection and supervision mechanism, safeguarded the legitimate rights and interests of workers, and stipulated many rights and interests of female employees such as pregnancy, maternity leave and menstrual period protection to protect their legitimate rights and interests. According to the *Regulations of Hubei Province Concerning the Labor Protection of Female Staff and Workers* (Provincial Government Order No. 329), in terms of the protection of maternity rights and interests, Employers shall not stipulate in labor contracts or employment contracts any content that restricts the legitimate rights and interests of female employees such as marriage and childbirth, and if an employee is during pregnancy, childbirth or lactation, except for special circumstances stipulated by laws and administrative regulations and when a female employee resigns or proposes to dissolve or terminate her labor contract, Employers shall not dismiss a female employee or dissolve or terminate her labor contract with him/her. If the employer violates the regulations and damages the legitimate rights and interests of

female employees, female employees may complain or report to the administrative departments in charge of labor and social security, personnel, etc.; or apply to labor and social security, personnel mediation organizations for mediation according to law; or apply to labor and social security, personnel dispute arbitration agencies for arbitration.

In addition, the Supplier shall provide a statement in its procurement documents that there are no labour working conditions (LWC) issues in its supply chain; obtain similar representations from its subcontractors and suppliers of the Solar Power Project Products; abide by workforce requirements consistent with the Bank's ESF and require similar representations and compliance from their subcontractors and suppliers of identical products to the Project; and if necessary, the Bank will have the right to inspect and audit compliance with these requirements.

(3) Mitigation measures

For potential worker risks of the Project, the PMO and PIU need to manage workers properly. These measures include: 1) Employ the project staff based on the principles of equal opportunity and fair treatment, without discrimination against specific groups such as women, disabled persons, migrant workers, and legal working-age youth. 2) Provide appropriate protection and assistance measures. For instance, equip the construction site with adequate and comprehensive labor protection supplies to address hazard factors as well as labor safety and hygiene needs, such as reflective vests, anti-smash shoes, cold clothing, etc. 3) All equipment operators must be trained and qualified, and work with certificates. Non-equipment operator cannot operate the equipment. 4) Effectively protect the legitimate rights and interests of female employees. Formulate provisions on the rights and interests of female employees such as pregnancy and maternity leave to reduce gender-based worker discrimination. Set up sufficient gender-specific temporary toilet facilities at the construction site according to the number of female workers. (5) Establish and clarify a grievance mechanism for worker complaints and reporting, and a worker protection supervision mechanism, ensuring personal privacy protection when handling sexual harassment complaints.

8.5.3 Development Status of Ethnic Minorities

8.5.3.1 Ethnic Minorities in Project Area

Hubei Province is a multi-ethnic province with 55 ethnic minorities. According to the 7th national population census in 2020, the resident population of ethnic minorities was 2.7711 million, accounting for 4.8% of the province's total population. The minorities with more than 10,000 people mainly include Tujia, Miao, Hui, Dong, Manchu, Mongolian, Uyghur and Yi. Among them, there are 2,285,800 Tujia people and 214,000 Miao people. There are 1 autonomous prefecture (Enshi Tujia and Miao Autonomous Prefecture), 2 autonomous counties (Changyang Tujia Autonomous County and Wufeng Tujia Autonomous County), 12 ethnic townships (towns) and 37 ethnic villages (communities). The minority population in the province shows a distribution pattern of large dispersion and small concentration. Except for Tujia nationality, Miao nationality and Dong nationality who mainly live in ethnic autonomous areas, other minorities scatter in various places.

Among them, there are 3,700 ethnic minorities in Ezhou City, mainly including 25 ethnic groups such as Tujia, Miao and Hui. There are a total of 13 persons belonging to ethnic minorities in the Linkong Economic Zone, all of whom are Hui. For details, see Table 8.5-10. With the cooperation of the PMO, township governments and village committees, the social impact assessment investigation team carried out the field investigation on ethnic minorities in the project area from December 4 to 8, 2023. The population, ethnic composition, identification of ethnic minority villages, and whether ethnic minorities live in groups in each project area were thoroughly investigated in accordance with the identification criteria specified in the ESS3 of AIIB's Environmental and Social Framework - Guidelines for Ethnic Minorities.

The scope of influence of the Project involves Gutang Village in Yangye Town and Bajiao Village, Chehu Village and Duwan Village in Yanji Town in the Linkong Economic Zone, with a total population of 17,083, including 6 ethnic minorities who are all floating ethnic minorities. Most of these floating ethnic minorities are Hui people who run "Lanzhou Ramen Noodle Shops". Minorities and Han nationality in the project area enjoy the same social and public services. In terms of social welfare, rights, security, cultural customs and living habits, there is no difference between minorities and Han nationality, in the project area.

Table 8.5-10 Minorities Population in the Project Area (2022)

Project Area	Total population (10,000)	Minority population (10,000 people)	Proportion of minority population (%)	Composition of minority population
Hubei Province	6121.38	277.11	4.5%	55 ethnic minorities including Tujia, Miao, Hui, Dong, Manchu and Mongolia
Ezhou City	110.0976	0.39	0.3%	25 ethnic groups including Tujia, Miao and Hui
Linkong Economic Zone	13.14	0.0013	0.009%	Hui Ethnicity
Yangye Town	2.88	-	-	-
Yanji Town	3.79	0.0006	0.015%	Hui Ethnicity

8.5.3.2 Identification of Ethnic Minorities in the Project Area

The ethnic minority identification survey found that: (1) In the project affected area, there are no ethnic minority group that triggers the ESS3 criterion. (2) The population of ethnic minorities within the scope of the project construction is extremely low. There are no traditional territories, ethnic minority languages, or traditional cultures, and there are no self-identified ethnic minorities in the area. Therefore, the ethnic minority development plan is not required for the Project.

Table 8.5-11 Ethnic Minority (ESS3) Identification Matrix

Identification criteria	Yes	No	Remarks
1. The respondents identify themselves as members of a group with unique aboriginal culture and are recognized by others?		X	All the respondents, including ethnic minorities and Han nationality, believe that the local ethnic minorities are indistinguishable from Han nationality and fully integrated with Han nationality.
2. The respondents have collective		X	N/A

attachment to geographically different habitats or ancestral territories in the project area or the natural resources of those habitats and territories?			
3. The respondents have customary cultural, economic, social or political systems that are different from mainstream society and culture;		X	N/A
4. The respondents have a unique language that is generally different from the official language of the country or region.		X	They don't have their own language and role. They speak local dialects and Standard Chinese, and are fully integrated with Han nationality.

8.6Gender Analysis

8.6.1 Development Status of Women in the Project Area

To promote gender equality and the advancement of women's socio-economic status, China has developed a complete legal framework and policy system. Taking General Secretary Xi Jinping's important instructions on work related to women and children as the fundamental guideline, in accordance with *the Constitution*, *the Law on the Protection of Women's Rights and Interests*, *the Labor Law*, *the Marriage Law*, *the Electoral Law*, *the Criminal Law* of the People's Republic of China and other relevant laws and regulations, and in line with the *Outline for Women's Development in China (2021-2030)*, the *Plan for Women's Development in Hubei (2021-2030)* and the *Plan for Women's Development in Ezhou (2021-2030)*, the Project will be implemented within the framework of relevant laws and policies in China, coordinating women's federations at all levels in the project area to implement the specific requirements for the protection of women's rights and interests and gender development.

Table 8.6-1 Organizational Structure of Women's Federations at All Levels

Level	Affected party
National organization	All-China Women's Federation
Local organization	Hubei Women's Federation
	Ezhou Women's Federation
	Women's Federation of Ezhou Linkong Economic Zone
Primary-level organizations	Women's Federation of Yangye Town and Yanji Town
	Women's Federation of affected villages within the Project area
Group member	Labor Union Women's Protection Committee of Hubei Linkong Group Co., Ltd.
	Grass-roots trade union committee for female employees of affected enterprises within Project area

According to Ezhou Statistical Yearbook 2022, by the end of 2022, Ezhou had a registered population of 1,115,063 and a permanent resident population of 10,595 million, including 5,277.4 million women, accounting for 47.33%. See the table below for details.

Table 8.6-2 Basic Conditions of Women Population in the Project Area

Demographic Indicators	Registered population by the end of the year (person)	Female (Person)	Proportion (%)
Ezhou City	1115063	527740	47.33%
Yangye Town	28750	13545	47.11%
Yanji Town	38661	18900	49.6%

Data source: Ezhou Statistical Yearbook 2022 and data provided by villages and towns.

8.6.2 Analysis of Gender Differences in the Project Area

(1) Demographic structural characteristics of the survey sample

To understand the development status of women within the Project area, the SIA team conducts questionnaires and interviews with women in the field survey. Totally 220 valid questionnaires are collected, of which 96 questionnaires are collected from female respondents, accounting for 43.6% of survey samples.

Age composition. According to the age distribution of the sample, the number of women aged 55–64 is the largest, accounting for 38.5%, followed by those aged 45–54, accounting for 32.29%, and those aged 18–24 are the least, accounting for 2%. See the figure below for details.

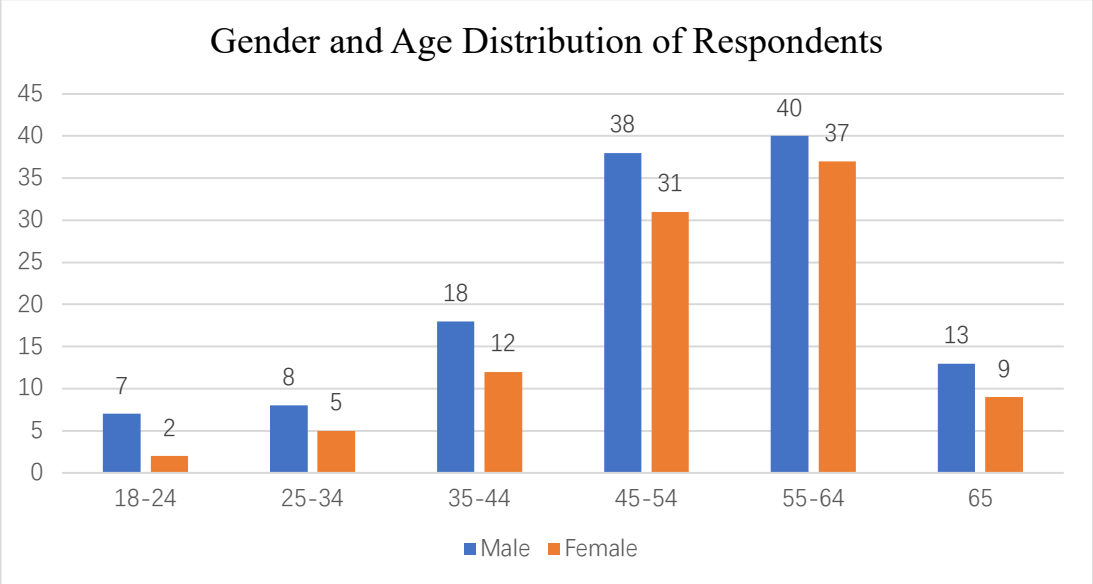


Figure 8.6-1 Gender and Age Distribution of Survey Samples

Education conditions. Based on the distribution of education levels among the survey samples, most respondents have a junior high school education. Within this group, women constitute 45.2% and men 30.2%, with the proportion of men being higher than that of women. In the category of senior high school or technical secondary school, 15.6% of women fall into this group compared to 21.8% of men. Additionally, 40.6% of women have a primary school education, whereas only 24.2% of men fall into this category. The number of women with high school, technical secondary school, or junior high school education is significantly lower than that of men, while the number of

women with elementary school education is significantly higher than that of men, indicating that the educational level of women in the project area is relatively low.

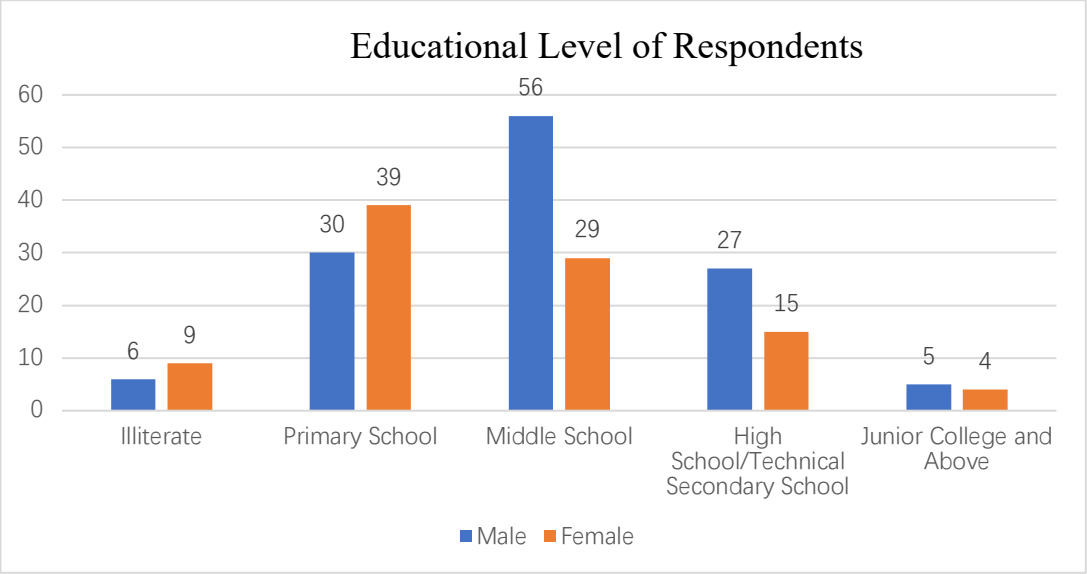


Figure 8.6-2 Gender and Age Distribution of Survey Samples

Occupation composition. According to the overall distribution of survey samples in the project area, more than 1/4 men and women are farmers, followed by the self-employed. The proportion of men employed in government departments, public institutions and enterprises is higher than that of women, while the proportion of women employed in freelancers is higher than that of men. Young men and women in urban areas mainly work nearby, while older women mostly stay at home and rarely go out to work. There is still a clear division of roles between the sexes, with men playing mainly external roles, while women play more prominent roles in housekeeping. Most of the female respondents were housekeepers, caring for the elderly and children.

Table 8.6-3 Gender and Occupation Distribution of Survey Samples

Occupation	Male		Female		Total	
	Number of people	Percentage	Number of people	Percentage	Number of people	Percentage
Government employees	8	6.45%	5	5.21%	13	5.91%
Employees of public institutions	15	12.10%	9	9.38%	24	10.91%
Corporate staff	18	14.52%	13	13.54%	31	14.09%
The self-employed	26	20.97%	15	15.63%	41	18.64%
Freelancers	13	10.48%	15	15.63%	28	12.73%
Students	0	0.00%	0	0.00%	0	0.00%
Retirement	9	7.26%	11	11.46%	20	9.09%
Peasant	35	28.23%	28	29.17%	63	28.64%
Others	0	0.00%	0	0.30%	0	0.00%

Total	124	100%	96	100%	220	100.00 %

(2) Gender Differences in the Project Area

AIIB projects have always focused on gender equality and women's development. ESS1 states that it is necessary to identify any adverse gender risks and impacts arising from gender factors and formulate mitigation measures to reduce these risks and impacts. Promote equality of opportunity and the socio-economic empowerment of women by optimizing the Project design. With reference to the analysis dimensions of gender difference of international financial institutions such as the World Bank and Asian Development Bank (ADB), and in combination with the actual conditions of the Project, three dimensions, namely, participation in decision-making, economic participation and development ability, are selected to analyze gender difference.

The proportion of women participating in the mobilization and decision-making of the Project is lower than that of men. The participation percentage of women (39%) in consultations related to the Project is lower than that of men (56%). The proportion of women (40%) who believe that they have a better understanding of policies such as land acquisition compensation and the implementation of regulations on noise pollution control is also lower than that of men (52%). In the interview, it is found that women's recognition of the Project and participation percentage show a positive trend.

The family economic status of women within the Project area is lower than that of men. Household income within the Project area is still mainly supported by men. The survey results show that men's income accounts for 60%, while women's income only accounts for 30%. In the interview, it is found that family decision-making power is mainly in the hands of men, and women are limited by low educational level, differences in physiological ability, heavy housework burden, and restrictions on taking care of the elderly and children, so that women are restricted by many objective factors in going out for work, which also leads to that the women's contribution to family economic activities is significantly lower than that of men, and their family economic status is lower than that of men.

Women have less access to job information and skills training than men. Rural women in the project area suffer more employment difficulties than men in the job market. Their access to employment information (30%) is significantly lower than that of men (58%), which reduces their opportunities to participate in income-generating activities. Household chores and taking care of the elderly and children make women lack time to participate in various employment skills training activities.

Table 8.6-4 Analysis of Gender Differences

S/N	Specific options	Male	Female	Joint participation	Analysis of difference	Remarks	Dimension
1	Whether to participate in symposiums such as mobilization and	56%	39%	5%	The percentage of women attending the meetings is much lower	Female respondents show strong willingness to attend meetings	Participation in decision-making

S/N	Specific options	Male	Female	Joint participation	Analysis of difference	Remarks	Dimension
	consultation of international freight projects?				than that of men		
2	Who in the family is familiar with the policies such as land acquisition compensation, and specifications for implementation of noise pollution control?	52%	40%	8%	Women are less familiar with policies than men	It is required to improve the level of familiarity of women on policies related to the Project	
4	What is the income of male labor force and female labor force?	60%	30%	10%	In families, men generally earn more than women	Increase women's income	Economic participation
5	Whether women in the family have difficulty in employment	32%	68%	/	It is more difficult for women to be employed	Give priority to women with regard to employment opportunities	
6	Who has more information about access to employment opportunities for men and women?	58%	30%	12%	Men are significantly more likely than women to receive employment information	Business information promotion and skills training for women should be increased	Develop ability

8.6.3 Impacts on Women

(1) Positive impacts

Provide employment opportunities for women and expand new space for employment and entrepreneurship. During the construction period of the Project, it is expected to provide 198 temporary jobs for women, such as road cleaning and green planting. It will provide employment opportunities for surrounding women and low-income groups and increase their non-agricultural economic income. With the operation of the Project, more than 3,000 employees from up to 50 enterprises will be mobilized as agents. They will be mainly engaged in cross-border e-commerce, import

and export formalities agency, finance and insurance, trade financing and third party work. About 30% of them will be female workers, which creates conditions for women to engage in relevant positions and also creates opportunities for surrounding women to enter emerging business formats, such as operating express stations.

Encourage women to participate in public affairs and promote their own development. During the construction of the Project, women are encouraged to participate in forums related to the Project through community neighborhood committees and village committees, so that more women can understand and participate in the Project, have a fuller voice, put forward their own needs and strive for more development opportunities. At the same time, the construction and operation of the Project will provide women with low-carbon awareness training and employment training, which will be conducive to improving their comprehensive quality and promoting their long-term development. The field investigation shows that women are more willing to participate in community public affairs, which is conducive to enhancing women's ability to participate in communities.

(2) Negative impacts

The field investigation shows that the construction and operation of the Project can benefit women in the project area. If women's needs and suggestions are ignored during the design, implementation and management of the Project, the social benefits of the Project will be reduced. These impacts include:

It is easy to ignore the actual needs of women during the construction and implementation of the Project. Affected by factors such as social traditional culture and economic dominance, the social status of women in the project area is still lower than that of men. In significant household matters, men generally have more say and decision-making power than women, and participation in public affairs is predominantly by men. In symposiums related to the design, implementation and operation of the Project, it is easy to ignore the actual needs of women, resulting in insufficient attention to women's needs.

Potential risk of gender-based violence (GBV). Gender-based violence is any harmful behavior against the will of individuals based on gender differences between people due to social attribution. It includes acts causing physical, sexual, or mental harm or suffering, threats involving such acts, coercion, and other deprivation of liberty. These behaviors may occur in public or in private. During the implementation and operation of the Project, the proportion of male employees is much higher than that of female employees, which poses a potential risk of gender violence. It is necessary to urge employers to prevent and stop sexual harassment against female employees, and ensure that when handling complaints from female employees for sexual harassment, their personal privacy is protected according to law.

8.6.4 Gender Action Plan

Sort out part of the concentrated demands of women within the Project area based on the questionnaire survey of the sampling samples within the Project area, the women's symposium held, the in-depth interview and the field survey. To address these needs,

the following action recommendations are proposed, as detailed in the table below.

Table 8.6-5 Gender Action Plan

Specific measures or actions		Monitoring indicators	Implementation Main structure	Target Population	Budget and Source
A. Increase employment opportunities for women	a. During the construction of the Project, prioritize providing non-technical positions to women in the communities/subvillages involved in the project area. b. Certain employment opportunities will be provided for women during the operation of the Logistics Park. c. For jobs that are not physically demanding, the age range should be broadened to give priority to women aged 45 to 55 who have difficulty in finding non-agricultural employment opportunities, such as cleaning and management and protection. d. Except for jobs or posts that are not suitable for women as stipulated by the state, it is not allowed to refuse to employ women or raise the employment standards for women on the grounds of gender	A.1 Prioritize employment opportunities for women in the project (the baseline proportion of female workers during the construction phase: about 5%; target value: 20%). **A.2 Provide employment opportunities for female workers with the new jobs created in the logistics park (baseline: 0%; target: 30%).**	Ezhou Linkong Group, AIIB PMO and Contractors	Women in the surrounding subvillages of the Project area and female staffs in AIIB PMO	Listed in the construction budget
B. Enhance women's development ability	a. By organizing employment knowledge lectures, skills training courses, and seminars on employment and entrepreneurship, women's skills, knowledge, and opportunities for employment and entrepreneurship will be enhanced. b. In the capacity building training of green airport and sustainable information disclosure, appropriate skills training content and appropriate training time should be provided in combination with women's physical and psychological quality, education level and personal needs, further guaranteeing that women have the same opportunities to improve their skills as men. **c. Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd. through relevant training**	B.1 Increase the proportion of women participating in various training programs, including the promotion of women's rights and interests, and employment skills training (baseline: 10%; target: 20%). B.2 Increase the proportion of female employees of Ezhou Linkong Group Co., Ltd. participating in project information disclosure and management training (baseline	Ezhou Linkong Group, Women's Federation of Linkong Economic Zone, Organization and Human Resources Bureau of Linkong Economic Zone	All women in the Project area	RMB 60,000, government supporting funds and loan funds

	and improve their awareness and skills of green logistics.	10%, target 20%). **B.3 Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd. through relevant training. (baseline: 10%, target: 20%)**			
C. Expand women's participation in decision-making	a. Increase the proportion of women participating in decision-making in relevant community affairs; b. The percentage of women signing or jointly signing with husbands in the land acquisition or demolition compensation agreements will be increased.	C.1 Proportion of women participating in project mobilization, targeted information disclosure, policy promotion, and consultation (baseline: 20%; target: 30%). C.2 Proportion of women signing land acquisition or demolition compensation agreements (the baseline value is 0%, while the target value is 100%).	Ezhou Linkong Group, AIIB PMO, Village Committee and Land Acquisition and Demolition Office	Women and female employees in subvillages around the Project area	RMB 70,000, project budget
D. Reduce the gender-based violence risks	a. Strengthen the protection of female worker rights and interests, provide regular psychological health counseling and female worker rights protection training for female workers; b. Enhance site supervision to prevent harmful behaviors such as gender-based violence, sexual exploitation and abuse, and sexual harassment; c. A clear grievance and complaint mechanism will be established, and a site grievance committee that includes at least two female members will be set up. The	D.1 Ensure 100% of female workers receive worker rights protection training. D.2 Ensure equal pay for equal work for 100% of female and male workers, with zero incidents of gender-based violence. D.3 Establish	Ezhou Linkong Group, Women's Federation of Linkong Economic Zone, AIIB PMO and Contractors	All women in the Project area	RMB 70,000, project capacity building and/or training budget

	safety of committee members will be ensured to avoid bias and fear of retaliation.	a grievance and complaint mechanism with at least two female members on the grievance committee.			

9 Information Disclosure and Public Participation

9.1 Identification of Stakeholders

9.1.1 Parties Affected by the Project

Stakeholders refer to individuals or groups who can affect or are affected by or benefit from the project implementation.

Project stakeholders include: 1) affected parties; 2) other stakeholders; and 3) vulnerable groups.

(1) Affected parties: individuals or groups who are or may be affected by the project (including directly or indirectly affected persons).

(2) Other stakeholders: individuals or groups who may have an interest in the project.

(3) Vulnerable groups: the elderly, women, and low-income individuals affected by the project.

The parties affected by the Project include residents in resettlement areas affected by land acquisition and demolition, field workers of project construction, staff of Huahu Airport, etc.

The specific identification and analysis of project-affected parties are detailed in the following table.

Table 9.1-1 Identification and Analysis of Project Affected Parties

Category	Stakeholders	Impact of/on the Project
Parties affected by the Project	Residents in the project area affected by land acquisition	The Project involves two townships: Yanji Town and Yangye Town. Livelihood development opportunities for the people affected by land acquisition are a key assessment indicator in the social assessment of the Project.
	Residents in noise areas where land acquisition and demolition have not yet been carried out	Undertake the environmental and social health and safety risks during the construction and operation period of the Project.
	On-site workers for project construction	They will need to bear the potential occupational health and safety risks that may arise during the project construction period.
	Staff of Huahu Airport	The increase in passenger and cargo throughput at the airport will correspondingly increase employment opportunities with airlines, enhance economies of scale, and boost the

		occupational pride of airport staff.

9.1.2 Other Stakeholders

Other stakeholders include the PMO of Ezhou Linkong Group and its subordinate institutions, relevant local government departments, Hubei International Logistics Airport Co., Ltd., media units, design consulting firms, and contractors. The specific identification and analysis of other stakeholders are detailed in the following table.

Table 9.1-2 Identification and Analysis of Other Stakeholders

Category	Stakeholders	Role (Impact of/on the Project)
Other stakeholders	PMO of Ezhou Linkong Group	Responsible for formulating the overall project implementation plan, supervising and guiding the implementation units of each sub-project to complete the plan and related tasks, and promoting project implementation.
	Natural Resources and Planning Bureau of Linkong Economic Zone	Responsible for land acquisition and house demolition involved in the project, and assisting with related approval procedures.
	Social Affairs Bureau of Linkong Economic Zone	Responsible for implementing social assistance/subsidy standards and supporting policies, such as subsistence allowances and five guarantees.
	Organization and Human Resources Bureau of Linkong Economic Zone	Responsible for implementing policies related to skill training and employment promotion for relocated residents.
	Economic Development Bureau of Linkong Economic Zone	Responsible for overseeing the initial stages of the project and approving and submitting investment projects according to regulatory authority.
	Financial Bureau of Linkong Economic Zone	Responsible for managing the financial plan of the Project and AIIB investment loan activities.
	Women's Federation of Linkong Economic Zone	Protect the legitimate rights and interests of women and children in the jurisdiction.
	Contractor	Carry out construction according to the project design and be responsible for the environmental and social impacts at the construction site.
	Hubei International Logistics Airport Co., Ltd.	The completion of the Project will enhance the cargo warehousing level and capacity of Huahu Airport, significantly increasing the airport's cargo throughput.
	Design consulting unit (e.g., feasibility study/environmental impact assessment units)	Learn the needs of stakeholders and optimize the design.
	Media	Responsible for publicizing the Project and informing the general public about various aspects of the Project.

Source: Project environmental and social impact survey, interviews and consultations with relevant departments

9.1.3 Disadvantaged/Vulnerable Individuals or Groups

The vulnerable groups of the Project include: the elderly, women, and low-income individuals.

The construction of the Hubei Global Air Cargo Logistics Hub Project may have greater impacts on the elderly and women in nearby resettlement areas due to noise and air pollution. Additionally, female employees may face higher occupational health risks during the project construction process. Moreover, since the Project involves large-scale civil works and land acquisition compensation and resettlement, vulnerable groups may be in a weak position in benefit distribution.

The specific identification and analysis of vulnerable groups are detailed in the following table.

Table 9.1-3 Identification and Analysis of Vulnerable Groups

Category	Stakeholders	Role (Impact of/on the Project)
Vulnerable groups	Elderly	Reduce the impacts of noise, dust, and other disturbances during the project construction; provide dedicated information disclosure methods
	Women	Ensure that female residents are less affected by noise, dust, and construction emissions during the project construction and operation; ensure equal pay for female workers and male workers, and guarantee the occupational health and safety of female employees
	Low-income population	The project construction impacts existing livelihoods, requiring the provision of more job opportunities during project implementation

Source: Project environmental and social impact survey, interviews and consultations with relevant departments

9.1.4 Analysis of the Needs of Stakeholders in the Project Area

Based on the different roles of stakeholders in the Project, we conducted an environmental and social impact survey on various stakeholders through methods such as focus group discussions, key informant interviews, and questionnaires. We have preliminarily identified the needs of different stakeholders for the Project, such as preferred notification methods and potential special requirements, as well as their needs for information disclosure and consultation at different stages of project implementation. See the following table for specific analysis.

Table 9.1-4 Summary of the Needs of Stakeholders

Category	Stakeholders	Preferred Method of Notification	Needs and Interests	Possible Special Needs
Parties affected by the Project	Residents in the project area affected by land acquisition	Written notice, telephone, and broadcast in the resettlement area	They need to be fully compensated and properly resettled in accordance with policies; Desire to obtain employment opportunities and increase income;	Obtain full compensation in time
	On-site workers for project construction	Written notice, telephone, and seminars	More guarantee measures for construction safety Develop a more reasonable dust control construction plan Receive timely remuneration according to the labor provided	Regular training
	Staff of Huahu Airport	Written notice, e-mail, telephone, and seminars	It is hoped that the completion of Hubei Global Air Cargo Logistics Hub Project will help improve the cargo throughput of Huahu Airport, so as to provide more jobs and higher wages.	Daytime meetings
Other intereste d parties	AIIB PMO of Ezhou Linkong Group	•Access to loans; •Smooth implementation of the project	Government official documents, emails, seminars, telephone	Consultation activities on weekdays, requiring face-to-face meetings
	Relevant government agencies and departments	•Smooth implementation of the project	Written notice, telephone	Consultation activities on weekdays, requiring face-to-face meetings
	Design consulting unit (e.g., feasibility study/environm ental impact assessment units)	•Smooth project implementation with revenue and operating profit	Government official documents, emails, seminars, telephone	Daytime meetings
	Contractor	•Smooth project implementation with revenue and operating profit	Government official documents, emails, seminars, telephone	Daytime meetings
	Media	•Design and implement relevant publicity and education activities	Government official documents, emails, seminars, telephone	Daytime meetings

Source: Project environmental and social impact survey, interviews and consultations with relevant departments.

To ensure that vulnerable groups can fully participate in the project and safeguard their rights during the implementation and operation of the project, special attention was paid to the main characteristics and needs of these groups during the social impact survey and public participation of the Hubei Global Air Cargo Logistics Hub Project. The identification of vulnerable groups and their needs are detailed in the following table.

Table 9.1-5 Identification of Vulnerable Groups and Their Needs

Vulnerable groups	Needs and Interests	Recommended Participation Method	Special Needs
Elderly	Reduce the impact of noise and dust generated during project construction and operation on the travel and health of the elderly	Meeting of residents in the resettlement area Daily publicity of the Party-mass Service Center	Daytime meetings
Women	Reduce the occupational safety risks of female workers that may exist during project construction; Priority access to employment opportunities; Women's opinions are fully considered in public consultations	Bulletin boards in resettlement area Seminars	Schedule meetings during weekends or evenings to accommodate free time
Low-income groups	Give priority to creating jobs and obtain project benefits through multiple channels Opinions expressed in public consultations can be fully considered	Residents' representative assembly Bulletin boards in resettlement area Home interview	Schedule meetings during weekends or evenings to accommodate free time

Source: Project environmental and social impact survey, interviews with relevant departments and consultation.

9.2 Information Disclosure and Consultation Activities Completed During Preparation:

9.2.1 Completed Information Disclosure Activities

In the preparation stage of the Project, Ezhou Linkong Group Co., Ltd. (hereinafter referred to as "Ezhou Linkong Group"), AIIB PMO of Linkong Group (hereinafter referred to as "PMO"), Management Committee of Linkong Economic Zone, other relevant government departments and media units have carried out a series of information disclosure and information publicity activities on the Project. The publicly disclosed information in the project area includes:

Public announcement of the basic information of the Hubei Global Air Cargo Logistics Hub Project

Project initiation information of the Hubei Global Air Cargo Logistics Hub Project

Land and housing acquisition and demolition standards for the Project, and the approval for urban construction land

The environmental and social documentation of the Project includes an Environmental and Social Impact Assessment (ESIA) report for the advanced project activities of the Project

See the following table for details of information disclosure completed so far.

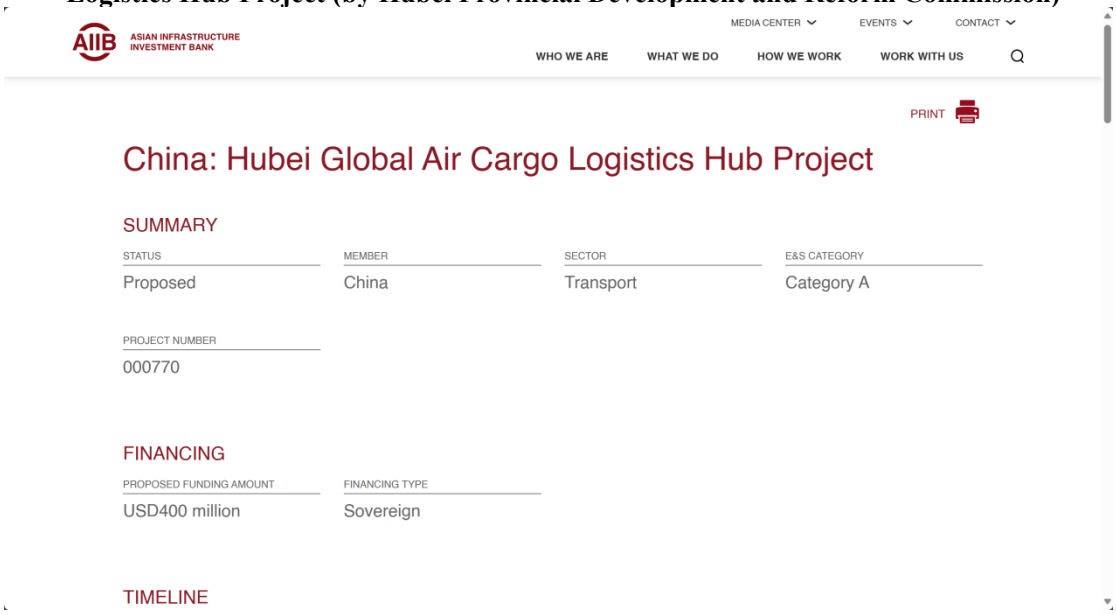
Table 9.2-1 Completed Information Disclosure of the Project

Time	Location	Stakeholders/Participants	Main Contents	Approach
October 2019	Hubei Provincial Governme nt	Ezhou Linkong Group, AIIB PMO of Linkong Group, Linkong Economic Zone, Natural Resources and Planning Bureau, residents in resettlement areas within the scope of acquisition and demolition, etc.	Notice of the Hubei Provincial People's Government on the Implementation of the Comprehensive Land Price Standards for Land Acquisition in Hubei Province	Government website https://www.hubei.gov.cn/zfwj/ezf/201910/t20191028_1712135.shtml
October 2020	Hubei Provincial Governme nt	Ezhou Linkong Group, Linkong Economic Zone, Yangye Town, etc.	Approval of the Provincial People's Government on the 81st Batch of Urban Construction Land (Land Consolidation) in Ezhou City for the Year 2020	Government documents
February 2022	Towns/to wnships affected by land acquisitio n and demolitio n for the Project	Ezhou Linkong Group, AIIB PMO of Linkong Group, Natural Resources and Planning Bureau of Linkong Economic Zone and affected townships	Policies and compensation standards regarding land acquisition and demolition	Public notices
April 2022	Hubei Provincial Governme nt	Ezhou Linkong Group, Linkong Economic Zone, Yanji Town, Yangye Town, etc.	Approval of the Provincial People's Government on the 27th Batch of Urban Construction Land in Ezhou City for the Year 2021	Government documents
Septemb er 2022	National Developm ent and Reform Commissi on	Ezhou Linkong Group, AIIB PMO of Linkong Group, Linkong Economic Zone, etc.	The Hubei Global Air Cargo Logistics Hub Project has been approved and included in China's 2022-2024 candidate project plan for utilizing loans from the Asian Infrastructure Investment Bank.	Government website https://www.ndrc.gov.cn/fggz/lywzjw/wzgl/202101/t20210108_1264693.html
October 2022	Changjian g Daily	Ezhou Linkong Group, AIIB PMO of Linkong Group, etc.	The Hubei Global Air Cargo Logistics Hub Project has been included as a candidate project for AIIB loans.	MicroBlog
February 2023	Hubei Provincial Developm ent and	Ezhou Linkong Group, AIIB PMO of Linkong Group, Linkong Economic Zone, etc.	AIIB and Ezhou Signed the Memorandum of Understanding for Hubei Global Air Cargo	Government website https://fgw.hubei.gov.cn/fbjd/xxgkml/jgzn/nsjg/wjc/gzdt/202302/t20230228_45

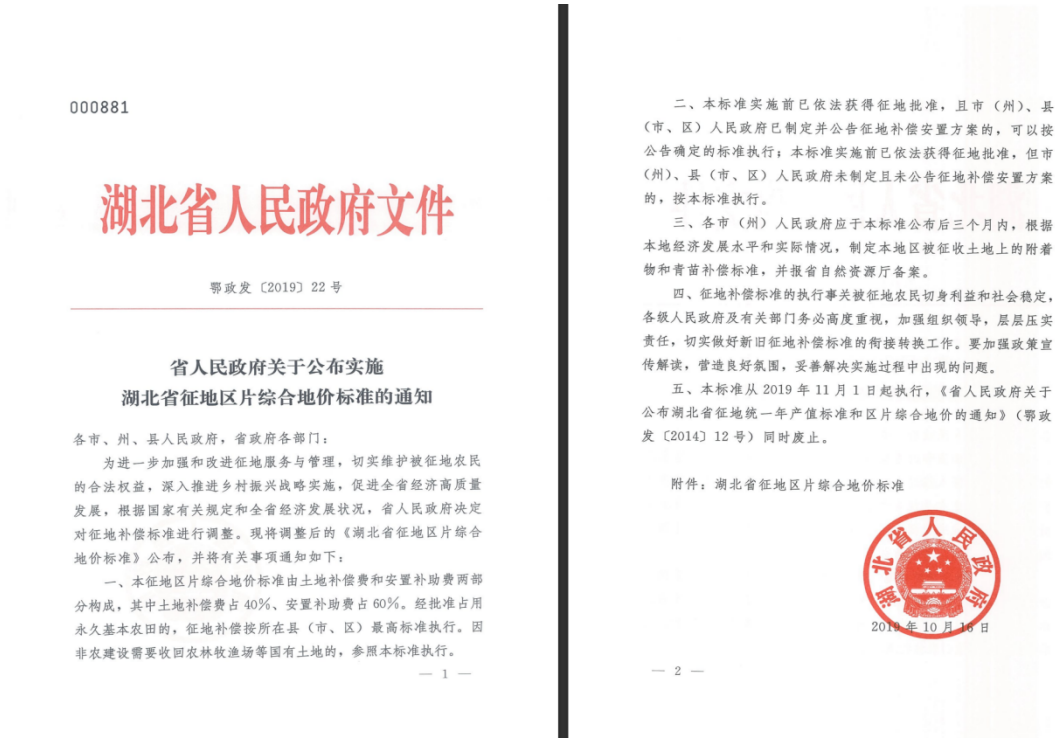
Time	Location	Stakeholders/Participants	Main Contents	Approach
	Reform Commission		Logistics Hub Project	65389.shtml
February 2023	Ezhou Converged Media	Ezhou Linkong Group, AIIB PMO of Linkong Group, Linkong Economic Zone, etc.	Publicize the signing of the Memorandum of Understanding between AIIB and Ezhou	WeChat Official Account
August 2023	Linkong Economic Zone	Ezhou Linkong Group, AIIB PMO of Linkong Group, Management Committee of Linkong Economic Zone, etc.	Approval of the Feasibility Study Report on the Port Operations of the Hubei Global Air Cargo Logistics Hub Project at Ezhou Airport Comprehensive Bonded Zone (Phase I)	Government website https://lkjjq.ezhou.gov.cn/xxgk/fdzdgknr/zdjsxm/pzjgxx/202308/t20230817_567806.shtml
August 2023	Linkong Economic Zone	Ezhou Linkong Group, Management Committee of Linkong Economic Zone, etc.	Approval of the Preliminary Design for the Port Operations of the Hubei Global Air Cargo Logistics Hub Project at Ezhou Airport Comprehensive Bonded Zone (Phase I)	Government website https://lkjjq.ezhou.gov.cn/xxgk/fdzdgknr/zdjsxm/pzjgxx/202308/t20230817_567806.shtml
September 2023	Ezhou Linkong Group	Ezhou Linkong Group, AIIB PMO of Linkong Group, Asian Infrastructure Investment Bank (AIIB), environmental protection units, etc.	Environmental and Social Impact Assessment (ESIA) Report for the advanced project activities of Hubei Global Air Cargo Logistics Hub Project	File report
September 2023	AIIB	AIIB, National Development and Reform Commission, Ezhou Linkong Group	Public Announcement of Project Information for the Hubei Global Air Cargo Logistics Hub Project	AIIB website https://www.aiib.org/en/projects/details/2023/proposed/China-Hubei-Global-Air-Cargo-Logistics-Hub-Project.html
June 2024	Ezhou Linkong Group	Ezhou Linkong Group, AIIB PMO of Linkong Group, Asian Infrastructure Investment Bank (AIIB), environmental protection units, etc.	Environmental and Social Impact Assessment, Stakeholder Engagement Plan and other documents	Website publicity

Source: PMO of Ezhou Linkong Group.

AIIB and Ezhou Signed the Memorandum of Understanding for the Hubei Global Air Cargo Logistics Hub Project (by Hubei Provincial Development and Reform Commission)



Public Announcement of Project Information for the Hubei Global Air Cargo Logistics Hub Project (by AIIB)



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湖北省人民政府文件

鄂政发〔2019〕22号

省人民政府关于公布实施湖北省征地区片综合地价标准的通知

各市、州、县人民政府，省政府各部门：

为进一步加强和改进征地服务与管理，切实维护被征地农民的合法权益，深入推进乡村振兴战略实施，促进全省经济高质量发展，根据国家有关规定和全省经济发展状况，省人民政府决定对征地补偿标准进行调整。现将调整后的《湖北省征地区片综合地价标准》公布，并将有关事项通知如下：

一、本征地区片综合地价标准由土地补偿费和安置补助费两部分构成，其中土地补偿费占40%、安置补助费占60%。经批准占用永久基本农田的，征地补偿按所在县（市、区）最高标准执行。因非农建设需要收回农林牧渔场等国有土地的，参照本标准执行。

— 1 —

二、本标准实施前已依法获得征地批准，且市（州）、县（市、区）人民政府已制定并公告征地补偿安置方案的，可以按公告确定的标准执行；本标准实施前已依法获得征地批准，但市（州）、县（市、区）人民政府未制定且未公告征地补偿安置方案的，按本标准执行。

三、各市（州）人民政府应于本标准公布后三个月内，根据本地经济发展水平和实际情况，制定本地区被征收土地上的附着物和青苗补偿标准，并报省自然资源厅备案。

四、征地补偿标准的执行事关被征地农民切身利益和社会稳定，各级人民政府及有关部门务必高度重视，加强组织领导，层层压实责任，切实做好新旧征地补偿标准的衔接转换工作。要加强政策宣传解读，营造良好氛围，妥善解决实施过程中出现的问题。

五、本标准从2019年11月1日起执行，《省人民政府关于公布湖北省征地统一年产值标准和区片综合地价的通知》（鄂政发〔2014〕12号）同时废止。

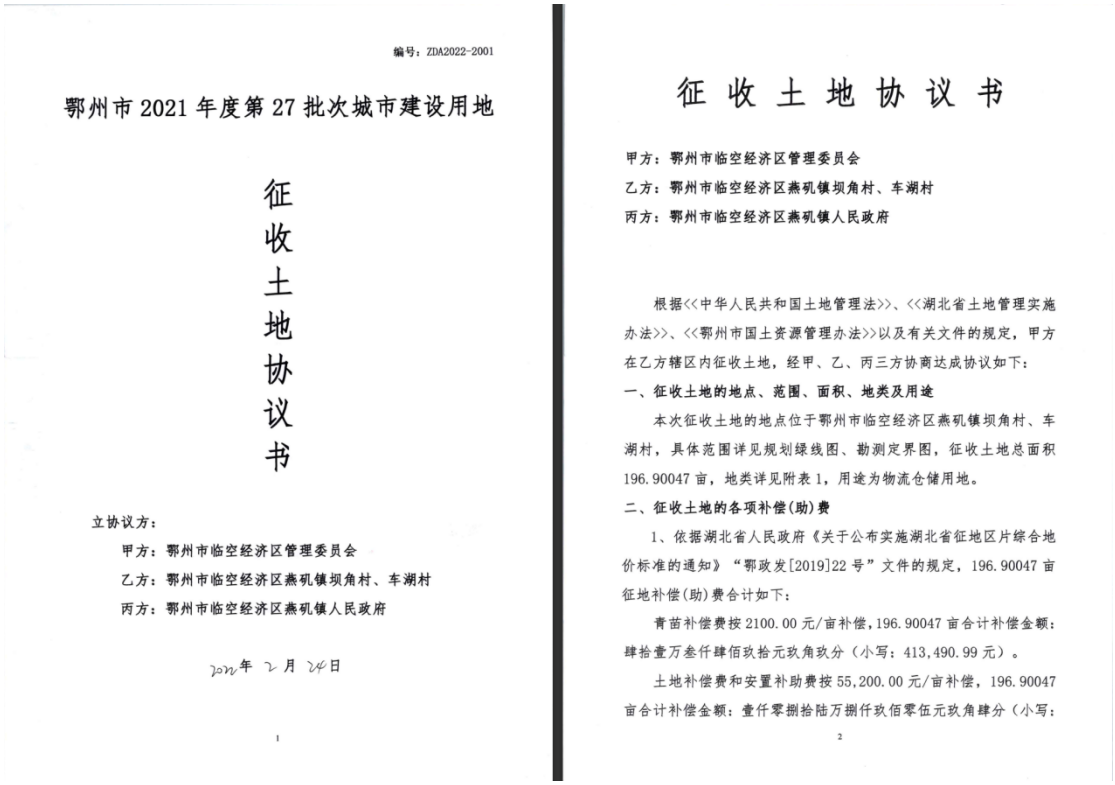
附件：湖北省征地区片综合地价标准

湖北省人民政府

2019年10月16日

— 2 —

Notice on Publishing and Implementing the Comprehensive Land Price Standards for Land Acquisition Areas in Hubei Province (by Hubei Provincial People's Government)



编号：ZDA2022-2001

鄂州市2021年度第27批次城市建设用地

征收土地协议书

立协议方：

甲方：鄂州市临空经济区管理委员会

乙方：鄂州市临空经济区燕矶镇坝角村、车湖村

丙方：鄂州市临空经济区燕矶镇人民政府

2021年7月26日

1

征 收 土 地 协 议 书

甲方：鄂州市临空经济区管理委员会

乙方：鄂州市临空经济区燕矶镇坝角村、车湖村

丙方：鄂州市临空经济区燕矶镇人民政府

根据<<中华人民共和国土地管理法>>、<<湖北省土地管理实施办法>>、<<鄂州市国土资源管理办法>>以及有关文件的规定，甲方在乙方辖区内征收土地，经甲、乙、丙三方协商达成协议如下：

一、征收土地的地点、范围、面积、地类及用途

本次征收土地的地点位于鄂州市临空经济区燕矶镇坝角村、车湖村，具体范围详见规划绿线图、勘测定界图，征收土地总面积196.90047亩，地类详见附表1，用途为物流仓储用地。

二、征收土地的各项补偿(助)费

1、依据湖北省人民政府《关于公布实施湖北省征地区片综合地价标准的通知》“鄂政发[2019]22号”文件的规定，196.90047亩征地补偿(助)费合计如下：

青苗补偿费按2100.00元/亩补偿，196.90047亩合计补偿金额：肆拾壹万叁仟肆佰玖拾元玖角玖分（小写：413,490.99元）。

土地补偿费和安置补助费按55,200.00元/亩补偿，196.90047亩合计补偿金额：壹仟零捌拾陆万捌仟玖佰零伍元玖角肆分（小写：

2

Land Acquisition Agreement (by Management Committee of Linkong Economic Zone)

Approval of the Preliminary Design for the Port Operations of the Hubei Global Air Cargo Logistics Hub Project at Ezhou Airport Comprehensive Bonded Zone (Phase I) (by Management Committee of Linkong Economic Zone)

Publicize the signing of the Memorandum of Understanding between AIIB and Ezhou (by Ezhou Convergence Media)

Figure 9.2-1 Publicity of Project Information during the Preparation Period (Excerpt)

9.2.2 Consultation Activities Completed during the Preparation Period

During the preparation period of the Project, Ezhou Linkong Group, AIIB PMO of Linkong Group, Management Committee of Linkong Economic Zone and Central-Southern Safety & Environmental Technology Institute Co., Ltd. carried out social impact investigation and extensive public participation and consultation on

Hubei Global Air Cargo Logistics Hub Project, and preliminarily identified stakeholders of the Project. Subsequently, based on the initially identified stakeholders, the AIIB PMO of Ezhou Linkong Group organized a series of seminars and key informant interviews. The institutions and individuals participating in the seminars and interviews mainly included:

Relevant government departments: Provincial Development and Reform Commission, Provincial Finance Bureau, Management Committee of Linkong Economic Zone, related bureaus governing the Linkong Economic Zone (Ecology and Environment Bureau, Natural Resources and Planning Bureau, Social Affairs Bureau, Organization and Human Resources Bureau, Rural Revitalization Bureau, Women's Federation), and Hubei International Logistics Airport Co., Ltd., etc.;

Yanji Town Resettlement Area, Yangye Town Resettlement Area, etc.

In the public participation activities that have been conducted, the main activity processes are as follows:

The AIIB PMO of Ezhou Linkong Group introduced the objectives and contents of the Hubei Global Air Cargo Logistics Hub Project;

The AIIB PMO of Ezhou Linkong Group introduced the project's environmental and social impacts, the purpose of public participation research, and the AIIB's requirements for public participation and its environmental and social policies;

Communicated with relevant government departments, town/townships, and neighborhood committees in resettlement areas to obtain relevant social baseline data and information.

Stakeholders' participants freely expressed their opinions and suggestions regarding the project construction and their respective concerns.

The main results of public participation found through seminars and key informant interviews are as follows:

All stakeholders' participants recognized and strongly supported the Hubei Global Air Cargo Logistics Hub Project and the construction of the international logistics park;

During the project preparation period, it is necessary to engage in meaningful consultations with all stakeholders. Based on the results and findings of these consultations, optimize the project design to minimize impacts on surrounding resettlement areas during implementation. Throughout the entire project cycle, special attention should be given to inclusive arrangements for vulnerable groups, such as the elderly, women, and low-income populations in the resettlement areas.

The ESIA unit carried out field investigation and public consultation activities. Main findings are as follows:

a. Residents hope to reduce the negative impacts of project construction, such as dust, noise, and soil/water pollution.

b. Most of the residents in the affected resettlement areas support the proposed Hubei Global Air Cargo Logistics Hub Project.

c. Residents generally expressed that the primary benefit of the project would be the increase in employment opportunities.

d. Women's recognition and participation rate of the Project show a positive trend, hoping that the Project can provide them with certain employment opportunities.

e. The grievance and feedback mechanism is operating effectively. Residents can provide feedback through community groups and resettlement areas. Additionally, if residents encounter project-related issues, they can directly report them to local neighborhood committee officials and the resettlement area. After receiving feedback, the neighborhood committee officials and resettlement area will convey the concerns to relevant departments such as the PMO and the Management Committee of Linkong Economic Zone, which will then work out appropriate solutions.

9.3 Public Engagement Plan for Each Stage of the Project

Information disclosure and public participation will run through the whole project cycle.

According to stakeholder identification and the project content, a public engagement plan for each stage of the Project is formulated. See Chapter II of SEP for details.

Table 9.3-1 Public Consultation Conducted and Main Findings

Time	**Location**	**Stakeholders' participants**	**Consultation contents**	**Adopted method**	**Results**
February 2023	Ezhou Linkong Group	Hubei Provincial Department of Finance Hubei Provincial Development and Reform Commission Management Committee of Linkong Economic Zone Ezhou Linkong Group Consulting Unit	Project memorandum	Seminars	➢ All parties signed the project memorandum
March 2023	Ezhou Linkong Group	Ezhou Linkong Group	Establishment of AIIB PMO	Seminars	➢ It was decided to establish the AIIB PMO, which will be responsible for the daily management, bidding and procurement, financial management, project construction, environmental protection, resettlement, and communication and coordination during the project preparation and

					implementation phases.
May 2023	Ezhou Linkong Group	AIIB Expert Panel Management Committee of Linkong Economic Zone Ezhou Linkong Group Consulting Unit	Discussion meeting of project feasibility study report	Seminars	➢ AIIB provided guidance on the feasibility study report for further refinement and revisions.
July 2023	Ezhou Linkong Group	Ezhou Linkong Group PMO AIIB Task Force FSR Consultant	Report on the Overview of the Hubei Global Air Cargo Logistics Hub Project	Seminars Online meeting	Summarize the project components, progress updates, and expected timeline, specifically: ➢ Discussion on the feasibility study report of the Project; ➢ The latest updates on parallel financing project activities; ➢ The latest updates on subsequent project activities
July 2023	Ezhou Linkong Group	Ezhou Linkong Group Hubei Provincial Department of Finance AIIB Task Force	Financial Management of the Hubei Global Air Cargo Logistics Hub Project	Seminars	➢ Assessed the capacity of the PIU, identified gaps between the financial management arrangements/financial management system proposed for the project and AIIB's financial management requirements, and reached an agreement on the financial management arrangements for the project. ➢ Discussed the arrangements for counterpart funding,

December 2023	Ezhou Linkong Group	AIIB PMO of Ezhou Linkong Group ESIA Unit	Discuss the work plan for the field survey on resettlement and social assessment	Seminars	➢ Clarified the work plan and schedule for the resettlement and social assessment survey, etc. ➢ Provided a series of forms for the inventory survey, verified the physical quantities affected by resettlement, and provided a list of policy documents; ➢ Determined the specific arrangements for the questionnaire survey and field reconnaissance in each project area, and select the resettlement areas and sample sizes for the survey.
December 2023	Ezhou Linkong Group	PMO Natural Resources and Planning Bureau Social Affairs Bureau Organization and Human Resources Bureau Women's Federation ESIA Unit	Learned and collected information on resettlement and social impacts of the Project.	Seminars	➢ Collected relevant data and information on land acquisition and house demolition involved in the Project. ➢ Learned the local social assistance & subsidy standards and the implementation of employment-related supporting policies. ➢ Learned the relevant policies and measures to protect the legal rights and interests of women and children within the scope of the Project.

		Hubei International Logistics Airport Co., Ltd. ESIA Unit	associated project and collection of opinions		associated project (Ezhou Huahu Airport) under the Hubei Global Air Cargo Logistics Hub Project. ➢ The person in charge of Huahu Airport expressed strong support for the Project and provided some positive suggestions and recommendations.
December 2023	Construction site of the early-stage construction project	PMO Contractor ESIA Unit	Social impacts at project construction site	Seminars Key informant interviews Site survey	➢ Investigated the project construction environment and current construction progress on site. ➢ Collected information on the project contractor's institutional development, construction training, labor rights, and other related aspects.
December 2023	Project affected town/townships	PMO Yanji Town Government (Chehu Village, Bajiao Village and Duwan Village) Residents in the resettlement area ESIA Unit	Find out the project's resettlement and social impacts	Seminars Questionnaire Key informant interviews Site survey	➢ Learned the basic information and specific circumstances of the interviewees. ➢ Learned the status of project information disclosure and public participation. ➢ Learned the project's environmental and social impacts. ➢ Collected interviewees' opinions and suggestions on the project's land acquisition and demolition issue.
	Project affected	PMO	Find out the project's	Seminars	➢ Learned the basic information and specific circumstances

		Government (Gutang Village)	social impacts		➢ Learned the status of project information disclosure and public participation. ➢ Learned the project's environmental and social impacts. ➢ Collected interviewees' opinions and suggestions on the project's land acquisition and demolition issue.
		Residents in the resettlement area		Key informant interviews	
		ESIA Unit		Site survey	
December 2023	Project affected town/townships	PMO	Find out the project's resettlement and social impacts	Seminars	➢ Learned the basic information and specific circumstances of the interviewees. ➢ Learned the status of project information disclosure and public participation. ➢ Learned the project's environmental and social impacts. ➢ Collected interviewees' opinions and suggestions on the project's land acquisition and demolition issue.
		Shawo Township Government (Zouma Village)		Questionnaire	
		Residents in the resettlement area		Key informant interviews	
		ESIA Unit		Site survey	
December 2023	Ezhou Linkong Group	AIIB Expert Panel	Inspection by AIIB Expert Panel	Seminars	➢ Learned the current project progress and inspected the construction site. ➢ Discussed and provided suggestions on the Project Implementation Unit's implementation capacity, the project's environmental and social assessment work, project finance, and project procurement.
		Management Committee of Linkong Economic Zone			
		AIIB PMO of Ezhou Linkong			

		Consulting Unit			
April 2024	Ezhou Linkong Group	AIIB Expert Panel Management Committee of Linkong Economic Zone AIIB PMO of Ezhou Linkong Group Consulting Unit	Inspection by AIIB Expert Panel	Seminars	➢ Discuss and negotiated changes to the project design, and redefine the new project scope. ➢ Discussed and provided suggestions on the Project Implementation Unit's implementation capacity, the project's environmental and social assessment work, project finance, and project procurement. ➢ Summarized and signed the meeting memorandum.
June 2024	Ezhou Linkong Group	AIIB Expert Panel AIIB PMO of Ezhou Linkong Group Consulting Unit	Project Report	Online meeting	➢ Due to project changes, all parties discussed and revised the original reports, including ESIA/ESMP, RP, SEP, and NMF. ➢ AIIB experts provided modification opinions for original reports based on project changes, and set the time limit for report modification and submission.

Source: PMO of Ezhou Airport Group, field investigation and interviews

10 Grievance Redress Mechanism (GRM)

During the preparation, construction, and future operation phases of the Project, a project-level GRM will be established. This mechanism aims to promptly address and resolve impacts and issues brought to stakeholders by the Project, ensure the affected parties' need for information disclosure, and promote the broadest possible participation in resettlement areas. This will also take into account the current status of complaints and grievances from the local communities in the Project area.

The GRM of the Project mainly includes two types:

The first type is the project-level GRM, which provides a complaint channel for affected residents, social groups, enterprises, institutions, and business entities during the implementation and operation of the Project.

The second type is a grievance redress mechanism for project workers, including direct workers and contract workers, as well as employees responsible for the project, providing a channel for grievance.

10.1 Arrangements for Grievance Redress Mechanism

(1) GRM for project-affected parties

The establishment of the GRM primarily aims to promptly reflect and resolve adverse impacts arising from the implementation of the Project (e.g., noise from aircraft takeoffs and landings, noise from construction site, dust generated by construction activities, and improper disposal of construction waste), thereby safeguarding the basic social rights of stakeholders. The GRM for the Project complies with the regulatory standards of the People's Republic of China, which protect citizens' rights from environmental and social impacts related to construction activities. The "Regulation on Complaint Letters and Visits No. 431," issued by the State Council of the People's Republic of China in 2005, outlines the complaint handling procedures at various levels of government and protects complainants from retaliation. In accordance with these regulations, the former Ministry of Environmental Protection issued the latest "Measures for Environmental Letters and Visits" (Decree No. 15) in December 2010.

If a grievance is received, the head of the Linkong Group AIIB PMO should first verify whether the grievance is related to the project. If the grievance is related to the Project, regardless of whether it pertains to environmental or social issues, the head shall initiate coordination to address and resolve the grievance. If the grievance is not related to the Project, the head shall submit the grievance to the relevant competent authorities on behalf of the complainant. All grievances shall be documented, and the entire process of handling the grievance shall be communicated to the relevant personnel. The basic steps and time frame of the GRM are as follows.

Stage 1 (5 days): If the complainant is dissatisfied with the land acquisition compensation and resettlement plan, or with safety and environmental issues during the construction and

operation periods, they can make an oral or written grievance to the local village committee in the project area or the contractor. If the grievance is oral, the project area village committee or the contractor should make a written record. The village committee or contractor will: (1) Immediately require the complained subject to stop the related activities after confirming the issue (e.g., noise impact from site construction on nearby residents); (2) Ensure that the complained subject does not resume the related activities until the complaint is resolved; (3) Immediately inform the Linkong Group AIIB PMO of the complaint content and the proposed solution; (4) Provide a clear response to the affected person within two days; (5) Resolve the issue as much as possible within five days of receiving the complaint.

Stage 2 (15 days): If the complainant is not satisfied with the handling results of the project area village committee or contractor, they can make an oral, telephone, or written grievance to the township-level government or the Linkong Group AIIB PMO after receiving the handling results. The AIIB PMO of Ezhou Linkong Group or the township government will: (1) Retrieve the original grievance records and organize a meeting with key stakeholders (including the subject of the complaint and the complainant) within five days. Develop a solution that is acceptable to all parties, outlining the key steps to resolve the issue. (2) The subject of the complaint shall immediately implement the resolution and resolve the issue within 15 days. All measures and outcomes shall be documented.

Stage 3 (15 days): If the complainant is not satisfied with the handling results of the township government or the Linkong Group AIIB PMO, they can make an oral, telephone, or written grievance to the Management Committee of Linkong Economic Zone or Ezhou Linkong Group, or directly file a lawsuit in the people's court after receiving the handling results. The Management Committee of Linkong Economic Zone or Ezhou Linkong Group will organize a stakeholder consultation meeting within two weeks (including the complainant, the subject of the complaint, and relevant functional departments such as the local Natural Resources and Planning Bureau, Resettlement Office, Human Resources and Social Security Bureau, Women's Federation, and Agriculture and Rural Affairs Bureau). The meeting shall establish a resolution acceptable to all parties, including clear steps for implementation. The subject of the complaint shall immediately implement the agreed-upon resolution and completely resolve the issue within 15 days. The actions and results of all these stages will be documented. At the end of Stage 3, Ezhou Linkong Group will inform the AIIB of the results.

Stage 4: If the complainant is still not satisfied with the above decisions, they may file a lawsuit with the Civil Court in accordance with the "Civil Procedure Law of the People's Republic of China" after receiving the decision.

(2) GRM for workers

Ezhou Linkong Group will establish a separate grievance handling center to address complaints raised by workers at construction sites against contractors. These complaints include issues related to wages, overtime pay, timely payment of wages, accommodation problems, or facilities related to drinking water, sanitation, and medical services.

In GBV management, relying on the guidance and coordination of the AIIB PMO, the Women's Federation of the Linkong Economic Zone, and the Women's Federation of the resettlement subdistrict, the PIU and project contractors shall, during the implementation or operation of the Project, sign labor (employment) contracts with female employees in accordance with laws and regulations such as the "Law of the People's Republic of China on

the Protection of Women's Rights and Interests," the "Special Provisions on Labor Protection for Female Employees," the "Regulations on Health Care for Female Employees," the "Special Labor Protection System for Female Employees in Workplaces (Reference Text)," and the "System for Eliminating Sexual Harassment in Workplaces (Reference Text)." They shall ensure equal pay for equal work for men and women and, based on the work and production characteristics of their units, take effective measures such as appointing dedicated personnel responsible for protecting women's rights to prevent and stop sexual harassment of female employees in the workplace.

At the same time, establish a rapid response mechanism for grievances or suggestions related to GBV from female workers and women in the project area. If there are incidents of sexual harassment or other behaviors that endanger the personal safety of female employees in the workplace, the victim can immediately report or file a complaint with the employer, grassroots Women's Federation organization, Female Employee Committee, or by calling the "12338" Women's Rights Protection Public Service Hotline. The employer shall promptly address the issue and legally protect the rights and interests of female employees from infringement.

Additionally, the AIIB has established a Project-affected People’s Mechanism (PPM). When project-affected people believe that the AIIB's failure to implement its Environmental and Social Policy (ESP) has caused or may cause adverse impacts on them, and their concerns cannot be satisfactorily resolved through the project GRM or AIIB's management mechanisms, the PPM provides an independent and impartial review opportunity. Relevant information about PPM can be accessed through the following link:

https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html.

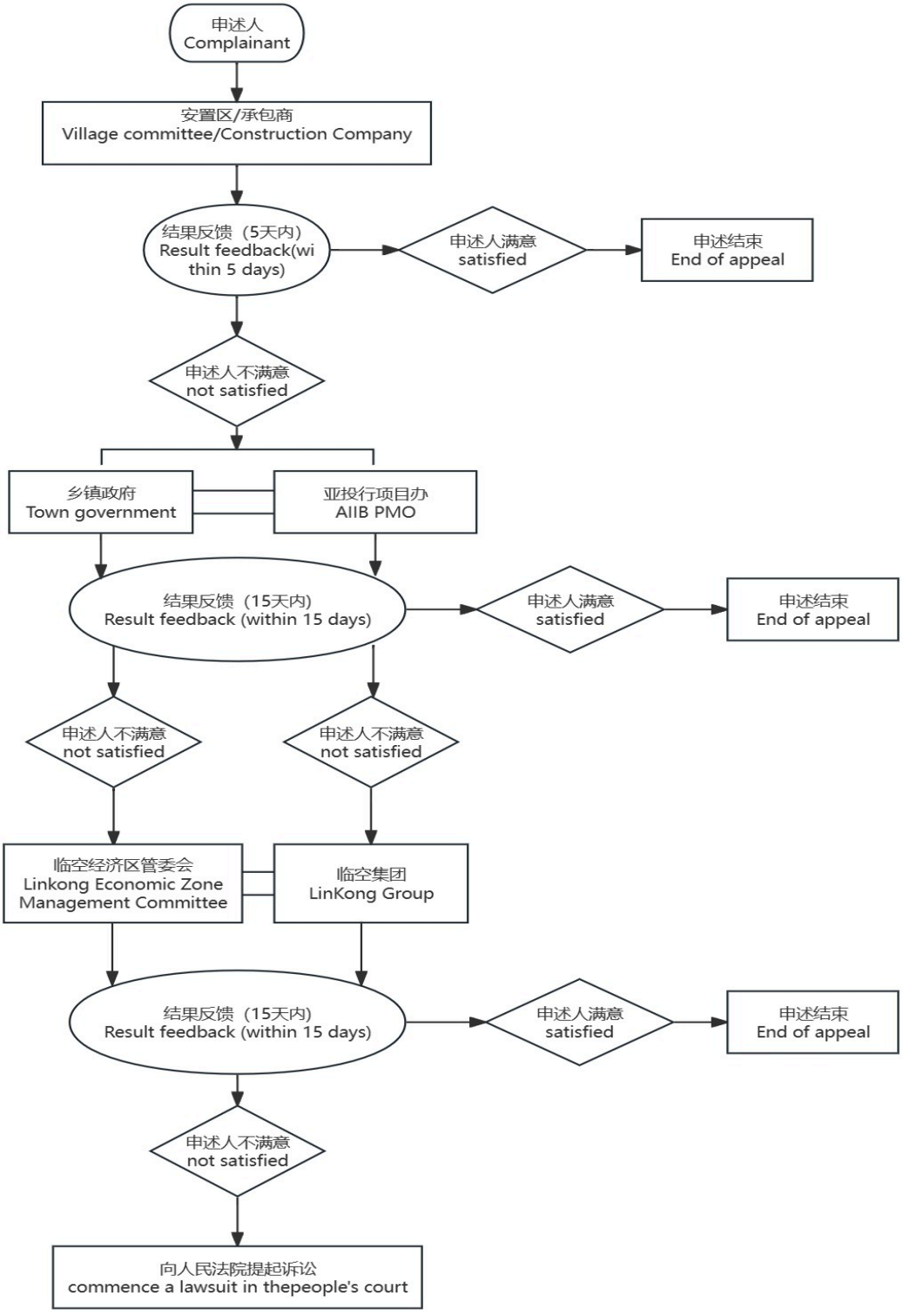


Figure 10.1-1 Flow Chart of Grievance Redress Mechanism

10.2 Recording and Tracking Feedback on Complaints and Grievances

During the implementation of the Environmental and Social Management Plan, the complaint data and handling result data shall be registered and managed at each entry point of the grievance redress mechanism and reported to Ezhou Linkong Group in writing once a month. Ezhou Linkong Group will regularly inspect the registration of complaint handling and ensure timely information exchange and progress tracking with the Management Committee of Linkong Economic Zone. Both parties must reach a consensus on suggestions.

To fully document the grievances of the affected population and the handling of related issues, the AIIB PMO of Ezhou Linkong Group has developed a Grievance and Complaint Registration Form for the affected population. The format of the form is shown in Table 10.2-1.

Table 10.2-1 Registration Form of Complaints and Grievances

Name of Complainant	Time	Location	Feedback from the Complaint-Receiving Unit	Ezhou Linkong Group	Management Committee of Linkong Economic Zone	Suggestions of External Monitoring Unit	Progress on Grievance Resolution
Reason for Grievance							
Requested Resolution							
Proposed Resolution							
Actual Handling Status							
Responsible person (signature)							
Note: 1) The recorder shall accurately document the complainant's grievance and requests. 2) The grievance process can be handled anonymously, free from any interference and obstacles. 3) The proposed resolution shall be communicated to the complainant within the specified time frame.							

10.3 Contact Information for Expressing Complaints and Grievances

The PIU will designate a key official to specifically handle and address grievances and complaints from the affected population. The names, office addresses, and contact numbers of the currently identified responsible persons are listed in Table 10.3-1. Upon completion of the bidding process, the contractor and supervision unit must designate an Environmental and Social Officer to serve as the GRM contact person.

Table 10.3-1 Institutions and Personnel Information for Receiving Complaints and Grievances from Affected People

Organization/Unit	Contact	Address	Telephone
PMO of Ezhou Linkong	Zhou Qing	Investment Promotion and Exhibition	18971999902

Organization/Unit	Contact	Address	Telephone
Group		Center of Ezhou Linkong Economic Zone	
Land Acquisition Office of Linkong Economic Zone	Zhou Xiaolin	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18972958040
Natural Resources and Planning Bureau of Linkong Economic Zone	Lyu Xinming	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18908685177
Social Affairs Bureau of Linkong Economic Zone	Liu Du	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	13972957838
Organization and Human Resources Bureau of Linkong Economic Zone	Wang Jun	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18771881690
Economic Development Bureau of Linkong Economic Zone	Li Chaoming	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18808685918
Financial Bureau of Linkong Economic Zone	Zhu Degao	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	13971995419
Women's Federation of Linkong Economic Zone	Xiao Mengyao	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	15090987052
Yanji Town	Lyu Siqi	Party-Mass Service Center of Yanji Resettlement Area	15926001011
Chehu Village	Shao Xuyong	Village cadres	13995829670
Bajiao Village	Zhang Yucai	Village cadres	13908682570
Duwan Village	Zhou Hua	Village cadres	13657115050
Yangye Town	Wang Binghua	Party-Mass Service Center of Yangye Resettlement Area	18908683811
Gutang Village	Pan Longzhen	Village cadres	18972965772
Shawo Township	Zhou Bo	Village cadres	18571100606
Zouma Village	Li Haibing	Village cadres	13995814016

11Environmental and Social Management Plan

11.1 Purpose of Compilation

The *Environmental and Social Management Plan* identifies appropriate mitigation measures for potential environmental and social impacts and clarifies the institutional responsibilities and management mechanisms for supervising and complying with the environmental and social laws and regulations of the People's Republic of China and the AIIB environmental and social policy framework.

The Environmental and Social Management Plan will be included as a separate appendix in all bidding and contract documents. Contractors are responsible for implementing the relevant requirements of the *Environmental and Social Management Plan* and listing the budget in the bidding documents. Environmental and social monitoring results will be used to assess the effectiveness of mitigation measures and determine whether additional improvement measures are needed.

11.2 Institutional Responsibilities for Implementing the Environmental and Social Management Plan

Ezhou Linkong Group Co., Ltd. is the implementation unit of this project. The implementation unit is responsible for implementing the project, managing and supervising contractors (construction contractors) and suppliers, and daily project management. The relevant institutional arrangements and responsibilities are as follows:

Table 11.2-1 Institutional Responsibilities for Implementing the Environmental and Social Management Plan

Institution	Duty
Project Implementation Unit (PIU)	**Overall Project Management and Environmental Social Safeguards** ① Supervise and manage daily project implementation. ② Recruit and manage design agencies, procurement agents, contractors (construction contractors), and construction supervisors according to government regulations. ③ Submit bidding documents (such as terms of reference), bid assessment reports, and other documents to the AIIB for approval as needed. ④ Supervise construction and monitor construction quality. ⑤ Coordinate with the AIIB on all aspects of project implementation. ⑥ Appoint an environmental and social officer responsible for environmental and social affairs. ⑦ Hire an environmental and social monitoring company to carry out external environmental and social monitoring. ⑧ Submit environmental and social monitoring reports to the AIIB regularly. ⑨ Be responsible for the operation of the grievance redress mechanism.
External Environment	The implementation unit hires a qualified independent environmental monitoring agency. Implement the external environmental monitoring plan during project implementation.

al Monitoring Unit	
External Social Monitoring Unit	Monitor whether the project implementation complies with AIIB policies.
Contractor (Construction Contractor)	① Ensure sufficient funds and manpower to implement the mitigation measures and monitoring programs in the *Environmental and Social Management Plan* throughout the construction phase. ② Be responsible for the operation of the grievance redress mechanism during the construction phase.
Construction Supervision Company	① Ensure sufficient funds and human resources to supervise and guide contractors (construction contractors), requiring contractors to implement mitigation measures and carry out environmental monitoring in a timely manner according to the requirements of the Environmental and Social Management Plan. ② Supervise construction progress and quality. ③ Appoint qualified occupational health and safety officers to conduct regular on-site supervision of contractors (construction contractors). ④ Supervise the performance of contractors (construction contractors) in implementing the *Environmental and Social Management Plan*. ⑤ Use basic handheld equipment to conduct simple and cost-effective on-site quantitative measurements to regularly check whether construction complies with project environmental monitoring standards and targets, especially regarding noise and air quality. ⑥ Submit monthly *Environmental and Social Management Plan* monitoring reports to the implementation unit.

11.3 Summary of Environmental and Social Impacts and Mitigation Measures

Based on the identified environmental and social impacts, corresponding mitigation measures for the construction period and operation period have been formulated for the Project and associated facilities. The designers and contractors, under the supervision of the project implementation unit and the supervision company, will incorporate the mitigation measures into the design, bidding documents, construction contracts, and operation management. The effectiveness of these measures will be assessed based on the monitoring results of the supervision and external monitoring units to determine whether adjustments and improvements to these measures are necessary.

Table 11.3-1 List of Environmental and Social Impact Mitigation Measures

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
Preparation						
Environmental and social aspects	Institutional strengthening	Arrangement of suitable environmental and social safeguards personnel	Appoint at least one full-time and qualified safeguard personnel within the project implementation unit. This person will be responsible for coordinating the implementation of the Environmental and Social Management Plan. The project implementation unit will hire a third-party environmental and social monitoring company to provide external support.		Ezhou Linkong Group Co., Ltd. / Ezhou Linkong Real Estate Co., Ltd.	AIIB
	Bidding	Implementation of environmental management requirements during project implementation	Incorporate the environmental and social intervening measures from the Environmental and Social Management Plan into the project bidding documents and the contracts for civil works and equipment installation. All contractors are required to strictly implement the Environmental and Social Management Plan.	Incorporate the management plan into bidding documents and contracting contracts		AIIB
	Grievance redress mechanism	Affected people and workers	The project implementation unit and construction contractors will establish a grievance redress mechanism for the affected people and workers before construction begins and appoint specific personnel in charge; relevant training will be provided to those responsible for the grievance redress mechanism. The contact information for the grievance redress mechanism, including phone numbers, addresses, and emails, will be made public.	/		AIIB
			The AIIB has established a Project-affected People's Mechanism (PPM). When the affected people believe that the AIIB project has failed to implement its Environmental and Social Policy (ESP) and has or may adversely affect them, and their concerns cannot be satisfactorily resolved through the Project or AIIB management mechanisms, the PPM provides an independent and impartial review opportunity. Relevant information about PPM can be accessed through the following link: https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html.	/	AIIB	/
Design Stage						
Environmental aspects	Greenhouse effect		Use environmentally friendly refrigerants; the selected unit refrigerant should have an ozone depletion potential (ODP) value of 0 and a global warming potential (GWP) value of less than 150. Optional refrigerants include R1234yf, R1234ze, and other fourth-generation refrigerants (HFOs). The R507 and R410A refrigerants in the installed cooling equipment will be replaced with new environmentally friendly refrigerants by 2027.	Comply with domestic and EU requirements.	Ezhou Linkong Group Co., Ltd.	AIIB
	Photovoltaic impact		(1) Solar cell mounting brackets will be designed with a 10° installation angle, and the brackets will be about 1.5m high to minimize sunlight reflection. (2) Polycrystalline silicon solar cells are adopted in the design, which has an outer layer of special tempered glass with a very high light transmittance of over 95%, resulting in very low reflectivity and no significant light pollution.	/	Ezhou Linkong Group Co., Ltd.	AIIB
Construction Period						
Environmental aspects	Waste gas	Construction dust	The Construction Contractor shall strictly abide by the Management Measures for Prevention and Control of Dust Pollution in Ezhou City (EZZF [2008] No. 21) and other relevant regulations during construction. The details are as follows: (1) Continuous and closed enclosures shall be set up around the construction site, with a height of not less than 1.8m. Anti-overflow seats shall be provided at the bottom of the enclosures. Joints between the enclosures, as well as between the enclosures and the anti-overflow seats, shall be closed; (2) The ground and carriageways of the living areas, office areas, processing yards in operation areas and material storage yards within the construction site shall be hardened, or materials with the equivalent functions shall be laid on such ground and carriageways, supplemented by wet operations; (3) The operations such as earthwork excavation, filling and transfer as well as the demolition of houses or other buildings (structures) shall not be carried out in the weather with wind force above Grade 5 according to the meteorological forecast; (4) For the removal and transportation of construction materials and wastes in buildings (structures), transport vehicles shall not leave the workplace until they are free of silt and washed clean, and containers or pipelines shall be adopted for transportation. It is forbidden to throw them from high places; (5) If the items such as construction wastes cannot be removed and transported away within 24 hours, a temporary stacking yard shall be provided at the construction site, and dust prevention measures such as enclosures and	Integrated Emission Standard of Air Pollutants (GB 16297-1996);	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
			covering shall be taken for the temporary stacking yard; (6) For the construction operations producing a large amount of slurry, corresponding slurry pits and ditches shall be provided to ensure that the slurry does not overflow, and waste slurry shall be transported in a sealed manner; (7) Cement or other fine-grained building materials that are easy to fly shall be stored in a sealed manner or covered; (8) When ready-mixed concrete and mortar are used on the construction site according to regulations, dust prevention measures such as sealing, fencing, watering, and flushing shall be taken; (9) Permanent dust prevention measures such as building closed or semi-closed awnings and wind-break walls shall be taken for the material stacking yard of the concrete mixing station. Sand and stone temporarily piled up outside the site shall be covered with a dust screen or dust cloth. In addition, transport vehicles shall run at a low speed on the construction site and daily maintenance of vehicles shall be strengthened.			
		Construction waste gas	(1) Strengthen the overhaul and maintenance of construction vehicles and machinery. It is strictly prohibited to use vehicles with overdue service life and excessive tail gas. (2) Use electric equipment or high-quality fuel as much as possible to reduce harmful gas emissions from equipment and vehicles. (3) Strengthen the personnel management of the construction contractors and carry out HSE-compliant construction.			
	Wastewater	Domestic sewage	Temporary septic tanks, oil-water separators, and other domestic sewage treatment facilities shall be set up for the treatment of the sewage, which shall then be discharged into the surrounding municipal pipe network.	Integrated Wastewater Discharge Standard (GB 8978-1996)	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau
		Construction wastewater	A sedimentation tank will be set up for the treatment of construction wastewater. The construction wastewater shall be reused for site dust reduction and washing of machinery and vehicles after being treated by the three-stage sedimentation tank.	No external discharge		
		Rainwater containing silt from surface runoff on the construction site and water gushing in the foundation pit	(1) Cover topsoil stockpiles, material storage yards, and other sites, set up intercepting ditches around the site, and set up grit chambers at low-lying areas. Surface runoff during the rainy season shall be reused after sedimentation treatment, and the portion that cannot be reused shall be discharged after obtaining permission from relevant departments. It is prohibited to discharge water containing large amounts of silt or untreated wastewater into municipal pipe networks or water bodies. (2) For water gushing in the foundation pit, set up dewatering wells or use pumps to drain water to grit chambers. After sedimentation, reuse the water for site dust suppression or greening.			
	Noise	Construction noise	(1) Reasonable arrangement of construction time Simultaneous construction of a large number of high-noise equipment shall be avoided as far as possible during the preparation of the construction plan. In addition, the construction period shall be shortened as far as possible on the premise of ensuring the project quality. High-noise construction shall be arranged in the daytime as far as possible to reduce the construction at night. Except for emergency repair and rescue, no bulldozer, excavator, grader, road roller or other similar machinery shall be used for night construction (from 22:00 to 6:00 the next day). If noise pollution around the city cannot be avoided during night construction due to the continuity of the production process or other special reasons, the construction must be reported to relevant government departments for approval in advance and announced to surrounding residents. (2) Reasonable layout of construction site It is necessary to avoid arranging a large number of power mechanical equipment in the same place; otherwise, the local sound level will be excessive. (3) Reasonable arrangement of operation time for transport vehicles The speed shall be strictly controlled and honking shall be prohibited after transport vehicles enter the vicinity of the construction area. (4) Reduction of sound level of equipment Low-noise equipment shall be selected as far as possible, such as hydraulic machinery (instead of fuel machinery) and high-frequency oscillator; For fixed loading and unloading equipment and earth-moving machinery, such as excavators and bulldozers, the noise can be reduced by exhaust pipe silencers and isolation of vibrating parts of engines; Power mechanical equipment shall be regularly repaired and maintained. The sound level of poorly maintained equipment often increases during operation due to vibration of loose parts or damage to silencers. (5) Reduction of man-made noise Operate mechanical equipment according to regulations. During the disassembly of formwork and support, comply with operation regulations to reduce collision noise; use modern equipment (instead of whistles) to direct operations as much as possible.	Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011)	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
			With the implementation of the above corresponding measures and scientific and strict management, based on the investigation of many HSE-compliant construction sites in China, the noise pollution affecting the external environment during the construction period is minimal. Moreover, this impact is only temporary and will cease immediately once the construction operations are completed. (6) Strengthening of construction management During the construction period, the construction method with low noise and vibration shall be adopted as far as possible for foundation and structural construction on the premise of not affecting the construction quality; The foundation of the equipment with a fixed base shall be treated separately to reduce the transmission of ground vibration and structural noise; The operation shall be standardized and the maintenance of equipment shall be strengthened to maintain normal operation of the equipment; Noise equipment with less movement can be set in the sound insulation enclosure made of corrugated plates. The declaration and registration system of the construction noise shall be strictly implemented. A declaration shall be submitted to the local ecological environment department within 15 days after the commencement of the Project. The Approval Form for Noise Management on Construction Sites shall be filled in and approved before commencement. It is necessary to avoid disturbing residents with noise, make the noise at the boundary of the construction site conform to relevant regulations in the Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011), and make the vibration conform to relevant regulations in the Standard of Vibration in Urban Area Environment (GB10070-88).			
	Solid waste	Domestic waste	Temporary waste containers shall be installed at the construction camp, and domestic waste shall be sorted for management, and regularly cleaned and transported in accordance with the regulations of the local sanitation department.	Regular removal	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau
		Construction waste	Construction waste will be sorted out by special personnel and useful steel bars, wood, cables, etc. will be recycled. Unusable construction waste will be disposed of at designated places in Ezhou City.	The construction waste shall be subject to the provisions of Measures for Construction Waste Management of Ezhou City (revised in 2022).	Construction Contractor	
		Hazardous waste	Develop a hazardous waste management plan. A temporary storage room for hazardous waste shall be set up on the construction site to temporarily store hazardous waste by classification, and a qualified third party shall be entrusted to transport and properly dispose of hazardous waste.	The temporary storage site meets the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597-2023); all entrusted disposal units have corresponding hazardous waste disposal qualifications	Construction Contractor	
		Waste earthwork	Backfilling is carried out in the adjacent backfilling areas of Bajiao Village and Woertang.	/	Construction Contractor	
	Ecology	Water and soil conservation	(1) Topsoil stripping shall be carried out in the construction area, and the exposed surface formed by excavation shall be covered with dust-proof nets. (2) Loosely stacked construction materials shall be covered with dust-proof nets to prevent rain erosion and reduce water and soil loss. (3) Enclosures and temporary drainage ditches shall be designed around the construction site and construction camp, and a grit chamber shall be designed at the outlet of the drainage ditch. (4) Vegetation shall be restored in time after construction. (5) Billboards and warning signs: Water and soil conservation billboards and warning signs shall be set up at the entrance and exit of the construction camp.	/	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau
	Occupational Health and Safety		(1) A water supply system shall be established in the construction camp to ensure a clean and sufficient fresh water supply; a sufficient number of portable toilets shall be set up and kept clean and sanitary; waste bins shall be set up and cleaned regularly to prevent disease outbreaks. (2) Personal protective equipment that meets domestic requirements shall be provided, such as safety boots, helmets, gloves, protective clothing, goggles, and earplugs; (3) Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting	/	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co.,

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
			procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish an emergency hotline with Ezhou Central Hospital (Linkong Branch) in the project area, and provide each construction camp with a fully-equipped first aid station. (4) A professional safety management team shall be established, a construction safety system shall be formulated, and adequate funding for safety measures shall be guaranteed; (5) Safety and health management plans (including emergency plans for safety accidents) shall be formulated and submitted to the Supervisor/Employer for approval; (6) A full-time safety and health department shall be established and full-time personnel shall be assigned to be responsible for the occupational health, work safety, and working and living environment inspections for laborers; (7) The equipment shall be regularly maintained and inspected to ensure its normal operation, and the maintenance and inspection records shall be kept and signed by relevant personnel. A system for the identification and rectification of potential safety hazards shall be formulated and improved. Any identification and rectification shall be truthfully documented, and a report shall be immediately made to the on-site work safety management personnel. The recipient of the report shall promptly address the issue. (8) Nationally regulated safety signs, danger warning signs and other signs and slogans shall be hung in the construction area to prevent residents from entering the building protection scope and dangerous areas.			Ltd.
	Cultural relics protection		Corresponding procedures shall be established for handling material cultural resources discovered during the construction phase. Handling procedures will be initiated as soon as material cultural resources are discovered. (1) If any material cultural resources are found, the construction activities will be stopped immediately and corresponding protective measures will be taken; (2) In accordance with the laws of China, it is strictly prohibited to destroy, damage, deface, or conceal material cultural resources; (3) The Cultural Relics Protection Bureau will be informed and consulted in time; Construction activities can only continue after a thorough investigation and permission from the local cultural relics bureau.		Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd.
Social aspects	Land acquisition and demolition risk		Implement the resettlement plan in accordance with the approved brief resettlement action plan.	/	Ezhou Linkong Group Co., Ltd. and Construction Supervisor	AIIB, Construction Supervisor
	Risks related to community traffic safety		(1) Increase traffic safety publicity, publicize and implement various transportation safety laws, regulations and provisions; (2) Plan the driving route of transport vehicles to avoid community gathering points as much as possible and reduce the disturbance of transport vehicles to communities; (3) Driver management: Work with certificates according to national requirements, abide by traffic regulations and operating procedures, resist violations, and ensure safe driving; (4) Vehicle safety management: Implement the national and company vehicle management rules and regulations, and ensure vehicle annual inspections, technical filing, and use management. (5) Establish a community communication mechanism, strengthen the communication with surrounding communities and respond to residents' questions in time;	/	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Ezhou Municipal Transportation Bureau
	Impact of migrant workers on local residents		(1) Enhance community management by implementing a shift rotation for duty personnel, ensuring timely registration of non-residents entering the community to guarantee the safety of the community inhabitants; (2) Encourage township/sub-district and community/village communities to proactively engage in the promotion of local social and cultural customs through materials such as brochures and posters; (3) Intensify health education efforts, including the dissemination of information on the prevention of AIDS and other communicable diseases, which must be incorporated into contractual agreements;	/	Construction Contractor	AIIB, Construction Supervisor, Ezhou Linkong Group Co., Ltd., Organization and Human Resources Bureau of Linkong Economic Zone

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
	Worker Management Risk		(1) Employ project staff based on the principles of equal opportunity and fair treatment, without discrimination against specific groups such as women, disabled persons, migrant workers, and legal working-age youth; 2) Provide appropriate protection and assistance measures. For instance, equip the construction site with adequate and comprehensive labor protection supplies to address hazard factors as well as labor safety and hygiene needs; (3) Improve employee training plans; (4) Set up sufficient gender-specific temporary toilet facilities at the construction site according to the number of female workers; (5) Establish and clarify the complaint mechanism for handling labor complaints and reports, clarify the supervision mechanism for labor protection, and protect individual privacy according to the law when handling sexual harassment complaints. (6) Refer to the Gender Action Plan for measures against gender-based violence. (7) The Supplier shall provide a statement in its procurement documents that there are no labour working conditions (LWC) issues in its supply chain; obtain similar representations from its subcontractors and suppliers of the SPV Project Products; abide by workforce requirements consistent with AIIB's ESF and require similar representations and compliance from their subcontractors and suppliers of identical products to the Project; and if necessary, the Bank will have the right to inspect and audit compliance with these requirements.	/	Construction Contractor	Ezhou Linkong Group Co., Ltd., Women's Federation of Linkong Economic Zone
Operation period						
Environmental aspects	Waste gas	Production waste gas	(1) Use fume hoods, gas collection hoods + multi-stage activated carbon adsorption devices + 20m high exhaust funnels in chemical laboratories; (2) Install UV light deodorizing facilities and an exhaust funnel not lower than 15m high in the animal room of the international cargo terminal; (3) Set up multi-stage activated carbon adsorption boxes + 15m high exhaust funnel in the fumigation room of the quarantine treatment center; (4) Discharge the waste gas from the harmless incinerator through a 15m high exhaust funnel after deacidification by water bath curtain, cooling dust removal + bag dust removal, and activated carbon treatment; (5) Utilize multi-stage activated carbon adsorption devices + 15m high exhaust funnels for bonded processing waste gases.	*Integrated Emission Standard of Air Pollutants (GB 16297-1996); methyl bromide waste gas from the fumigation warehouse follows the Integrated Emission Standard of Air Pollutants in Shanghai* (DB31/933-2015); animal house odor follows the *Emission Standards for Odor Pollutants* (GB14554-93); incinerator exhaust follows the special emission concentration limits for air pollutants in Table 3 of *Emission Standard of Air Pollutants for Coal-burning Oil-burning Gas-fired Boiler* (GB13271-2014).	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB, Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau
		Vehicle tail gas	(1) Motor vehicles entering the project area must meet China's Stage VI pollutant emission standard for motor vehicles. (2) Green belts shall be set up around the project roads and parking lots.	*Limits and Measurement Methods for Emissions from Light-Duty Vehicles (China Stage VI)* (GB18352.6-2016) and *Limits and Measurement Methods for Emissions from Heavy-Duty Diesel Vehicles* (China Stage VI) (GB17691-2018)		
		Oil fume in canteen	Install cooking fume purifiers and set up cooking fume emission outlets	*Emission Standard of Cooking Fume (Trial)* (GB 18483-2001);		
		Odor from waste treatment stations and waste transfer stations	Locate these stations away from densely populated activity areas, strengthen surrounding greenery, and clean regularly.	*Emission Standard for Odor Pollutants* (GB14554-93)		
	Wastewater	Domestic sewage and general	Pre-treat in septic tanks before collection and sending through the project sewage pipelines and municipal sewage pipelines to the reclaimed water plant of the aviation metropolitan area for centralized treatment.	Integrated Wastewater Discharge Standard (GB 8978-1996)		

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
		warehouse cleaning wastewater				
		Catering wastewater	Construct oil-water separators, pre-treat before collection and sending through the project sewage pipelines and municipal sewage pipelines to the reclaimed water plant of the aviation metropolitan area for centralized treatment.			
		Production wastewater	Set up pre-treatment facilities for wastewater in animal rooms, customs inspection centers, bonded processing centers, and waste transfer stations. Collect pre-treated wastewater and send it through the project sewage pipelines and municipal sewage pipelines to the reclaimed water plant of the aviation metropolitan area for centralized treatment.			
	Noise	Ground noise	(1) Set clear speed limit and horn prohibition signs at the entrances and exits, and strengthen the management of incoming and outgoing vehicles to maintain smooth traffic flow; (2) Select low-noise equipment during equipment selection and set up vibration reduction foundations to reduce noise impact from the source; (3) Adopt measures such as mufflers, sound insulation, and soundproof covers to reduce the adverse environmental impact of noise through transmission paths; (4) Place noise-generating equipment indoors to achieve noise reduction through building sound insulation; (5) Set up green landscape around roads and buildings to absorb noise through greenery.	Emission Standard for Industrial Enterprises Noise at Boundary (GB 12348-2008)		
	Solid waste	Domestic waste	Set up sufficient waste containers for collection, and have project cleaning staff collect and transport them to the project's garbage transfer station daily. The Ezhou City sanitation department will regularly clean up.	No external discharge		
		Kitchen waste	Entrust a qualified unit for kitchen waste collection, transportation, and disposal.	No external discharge		
		General industrial solid waste	The sludge from wastewater treatment is regularly transported by the operating unit to a domestic waste landfill for disposal; Waste packaging materials and waste battery panels are recycled by the manufacturer; Incinerator slag is planned for comprehensive utilization through external sale.			
		Hazardous waste	Temporarily stored by the generating unit, and then handed over to a qualified hazardous waste disposal unit for safe disposal.	Temporary storage facilities must meet the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597—2023)		
	Environmental risk	Environmental risks such as **leakage, fire and explosion** of hazardous substances due to unexpected factors and secondary environmental impacts;	(1) Design 1) Hazardous substances shall be stored in different areas by classification; 2) Dangerous goods and chemicals are transported by special vehicles into and out of a separately built dangerous goods warehouse or designated laboratory. Dangerous goods may be stored in storage rooms for dangerous goods of the whole ULD (referring to the unit load device used to carry cargo by air), kept on trailers. Chemical agents should be stored in designated reagent cabinets within the laboratory. 3) The fumigation chamber, special transportation depot, customs inspection center laboratory, and dangerous goods warehouse shall meet the advanced environmental protection and safety requirements at home and abroad, meet the requirements of sun protection, moisture prevention, ventilation, lightning protection, fire prevention, and anti-static electricity, and be provided with obvious warning signs. 4) Smoke alarms and fire warning facilities shall be provided to realize accident early warning and rapid response, and shall be managed by special personnel. 5) The quality, quantity, packaging, and leakage of hazardous chemicals and chemical materials shall be strictly inspected during warehousing; The warehoused hazardous chemicals shall be regularly inspected during the storage period. If any quality change, package damage, or leakage is found, it shall be handled in time; Dangerous goods and chemical agents shall be loaded, unloaded, and transported as per relevant regulations for gentle loading and unloading. It is strictly prohibited to fall, hit, strike, drag, dump and roll them; 6) A management record for dangerous goods and chemicals shall be established. Dangerous goods and chemicals shall be inspected, accepted, and registered before warehousing and delivery in terms of quantity, packaging, danger signs, etc., and can only be warehoused and delivered after verification; 7) Special personnel shall be assigned to regularly inspect the fumigation chamber, special transportation depot, customs inspection center laboratory, and dangerous goods warehouse, and make inspection records; 8) The management personnel and employees for dangerous goods and chemicals shall be regularly trained to improve their management, operation level, and prevention awareness. (2) Management			

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
			1) The project owner shall establish a dangerous goods management system, appoint dedicated personnel for dangerous goods management, and provide regular training for management staff; 2) Establish a dangerous goods risk investigation system, regularly inspect dangerous goods storage areas, maintain records, and promptly report any identified risks to environmental and social specialists; 3) Establish a dangerous goods environmental emergency response system. For the special transportation depot, dangerous goods warehouse, and other areas with environmental risks, the Emergency Plan for Environmental Emergencies shall be prepared and emergency drills shall be conducted regularly. (3) Emergency response 1) Emergency supplies meeting the requirements shall be provided for the storage areas of Class 9 dangerous goods transported by air (chemical agents shall be stored according to their properties with reference to corresponding dangerous goods): 2) With a safety protection distance of 50m in the vicinity, the Dangerous Goods Warehouse will be a separate courtyard surrounded by protective nets. Open flame and smoking are strictly prohibited in the warehouse and its nearby areas. The dangerous goods warehouse shall be equipped with protective clothing, gas masks, and other necessary items to ensure timely and effective emergency measures and personal protection in case of dangerous goods leakage or accidents, minimizing the risk of sudden environmental incidents. Protective masks mainly include filtered gas masks and isolated oxygen or air masks. The dangerous goods warehouse shall be equipped with personal protective articles. Protective articles frequently used by individuals mainly include work clothes, work caps, boots and shoes, rubber gloves, and masks; 4) An emergency pool with a volume of not less than 1550m^2 shall be set up, and the accident wastewater generated by water sprinkler extinguishers shall flow into the accident pool through the accident wastewater collection well in the warehouse.			
	Occupational health and safety		(1) Prepare the environmental and social management plans for the operation phase, and regularly provide workers with relevant training. (2) Provide workers with free personal protective equipment, including goggles, gloves, and safety shoes; provide noise insulation equipment for workers in high-noise environments. (3) Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish an emergency hotline with Ezhou Central Hospital (Linkong Branch) located in the project area. (4) Train workers in occupational health and safety, and emergency response. Train personnel in positions in contact with chemicals and hazardous wastes in special occupational health and safety, appropriate to the content of their job responsibilities. (5) Restrict the access of the public to the project operation area.	/	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB, Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau
	Waste gas from Wuchu Avenue	Vehicle tail gas	(1) Strengthen traffic management, enforce strict vehicle management systems, and strictly implement national motor vehicle emission standards. Prohibit vehicles with excessive tail gas emissions and vehicles carrying bulk materials without covering measures from accessing the road. (2) Improve road maintenance and cleaning to keep road conditions good and reduce dust and vehicle tail gas pollution. (3) Complete the construction of green belts as soon as the main works are finished, combining points, lines, and surfaces with a reasonable mix of trees, shrubs, flowers, and grasses. Use plants' adsorption capabilities to reduce the impact of vehicle exhaust on the plots on both sides of the project. Strengthen the maintenance of the green belts along the line, reduce dead branches and diseased plants, and maintain the pollution reduction function of the greenery.	*Limits and Measurement Methods for Emissions from Light-Duty Vehicles (China Stage VI)* (GB18352.6-2016) and *Limits and Measurement Methods for Emissions from Heavy-Duty Diesel Vehicles* (China Stage VI) (GB17691-2018)	Ezhou Linkong Real Estate Co., Ltd. and contractors	AIIB, Linkong Economic Zone Branch of Ezhou Ecology and Environment Bureau
	Wastewater from Wuchu Avenue	Rainwater runoff on pavement	(1) Set up rainwater and sewage pipelines for the road surface and roadbed according to the road environmental protection design specifications. Road surface drainage shall avoid direct connection with water bodies. (2) To protect the water quality of the Huama Lake water system along the route, prohibit vehicles with oil leaks, trucks without protective tarps, or overloaded vehicles from accessing the road to prevent oil leakage or cargo spillage from causing water pollution and safety hazards. Vehicles transporting coal, lime, cement, and other easily dusting bulk materials must be covered with tarpaulins to prevent runoff sewage formed by material scattering from affecting the water quality. (3) Regularly inspect and clean the road rainwater drainage system to ensure smooth flow and maintain good condition.	/		

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
	Noise from Wuchu Avenue	Traffic noise	(1) Select road materials like sound-absorbing pavement to reduce the impact of traffic noise on the surrounding areas. (2) Plant greenery on both sides of the road to achieve noise reduction and prevention. (3) Strengthen road traffic management by restricting vehicles with poor performance from accessing the road, strictly limiting driving speeds throughout the road, especially preventing speeding at night strengthen the management of motor vehicle whistling (whistling is prohibited in the whole line). Set up speed limit and no-honking signs on both sides of the road to effectively control traffic noise pollution. (4) Strengthen road maintenance and promptly repair damaged road surfaces to maintain smoothness and avoid increased traffic noise due to poor road conditions. (5) Implement a regular monitoring system for predicted noise-exceeding points along the route. When noise exceeds standards, take effective noise protection measures based on actual monitoring results and environmental characteristics to ensure the acoustic environment meets the requirements.	Implement Class 4a standards within 35m on both sides of the road centerline according to the *Environmental Quality Standard for Noise* (GB3096-2008); implement Class 3 standards in other areas according to the *Environmental Quality Standard for Noise* (GB3096-2008).		
	Solid wastes from Wuchu Avenue	Road sweeping waste	Strengthen road sanitation management by sweeping road surfaces daily, promptly cleaning waste containers on both sides of the road, and having all collected garbage uniformly transported to the city garbage disposal site by the local sanitation department.	No external discharge		
	Ecology of Wuchu Avenue	Ecology	To further reduce potential impacts on the aquatic ecosystem during operation, implement the following mitigation measures: ① Develop a corresponding emergency plan for potential leakage accidents during the transportation of toxic and hazardous substances. In the event of an accident, promptly handle the situation according to the plan to prevent toxic and hazardous substances from entering water bodies and causing pollution. ② Keep the pavement clean, organize maintenance personnel to clean up dust and other pollutants accumulated on both sides of the road in time, and mitigate pollution caused by pollutants entering water bodies due to runoff scouring. ③ Wastewater containing SS generated from road maintenance and flushing shall be recycled or discharged after sand setting in a water collecting tank.	/		
	Environmental risk of Wuchu Avenue	Environmental risk of surface water	(1) Vehicles and personnel engaged in the transport of dangerous goods shall refer to the Specifications for Highway Transportation of Dangerous Cargo and Regulations on Safety Management of Dangerous Chemicals. From road inspection, transportation on the way, parking to accident handling and other links, it is necessary to strengthen management and resolutely prohibit and eliminate vehicles transporting dangerous goods with incomplete "three certificates" from driving on the road, so as to prevent the occurrence of dangerous goods transport accidents and control the expansion of emergencies. (2) Dangerous goods on roads are inspected. Check whether the personnel directly engaged in road transport of dangerous cargo hold the Operation Certificate for Road Transport of Dangerous Goods approved by the competent department; vehicles and equipment shall comply with the provisions on hanging specified signs and marker lamps; vehicles, containers, loading and unloading machinery and tools must meet the prescribed conditions. Check and verify the consignment note filled out by the consignor and relevant information provided. (3) Vehicles carrying dangerous goods are forbidden on foggy and snowy days, while other vehicles shall have a speed limit. (4) Vehicles transporting dangerous goods running on the road section shall be monitored. Warning signs such as speed limit and no overtaking shall be set up at conspicuous positions on both sides of the route, and electronic warning signs shall be set up to remind passing drivers and passengers to keep a certain distance and speed; Vehicles carrying dangerous goods shall pass at a limited speed, so as to prevent the accidental pollution of liquid hazardous chemicals or petroleum from affecting the water quality of regional waters. (5) In case of burning, explosion, pollution, poisoning, and other accidents during transport, the driver must take corresponding emergency measures according to the nature of dangerous cargo carried and the specified requirements to prevent the situation from expanding, report to relevant local departments in time, and jointly take measures with relevant departments to eliminate hazards. (6) Emergency plans shall be prepared, emergency materials shall be allocated, and emergency drills shall be strengthened.			
Social aspects	Traffic safety risks		a. Plan road sections reasonably to reduce the risk of traffic congestion and collisions; b. Strengthen traffic safety publicity, and add traffic guides and traffic command stations to maintain traffic order better.	/	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co.,	AIIB, Ezhou Municipal Transportation Bureau

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
					Ltd., and contractors	
	Impact of migrant workers on local residents		a. Ensure that all incoming population registers promptly to maintain community safety. b. Encourage township/sub-district and community/village communities to proactively engage in the promotion of local social and cultural customs through materials such as brochures and posters;	/	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB, Organization and Human Resources Bureau of Linkong Economic Zone
	Worker Management Risk		(1) Employ project staff based on the principles of equal opportunity and fair treatment, without discrimination against specific groups such as women, disabled persons, migrant workers, and legal working-age youth; (2) Provide appropriate protection and assistance measures for women, the disabled, migrant workers, minors who have reached the legal age for employment, and other specific groups of workers, to overcome the shortcomings of project staff; (3) Establish and clarify the complaint mechanism for handling labor complaints and reports, clarify the supervision mechanism for labor protection, and protect individual privacy according to the law when handling sexual harassment complaints. (4) Refer to the Gender Action Plan for measures against gender-based violence. (5) The Supplier shall provide a statement in its procurement documents that there are no labour working conditions (LWC) issues in its supply chain; obtain similar representations from its subcontractors and suppliers of the SPV Project Products; abide by workforce requirements consistent with the Bank's ESF and require similar representations and compliance from their subcontractors and suppliers of identical products to the Project; and if necessary, the Bank will have the right to inspect and audit compliance with these requirements.	/	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB
	Protection of women's rights and interests	Increase employment opportunities for women	(1) During the project construction and operation phases, prioritize providing non-technical positions to women in the communities/villages involved in the project area. (2) During the operation phase of the logistics park, provide certain employment opportunities for female workers.	(1) Prioritize employment opportunities for women in the project (the baseline proportion of female workers during the construction phase: about 5%; target value: 15%). (2) Provide employment opportunities for female workers with the new jobs created in the logistics park (baseline: 0%; target: 20%).	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB
		Enhance women's development ability	(1) Improve women's skills, knowledge, and opportunities for employment and entrepreneurship by organizing employment knowledge lectures, skill training courses, and employment and entrepreneurship seminars. (2) Provide suitable skill training content and appropriate training times based on women's physiological and psychological qualities, education levels, personal needs, etc., to ensure women have equal opportunities as men to improve their skills. (3) Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd., through relevant training.	(1) Increase the proportion of women participating in various training programs, including the promotion of women's rights and interests, and employment skills training (baseline: 10%; target: 20%). (2) Increase the proportion of women participating in project information disclosure and management training (baseline: 10%; target: 20%). (3) Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd., through relevant training. (baseline: 10%, target: 20%)	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB, Women's Federation of Linkong Economic Zone, Organization and Human Resources Bureau of Linkong Economic Zone

Environmental/Social Aspects	Category	Impact	Mitigation measures	Implementation performance	Implementation unit	Supervisory institution
		Expand women's participation in decision-making	(1) Increase the proportion of women participating in decision-making in relevant community affairs; (2) Increase the proportion of women signing or "jointly signing by both spouses" in land acquisition or demolition compensation agreements.	(1) Proportion of women participating in project mobilization, targeted information disclosure, policy promotion, and consultation (baseline: 20%; target: 30%). (2) Proportion of women signing land acquisition or demolition compensation agreements (baseline: 0%, target: 100%).	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB
		Reducing gender-based violence risks	(1) Strengthen the protection of female worker rights and interests, provide regular psychological health counseling and female worker rights protection training for female workers; (2) Enhance site supervision to prevent harmful behaviors such as gender-based violence, sexual exploitation and abuse, and sexual harassment; (3) Establish a clear grievance and complaint mechanism, set up a site grievance committee that includes at least two female members, and ensure the safety of committee members to avoid bias and fear of retaliation.	(1) Ensure 100% of female workers receive labor rights protection training. (2) Ensure equal pay for equal work for 100% of female and male workers, with zero incidents of gender-based violence. (3) Establish a grievance and complaint mechanism with at least two female members on the grievance committee.	Ezhou Linkong Group Co., Ltd./Ezhou Linkong Real Estate Co., Ltd., and contractors	AIIB, Women's Federation of Linkong Economic Zone, Organization and Human Resources Bureau of Linkong Economic Zone

11.4 Construction Camp Management Plan

The construction camp management plan mainly outlines the management requirements related to the construction camp setup, infrastructure conditions, living conditions of workers, camp waste gas treatment, camp wastewater treatment, camp solid waste disposal, construction material storage and management, machinery/equipment use and management, labor influx management, occupational health and safety management, etc.

Table 11.4-1 Construction Camp Management Plan

S/N	Element	Management Plan Content
1	Site selection	The construction camp site shall be far from nature reserves, scenic spots, basic protected farmland, and other environmentally sensitive areas; The construction camp will be built mainly for living functions, and the production equipment and materials will be stored at local construction sites.
2	Design and acceptance	The construction camp shall be designed with adequate water supply, electricity, heating equipment for the heating season, toilets, showers, and firefighting equipment; The layout and design of the construction camp shall be reviewed and approved by the local safety supervision station and fire department; The construction camp will be inspected and accepted by the local safety supervision station and fire department after completion.
3	Living conditions of workers	➢ The living camp shall be equipped with temporary houses and facilities such as a guard room, dormitories, canteen, toilets, washroom facility, shower rooms, laundry rooms, boiled water room or drinking water insulation barrel, and enclosed garbage bins. ➢ The living camp must be reasonably hardened and landscaped, with effective drainage measures in place to ensure smooth drainage of rainwater and sewage and no accumulated water within the area. ➢ The canteen in the living camp shall be a single-storey building and shall maintain a safe distance from the dormitories. ➢ Living camp buildings shall meet the requirements of withstanding force 10 wind and local seismic fortification intensity. Fire protection requirements shall be implemented in accordance with the Technical Code for Fire Safety of Construction Site (GB50720-2011). ➢ Flush toilets shall be installed in the living camp, and special personnel shall be assigned to take charge of regular flushing, cleaning, and disinfection to prevent mosquitoes and flies from breeding. ➢ The dormitories shall be equipped with single beds or double beds, with each person having a living area of no less than 4 m^2. Workers shall not sleep in overcrowded conditions, and space shall be provided for personal belongings. Dormitories shall be kept clean, tidy, and ventilated, protected from heatstroke, mosquitoes, and flies in summer, and cold-proof and warm in winter. ➢ Drinking water must meet the national health standards, temporary boiled water supply points must be set up, and special personnel must be assigned for water supply and special drinking water buckets. Sharing a single vessel for drinking water is strictly prohibited. ➢ It shall strictly strengthen the labor protection management of employees, provide employees with qualified labor protection equipment such as safety helmets, safety belts, and work clothes according to regulations, and improve working conditions to ensure the physical and mental health of employees. ➢ It shall adhere to relevant national regulations, reasonably arrange the work and rest time of employees, ensure a balance between work and rest, and pay wages and welfare on time to meet workers' living needs.

S/N	Element	Management Plan Content
4	Camp waste gas treatment	➢ The camp shall include a canteen. It is required that after being treated by high-efficiency electrostatic cooking fume purifiers, the canteen's cooking fumes shall meet the requirements of the Emission Standard of Cooking Fume (Trial) (GB 18483-2001) and be discharged through a flue above the building roof.
5	Camp wastewater treatment	Domestic sewage produced by personnel in living camps requires each camp to be equipped with oil-water separators and septic tanks. Domestic wastewater undergoes treatment through measures such as oil separation and septic tank treatment to meet the Class III standard of the Integrated Wastewater Discharge Standard and then discharged into the surrounding municipal pipeline network.
6	Camp solid waste disposal	➢ Several waste containers are placed at each construction camp this time, and the domestic waste will be sent to the landfill in Ezhou City for sanitary landfill after being uniformly collected by the sanitation department.
7	Storage of materials	➢ The canteen in the construction camp involves the use of liquefied petroleum gas (LPG), and the standby generator in the construction site involves the use of diesel. Therefore, the construction camp shall be equipped with storage rooms for LPG tanks and diesel drums. ➢ The storage room shall be separated from the workers' dormitories, kept cool and ventilated, and provided with signs of no smoking and open flame. ➢ The storage room shall be managed and inspected by dedicated personnel, and equipped with firefighting equipment and other firefighting measures. ➢ The diesel storage containers and the drums for adding diesel in the diesel storage room shall be kept clean. To reduce the contact between diesel and air, they shall be stored in a sealed manner and reduce unnecessary inverting; if a diesel barrel is found leaking, the diesel shall be promptly transferred to other empty drums and the leak shall be absorbed with sand or other inert materials. ➢ Empty tanks and full tanks are required to be placed separately in the LPG storage room, and no other items shall be stored inside; Knocking, bumping and dragging the tanks on the ground are strictly prohibited; heating the tanks is strictly prohibited; inverting the tanks for use is prohibited, as is allowing gas to flow between tanks; It is strictly prohibited to dispose and empty LPG and residual liquid in the tank without permission; in case of a gas leak, the location of the leak should be quickly identified, and effective measures shall be taken to eliminate the leak as soon as possible. The leak detection shall be performed by brushing soapy water. Open flames are strictly prohibited for leak testing; For leaks that cannot be eliminated immediately, the tanks shall be quickly transferred to an outdoor, open and ventilated place, with warnings arranged. Professional personnel shall be notified immediately for inspection and handling.
8	Labor influx management	➢ Clearly stipulate that the principles of equal opportunity and fair treatment shall be adhered to when employing workers for the Project. Furthermore, discrimination based on personal characteristics unrelated to job requirements is prohibited. ➢ Provide appropriate protection and assistance measures for specific groups of workers, such as women, persons with disabilities, migrant workers and young workers of legal working age to address defects in the project's workforce; comply with national laws and regulations, assist workers in establishing worker organizations. Workers have the right to establish and join worker organizations of their choice, and their collective bargaining rights shall not be interfered with. ➢ The grievance and complaint mechanism for handling labor complaints and reports shall be established and clarified, the supervision mechanism for labor protection shall be clarified, and individual privacy shall be protected according to law when handling sexual harassment complaints; Enhance the safeguarding of women's worker rights and interests, ➢ Provide female laborers with regular mental health counseling and training concerning their worker rights and interests; ➢ The Construction Contractor shall strengthen the supervision of the

S/N	Element	Management Plan Content
		construction site to avoid gender-based violence, sexual exploitation, sexual abuse, sexual harassment, and other harmful behavior. ➢ Establish clear channels for grievances and complaints, and set up a grievance and complaint team (including at least two female members) on the construction site. Ensure the safety of the team members and prevent cases of prejudice and fear of retaliation.
9	Management of occupational health and safety	➢ The safety and health management plan (including the emergency response plan for safety accidents) shall include relevant contents of construction camps; regularly conduct hidden danger investigation on construction camps, truthfully record and notify workers; ➢ Occupational health and safety training for construction camp staff; ➢ Ensure adequate lighting in the office and living areas. The electrical equipment in the production camp shall be inspected regularly, and the insulation strength of lightning protection, grounding protection and transformer shall be measured once a quarter. ➢ Prohibit the use of non-standard heating equipment in office and living areas. Cut off power when leaving office and living areas. ➢ Arrange special personnel for regular inspections of places that may cause fires due to the use of fire and electricity in living and production camps, so as to prevent the occurrence of fire. Install fire extinguishing equipment according to relevant requirements. ➢ Kitchen staff must work with health certificates. Ventilation, exhaust and sewage discharge facilities shall be set up in the canteen. Raw and cooked food shall be strictly stored and marked. The kitchen utensils in the canteen shall be disinfected in time and stored orderly. Reliable and effective fly-proof and rat-proof facilities shall be provided. ➢ Flush toilets shall be established, and special personnel shall be assigned to take charge of regular flushing, cleaning and disinfection to prevent mosquitoes and flies from breeding. ➢ Drinking water in the camp must meet national health standards, temporary boiled water supply points must be set up, and special personnel must be assigned for water supply and special drinking water buckets. Sharing a single vessel for drinking water is strictly prohibited. ➢ The electrical equipment in the production camp shall be inspected regularly, and the insulation strength of lightning protection, grounding protection and transformer shall be measured once a quarter. ➢ Rebar processing yards shall be set up in certain production camps, and the processing area shall be well-ventilated. Workers are required to wear earmuffs, goggles, etc.
10	Use and management of construction machinery /equipment	➢ The use of mechanical and equipment must follow the "designate person, designate machine and designate responsibility" principle. Large-scale equipment operated by multiple persons shall have designated captains; Small-scale equipment may have one special personnel overseeing several units. Before construction, safety technical disclosure must be received; and the operation must be carried out with certificates. ➢ Operators shall check the equipment condition before work, keep the interior and appearance of the equipment clean and tidy, and ensure that the machine meets the "three no's" criteria: no pollution, no damage, no corrosion. Additionally, they should adhere to the "four no leaks": no water leaks, no oil leaks, no electrical leaks, and no gas leaks. ➢ After the operation is completed, the equipment shall be parked in a safe location and prevent non-productive damage. The spare parts and accompanying accessories of the machinery shall not be disassembled or lent at will.

11.5 Emergency Management Plan for Hazardous Chemicals

The emergency management plan for hazardous chemicals is an important measure to ensure the safety management of hazardous chemicals in the Project and deal with emergencies.

Table 11.5-1 Emergency Management Plan for Dangerous Goods

S/N	Element	Management Plan Content
1	Storage design	The fumigation chamber, special transportation depot, customs inspection center laboratory, and dangerous goods warehouse shall meet the advanced environmental protection and safety requirements at home and abroad, meet the requirements of sun protection, moisture prevention, ventilation, lightning protection, fire prevention, and anti-static electricity, and be provided with obvious warning signs. An emergency response pool shall be established to ensure the timely collection of firefighting wastewater and leaked hazardous substances during unexpected environmental incidents.
2	Management principle	1. Prevention First, Strengthen Safety Awareness: Enhance identification, classification, packaging, labeling, and transport management of hazardous chemicals to reduce the likelihood of accidents. 2. Integrated Governance, Ensuring Safety and Control: Utilize comprehensive techniques, management practices, and supervision methods to enhance the safety level of hazardous chemical transport and storage. 3. Rapid Response, Effective Handling: Establish and refine an emergency response mechanism to ensure prompt and effective handling of hazardous chemical incidents.
3	Management system	1. Establish a dangerous goods management system, appoint dedicated personnel for dangerous goods management, and provide regular training for management staff. 2. Establish a dangerous goods risk investigation system, regularly inspect dangerous goods storage areas, maintain records, and promptly report any identified risks to environmental and social specialists. 3. Establish a dangerous goods environmental emergency response system. For the special transportation depot, dangerous goods warehouse, and other areas with environmental risks, the Emergency Plan for Environmental Emergencies shall be prepared and emergency drills shall be conducted regularly.
3	Management measures	1. Identification and Classification of Hazardous Chemicals: Accurately identify hazardous chemicals in air transport, classify them according to their hazard level, and implement corresponding management measures. 2. Packaging and Labeling: Package hazardous chemicals according to relevant standards to ensure intact and secure packaging, with clear markings of dangerous goods symbols, names, quantities, etc. 3. Transport Process Monitoring: Utilize modern technological means to monitor the transport process of hazardous chemicals in real time to ensure transport safety. 4. Personnel Training and Assessment: Provide specialized training for personnel involved in hazardous chemical air transport to enhance their awareness and emergency handling capabilities, and conduct regular assessments. 5. Regular Inspection: Conduct regular inspections of dangerous goods transport routes and storage areas, promptly report findings, and implement timely corrections.
4	Emergency response procedures	(1) Information notification The environmental and social management officer of the project implementation unit receives information on sudden dangerous goods incidents; quickly assesses the type of environmental and safety incidents related to dangerous goods and reports to the main responsible person of the project implementation institution. Based on instructions from the main leadership of the project implementation unit

S/N	Element	Management Plan Content
		and the severity level of the incident, report the incident information to relevant local departments including public security, emergency response, fire, health, and ecological environment. (2) Emergency response and on-site handling Once a hazardous chemical accident occurs, the response procedures specified in the enterprise's risk emergency plan for environmental emergencies shall be started immediately and preliminary disposal measures shall be taken. The main responsible person of the project implementation unit and the safety management officer shall arrive at the scene promptly to command emergency response work; Local public security authorities organize necessary sealing and control of the incident site and surrounding areas, record and collect evidence at the rescue site; Local fire and emergency departments organize professional emergency rescue teams to the scene for dangerous goods leak control, fire and explosion disposal, personnel evacuation, and prevention of secondary disasters; Local health departments organize nearby medical personnel and equipment for on-site first aid for injured persons; Local ecological environment departments organize necessary emergency environmental monitoring to prevent further environmental pollution and health hazards to the population; (3) Post-event handling After the accident is handled, conduct investigation and analysis of the accident causes, summarize lessons learned, and improve emergency management plans.
5	Guarantee measures	Personnel guarantee: Establish a specialized hazardous chemical emergency management team for the Project to ensure personnel have the necessary knowledge and skills. Material guarantee: Equip hazardous chemical warehouses of the Project with necessary emergency rescue materials and equipment. Technical guarantee: Install warning and monitoring facilities in hazardous chemical warehouses of the Project, and utilize information technology to enhance the efficiency and accuracy of emergency response.

11.6 Institutional Strengthening and Capacity Building

During the implementation of the Project, Ezhou Linkong Group Co., Ltd. will organize external experts to provide initial training for environmental and social specialists of the project implementation unit, construction contractors, and supervisors, and implement the *Environmental and Social Management Plan*, including AIIB's *Environmental and Social Policy*, good management practices during construction, monitoring and reporting, and grievance redress mechanisms. Training plans are detailed in the table. Adjustments will be made based on the capabilities and needs of all stakeholders involved.

Table 11.6-1 Training Plan

Training Subject	Training Contents	Participant	Frequency and Time
Introduction to AIIB Environmental and Social Policy, Project ESMP	AIIB environmental and social policy; project ESMP; preparation of site-specific ESMP; site-specific	PMO, contractor and supervision company	Commencement of project implementation

Training Subject	Training Contents	Participant	Frequency and Time
Requirements	environmental management; worker management; good practices to prevent gender-based violence, etc.		
ESMP strengthening	ESMP implementation and monitoring, supervision process, whether to update and take further measures according to the implementation effect.	PMO, contractor and supervision company	After one year of project implementation, increase the frequency as required
Emergency preparedness plan	Physical and chemical properties, risk situation, and emergency plan for toxic and harmful chemicals/dangerous goods	PMO, operator	First year after operation
Information disclosure and grievance redress mechanism	Personnel, responsibilities, and process of grievance redress mechanism; requirements for on-site information disclosure	PMO, contractor and supervision company	At the beginning of project implementation and one year later
Environment, health and safety	Waste gas, wastewater, and waste management; occupational health and safety	Personnel related to project construction and operation	Start of construction period to first year after operation
Emergency response and drills	Organize emergency response drills for firefighting, natural disasters, and other emergencies	Personnel related to project construction and operation	From the beginning of the construction period to the first year after the operation; included in the daily training plan.

11.7 Monitoring and Reporting

The Environmental and Social Management Plan of the Project includes two types of environmental monitoring: (1) internal monitoring conducted by the construction contractor; (2) external monitoring conducted by hired external environmental and social monitoring units. The details are as follows:

Internal Monitoring: During the construction phase, the supervision company will conduct internal environmental and social monitoring according to the requirements of the monitoring plan. The monitoring results will be submitted by the supervision company to Ezhou Linkong Group Co., Ltd. in the form of monthly reports.

External Monitoring: Ezhou Linkong Group Co., Ltd. will hire at least one environmental and social monitoring company to conduct the external monitoring required by this report. External environmental and social monitoring will cover the entire construction and operation phases of the project. The environmental and social monitoring company will prepare environmental and social monitoring reports, including monitoring methods and results, and submit these reports to Ezhou Linkong Group Co., Ltd.

Environmental and Social Monitoring Report (ESMR). Ezhou Linkong Group Co., Ltd. will

prepare an environmental and social monitoring report for submission to AIIB, with a submission frequency of: once per quarter in the first year of project implementation, and once every six months from the second year of project implementation onwards, included in the semi-annual project progress report.

The environmental and social monitoring report will include: (1) project progress; (2) implementation and overall effectiveness of the Environmental and Social Management Plan; (3) conducted environmental and social monitoring and results.

11.7.1 Environmental Monitoring

The environmental monitoring plan for the Project and associated facilities is shown in the following table.

Table 11.7-1 Schedule of Environmental Monitoring Plan

Items	Monitoring indicators	Point location	Frequency	Source of Funds	Standard No.	Executing Unit	Supervising Unit
1. Internal monitoring							
Waste gas	Particulate matter	Areas around plant boundary	Once a month	RMB 150,000, included in the mitigation measures cost for the construction phase of the Project	GB16297-1996	Construction Contractor	Supervisor
Construction wastewater	COD, BOD, SS, and ammonia nitrogen	Sedimentation tank	Once a month		/	Construction Contractor	Supervisor
Domestic sewage	COD, BOD, SS, ammonia nitrogen, animal and vegetable oil	Outlet of sewage treatment facility	Once a month		GB8978-1996 and its amendments	Construction Contractor	Supervisor
Noise	L_{Aeq}	Construction plant boundary	Once a month		GB12523-2011	Construction Contractor	Supervisor
Solid waste	Domestic waste of construction personnel and construction waste, waste earth-rock and oily waste generated during construction	Temporary storage area for solid wastes	Once a day		/	Construction Contractor	Supervisor
Ecological environment	Soil erosion and vegetation recovery	At the construction site	Once a week		/	Construction Contractor	Supervisor
Occupational health and safety	Camp hygiene and safety, supply of clean water, personal protective equipment, emergency response plan	Construction camp	Once a month		/	Construction Contractor	Supervisor
2. External monitoring							
Construction Period							
Waste gas	Particulate matter	Areas around plant boundary	Once a quarter	RMB 300,000, included in the budget for	GB16297-1996	External monitoring company	Ezhou Linkong Group Co., Ltd.

Items	Monitoring indicators	Point location	Frequency	Source of Funds	Standard No.	Executing Unit	Supervising Unit
Construction wastewater	COD, BOD, SS, and ammonia nitrogen	Sedimentation tank	Once a quarter	external environmental and social monitoring	/		
Domestic sewage	COD, BOD, SS, ammonia nitrogen, animal and vegetable oil, total nitrogen, total phosphorus, etc.	Outlet of sewage treatment facility	Once a quarter		GB8978-1996 and its amendments	External monitoring company	
Noise	$L_{Aeq,}$	Construction plant boundary and sensitive points	Once a quarter		GB12523-2011, GB3096-2008	External monitoring company	
	Lwecpn, Lmax and Td	Sensitive point	Once a year		GB9660-88	External monitoring company	
Ambient air	TSP	Downwind sensitive points under prevailing wind direction	Once a quarter		GB3095-2012 and its amendments	External monitoring company	
Operation period							
Waste gas	VOCs, hydrogen chloride	Exhaust funnel of customs inspection center	Once a quarter	RMB 500,000, included in the budget for external environmental and social monitoring	GB 16297-1996 and its amendment	External monitoring company	Ezhou Linkong Group Co., Ltd.
	Concentration of H_2S, NH_3 and odor	Exhaust funnel of animal room			GB14554-93	External monitoring company	
	SO2, NOx and particulate matter	Exhaust funnel of harmless incinerator			GB13271-2014	External monitoring company	

Items	Monitoring indicators	Point location	Frequency	Source of Funds	Standard No.	Executing Unit	Supervising Unit
	VOCs and particulate matter	Bonded processing exhaust funnel			GB 16297-1996 and its amendment	External monitoring company	
	Oil fume in canteen	Cooking fume outlet			GB18483-2001	External monitoring company	
	SO2, NOx and particulate matter VOCs, methyl bromide, hydrogen chloride, NH_3, H_2S and odor concentration	Plant boundary of the Project			GB 16297-1996 and its amendment	External monitoring company	
Wastewater	COD, BOD, SS, ammonia nitrogen, animal and vegetable oil, total nitrogen, total phosphorus, etc.	Discharge outlet of each sewage treatment facility	Once a quarter		GB8978-1996 and its amendments	External monitoring company	
Noise	L_{Aeq}	Plant boundary of the Project	Once a quarter		GB12345-2008	External monitoring company	
Ambient air	TSP, NH3, H2S, TVOC	Downwind sensitive points under prevailing wind direction	Once a quarter		GB3095-2012 and its amendments	External monitoring company	
Acoustic environment	L_{Aeq}	Sensitive point	Once a quarter		GB3096-2008	External monitoring company	
	Lwecpn, Lmax and Td	Sensitive point	Once a year		GB9660-88	External monitoring company	

Items	Monitoring indicators	Point location	Frequency	Source of Funds	Standard No.	Executing Unit	Supervising Unit
	access sign						

* If exceedances are found: (1) immediately report to Ezhou Linkong Group Co., Ltd.; (2) take appropriate actions; (3) conduct follow-up monitoring to determine if standards are met after actions; (4) all issues will be included in the *Environmental and Social Management Plan Implementation Report* submitted to AIIB.

11.7.2 Social Monitoring

The social monitoring plan of the Project is shown in the following table.

Table 11.7-2 Schedule of Social Monitoring Plan

Stage	Items	Monitoring indicators	Source of Funds	Implementation unit
Construction Period	Land acquisition and demolition risk	a. Implementation of the Resettlement Action Plan; b. Monitoring of outstanding issues on resettlement, including the approval and acquisition of the 60th batch of construction land in 2023, the delivery of 261 sets of resettlement houses, and the reconstruction of Polong Temple;	a. Fund budget included in the *Resettlement Action Plan* b. RMB 100,000, included in the budget for external environmental and social monitoring	Linkong Group, External Monitoring Unit for RAP
	Traffic safety risks	a. Traffic safety publicity and education, including the number of brochures, posters, and photo albums; b. Route planning for transport vehicles, including off-peak travel road signs, detour plans, and distribution of signage in village road sections and photos; c. Times and number of participants in safe driving education and training for relevant drivers; d. Registration form for safety inspection of relevant cargo transport vehicles; e. Record form of residents' feedback on traffic safety.	RMB 150,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd. and Construction Supervisor
	Impact of migrant workers on local residents	a. Strengthen the information management and update of construction personnel, ensuring good information communication between the construction party and the community; b. Publicity and education on local social customs and culture, including the number of brochures, posters, and photo albums; c. Public safety and AIDS prevention knowledge publicity, including the number of	RMB 100,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd. and Construction Supervisor

Stage	Items	Monitoring indicators	Source of Funds	Implementation unit
		brochures, posters, and photo albums; number of training sessions and participants;		
	Worker Management Risk	Contractor worker management: a. Proportion of women, disabled people, and other special groups among the employed workers and the proportion of each age group; b. Types and quantities of safety protection equipment on the construction site; c. Employee training plans; d. Protective measures and regulations for women, disabled people, and child labor; e. Grievance redress mechanism; f. Monitoring the implementation of the Gender Action Plan. Direct Worker Management: a. Proportion of women, disabled people, and other special groups among the employed workers and the proportion of each age group; b. Protective measures and regulations for women, disabled people, and child labor; d. grievance redress mechanism; e. Monitoring the implementation of the Gender Action Plan;	/	Ezhou Linkong Group Co., Ltd. and Construction Supervisor
Operation period	Traffic safety risks	a. Route planning for vehicle operation, including travel road signs and community bulletin board notices; b. Traffic safety publicity and education, including the number of brochures, and posters; the number of training lectures and participants; the number of traffic command posts and guides;	RMB 100,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd.
	Impact of migrant workers on local residents	a. Information registration form of external population, including visiting reasons and time of entering and leaving the community; b. Publicity and education on local social customs and culture, including the number of brochures, posters, and photo albums;	RMB 50,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd. and Contractor

Stage	Items	Monitoring indicators	Source of Funds	Implementation unit
	Worker Management Risk	Direct Worker Management: a. The proportion of special groups such as women and people with disabilities among the employed workers and the proportion of each age group; b. Protective measures and regulations for women, disabled people, and child labor; c. Grievance redress mechanism; d. Monitoring the implementation of the Gender Action Plan. Supplier worker management: a. The supplier provides in its procurement documentation a statement that there are no labor working conditions (LWC) issues in its supply chain; b. Obtain similar representations from its subcontractors and suppliers of the SPV project products; c. Compliance with workforce requirements in AIIB's ESF and similar representations and compliance from its subcontractors and suppliers of same products are required; d. If necessary, AIIB will have the right to inspect and audit compliance with these requirements.	RMB 50,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd. and Contractor
Increase employment opportunities for women		1. Prioritize employment opportunities for women in the project (the baseline proportion of female workers during the construction phase: about 5%; target value: 15%). 2. Provide employment opportunities for female workers with the new jobs created in the logistics park (baseline: 0%; target: 20%).	/	Ezhou Linkong Group Co., Ltd. and Contractor
Enhance women's development ability		1. Increase the proportion of women participating in various training programs, including the promotion of women's rights and interests, and employment skills training (baseline: 10%; target: 20%). 2. Increase the proportion of women in Ezhou Linkong Group Co., Ltd. participating in	RMB 60,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd.

Stage	Items	Monitoring indicators	Source of Funds	Implementation unit
		project information disclosure and management training (baseline: 10%; target: 20%). 3. Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd., through relevant training. (baseline: 10%, target: 20%)		
Expand women's participation in decision-making		1. Proportion of women participating in project mobilization, targeted information disclosure, policy promotion, and consultation (baseline: 20%; target: 30%). 2. Proportion of women signing land acquisition or demolition compensation agreements (baseline: 0%, target: 100%).	RMB 70,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd.
Reducing gender-based violence risks		1. Ensure 100% of female workers receive worker rights protection training. 2. Ensure equal pay for equal work for 100% of female and male workers, with zero incidents of gender-based violence. 3. Establish a grievance and complaint mechanism with at least two female members on the grievance committee.	RMB 70,000, included in the budget for external environmental and social monitoring	Ezhou Linkong Group Co., Ltd. and Contractor

11.8 Document Management and Reporting Mechanism

11.8.1 Recording Mechanism

To ensure the effective operation of the environmental management system, a sound recording mechanism must be established to retain records related to the following aspects:

(1) Relevant laws and regulations;

(2) Permits issued by the Government;

(3) Relevant environmental and social impacts;

(4) Training records;

(5) Monitoring data;

(6) Issues in environmental management, environmental protection and social management work;

(7) Mitigation measures and effectiveness;

(8) Other project-related information;

(9) Review records of project documents.

In addition, the above records shall be well managed, including identification, collection, archiving, storage, maintenance, inquiry, retention period, and record disposal.

11.8.2 Reporting Mechanism

During project implementation, the PMO shall record project details and form the *Environmental and Social Management Plan Execution Report*, reporting to relevant departments in a timely manner.

The ESMP Execution Report can include the following main contents, with the final report content to be determined after discussion with AIIB:

① Project progress status;

② Implementation status of the Environmental and Social Management Plan;

③ Implementation status of the training plan;

④ Environmental and social monitoring status;

⑤ Public participation and grievance redress mechanism operation status, including the main content of complaints, solutions, and public satisfaction if complaints occur;

⑥ Problems encountered during construction and operation periods and actions taken.

The ESMP Execution Report shall be submitted to AIIB quarterly in the first year of project implementation, and semiannually in the second year and thereafter.

11.9 Cost Estimation

This section estimates the costs of implementing the *Environmental and Social Management Plan*. The costs include the following parts: costs for implementing mitigation measures, costs for carrying out the monitoring plan, and training costs. All costs are indluced in the total investment of the *Feasibility Study Report for the AIIB-funded Hubei Global Air Cargo Logistics Hub Project*. The costs cover the entire construction period and the first five years of the operation period.

The costs do not include: (1) costs incurred from detailed design changes and adjustments; (2) costs of internal monitoring, as these are included in the construction and supervision contracts. Training costs are based on the experience of other similar projects.

Table 11.8-1 Cost Estimation of Environmental and Social Management Plan

S/N	Items	Cost (RMB 10,000)
1	Cost of mitigation measures in construction stage	The "engineering cost" included in the total investment estimate of feasibility study is borne by the Construction Contractor
2	Cost of mitigation measures in operation stage	Hardware construction is included in the "engineering cost" of the total investment estimate of feasibility study and borne by the Construction Contractor. Operation and maintenance costs are included in the "other engineering construction costs" of the total investment estimate of feasibility study
3	Environmental and social external monitoring cost	This item is included in the "other construction costs" of the total investment estimate of feasibility study. It does not include the monitoring cost for resettlement safety management, which is listed in the *Resettlement Plan*
4	Other unforeseen costs	Included in the "reserve cost" of total investment estimate of feasibility study
Total		685

Appendix A: Schedule of Social Impact Analysis

Project Name	Affected townships and towns along the line	Affected population/female (10,000 people)-%	Stakeholder needs	Social benefits	Social risks
Hubei Global Air Cargo Logistics Hub Project Financed by Asian Infrastructure Investment Bank	Gutang Village of Yangye Town; Duwan Village, Chehu Village and Bajiao Village of Yanji Town	Directly affected population: 1.67/0.78-46.71%; Indirectly affected population: 111.51/52.77-47.33%; Radiation-affected population: 6142.8/2952-48.06%	**(1) Residents' need for adequate compensation and proper resettlement;** **(2) Residents' need for increased income opportunities and employment opportunities;** **(3) Construction workers' need for a reasonable dust reduction construction plan;** **(4) Stakeholders' need to be informed about project information disclosure;** **(5) Stakeholders' need to participate in project**	**(1) Promote the construction of regional logistics distribution centers and express stations** ➢ As an important supporting facility for the Huahu Airport, the Hubei Global Air Cargo Logistics Hub Project will drive the construction of logistics transfer stations and express stations in Ezhou City as the cargo throughput and transportation demand increase, thereby improving the spatial layout and functionality of the logistics infrastructure. ➢ It is expected that after the implementation of the Project, the number of express outlets in the airport economic zone will be increased by 2-3 times. The development of delivery logistics in this region will be promoted. **(2) Enhance the low-carbon awareness of residents in the project area** ➢ As part of the Project, the green logistics park will become a showcase for green development achievements upon completion. The construction and operation of the green logistics park will not only guide employees	**(1) Land acquisition and demolition risk** ➢ The Project plans to acquire 1598.3 mu of rural collective land, including 665.3 mu for Phase I and 933.0 mu for Phase II. The land acquisition impact involves two villages in one township of Ezhou Linkong Economic Zone, affecting a total of 386 households and 1503 people. **(2) Community traffic safety risks** ➢ The transportation of construction materials and large engineering vehicles to and from the construction site may pose risks to along-the-way communities, such as noise, dust, and waste scattered in the area. ➢ With the increasing number of large machinery vehicles and construction material transport vehicles, road damage around the community will increase, possibly causing sudden road traffic safety risks. ➢ During the project operation period, the increase in operating personnel and cargo vehicles will lead to more vehicle

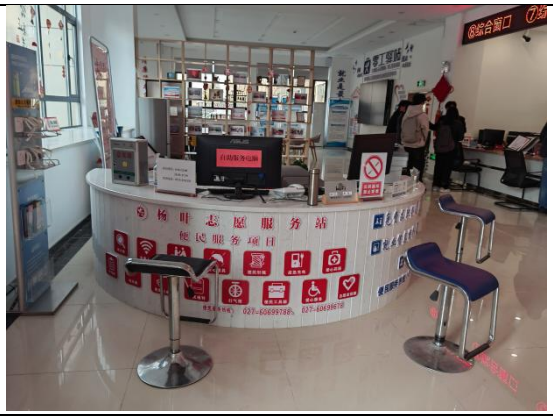
			development.	within the park to adopt green commuting, paperless offices, and waste sorting, but also provide an environment for employees to practice the green lifestyle. ➢ Meanwhile, the influence of the park will extend to surrounding communities, spreading the concept of green and low-carbon life to nearby areas. This will enhance the awareness of low-carbon life among residents around the project area, promoting the adoption of green consumption and production habits. **(2) Provide abundant employment opportunities for surrounding residents** ➢ Direct employment opportunities. Including jobs provided by the PMO, Operator, and Construction Contractor. The Construction Contractor will provide temporary, low-skilled employment opportunities, including jobs in construction, cleaning, logistics, transportation, and catering services. The PMO will provide positions such as document handling and project management. Corresponding jobs will be provided after the Operator settles in. ➢ Indirect employment opportunities. The implementation of the Project will promote the development of local industries, including the agricultural product processing industry and logistics industry. Firstly, the agricultural products, including Wuchang fish, Tuzhen blueberries, and Zhaoshan grapefruit, are	collisions and disputes over illegal parking, causing traffic order disruptions and potential traffic safety risks **(3) Impact of migrant workers on local residents** ➢ The increased interaction between migrant workers and local residents may lead to social conflicts and issues due to differences in language or social-cultural customs during communication. Moreover, close interactions between migrant workers and local residents may easily lead to health risks such as the spread of communicable or epidemic diseases. **(4) Risks to workers** **Construction period:** ➢ Mechanical equipment operation safety risks: Construction workers may have accidents when operating tools; ➢ Mechanical construction noise: Loud, repetitive, and excessive noise can cause long-term hearing problems for workers; Noise may also distract workers from the task at hand, increasing the risk of accidents; ➢ Sudden or emergency accidents: Due to incomplete HSE-compliant construction and quality safety management measures, sudden situations and quality safety accidents may occur during

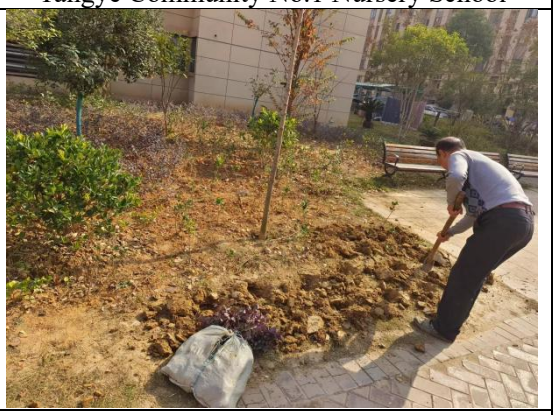
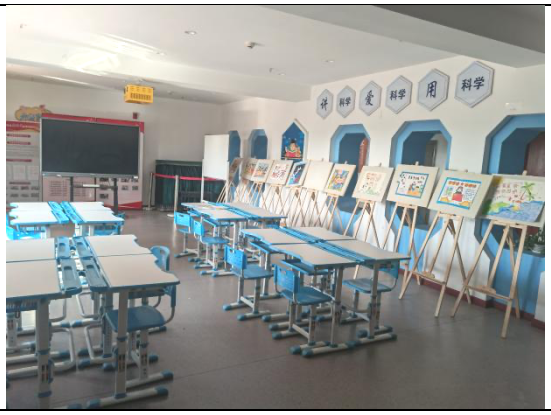
				is implemented, it will provide over 500 new jobs for local residents. Secondly, the logistics industry, involving logistics personnel and supporting infrastructure such as service points and distribution centers, will be promoted by the Project. The development of service industries like delivery services, catering, and accommodation will be driven by the Project. It is anticipated that 5,000 indirect job opportunities will be provided. **(3) Broaden employment and entrepreneurship opportunities for women in the surrounding area** ➢ After the Project is completed, it will create opportunities for women in the surrounding area to embrace new types of employment, such as intelligent logistics sorting, logistics transportation, and other related work. Additionally, the project will provide training on low-carbon awareness, employment, entrepreneurship, and business counseling for women in the surrounding area, enhancing their overall quality and empowering women for employment and entrepreneurship initiatives. **(4) Promote the development of local agricultural product logistics** ➢ After the completion of the Project, a variety of agricultural products such as Red Rape, Bean Vermicelli, and Wuchang fish will be transported out and supplied efficiently. This	contractors' workers during high-temperature operations; ➢ Wage and benefits: If construction contractors do not strictly comply with relevant laws and regulations and do not sign labor contracts, workers' rights may not be guaranteed, and wages may be delayed; ➢ Risks of sexual harassment and gender-based violence: Differences in the living habits of male and female contractor workers may cause physical or psychological violence against women. **Operation period:** ➢ Safety risks of mechanical equipment operation: collision or rolling by forklift during warehousing and logistics operations, injury by falling objects from high altitudes, rollover due to improper operation of driving equipment, etc.; ➢ Sudden or emergency accidents: errors in the operation of equipment, resulting in risks to labor health and life; ➢ Occupational disease hazards: Long-term work in low-temperature storage environments can lead to nervous system diseases, vascular diseases, and rheumatic diseases. ➢ Occupational health and safety risks: Employees of imported cold-chain food may be infected with exotic viruses

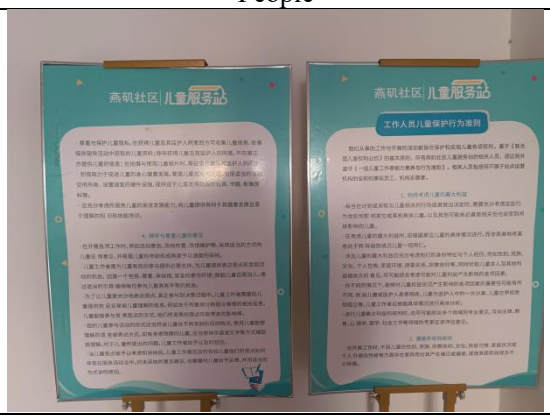
				areas, reduce transportation costs for agricultural products, improve post-harvest processing, packaging, storage, transportation, and distribution logistics, and drive the development of agricultural product logistics. **(5) Reduce the purchase cost of imported goods for residents** ➢ The Project will involve the construction of multiple bonded warehousing and processing centers and customs infrastructure. With these facilities in place, residents of Ezhou City and the surrounding areas can expand their cross-border online shopping options. Instead of relying solely on overseas direct purchases or having items shipped through other domestic cities, they will have the convenience of receiving imported goods directly from local bonded warehouses. This direct access is expected to significantly reduce the cost of goods for consumers. ➢ Efficient customs can speed up logistics operations and shorten the entire supply chain cycle, which not only improves the satisfaction of logistics enterprises, but also directly reduces the transportation cost of residents purchasing goods. **(6) Improve the safety and health level of local residents** ➢ Upon the completion of the customs infrastructure, there will be an increase in	➢ Risk of sexual harassment and gender-based violence: There may be gender-based labor discrimination, and the rights and interests of female employees such as pregnancy and maternity leave cannot be guaranteed.

				the influx of invasive species, and other biological security risks under customs supervision. The aim is to avoid and reduce potential harm to domestic ecosystems, biodiversity, agriculture, forestry, animal husbandry, fisheries, and the health of residents. ➢ The increase of imported food will effectively diversify the local food supply system, meet the diverse nutritional needs of the human body, and improve the health level of residents in the project area and surrounding areas.	

Appendix B: Yangye and Yanji Resettlement Communities

Yangye Resettlement Community	
	
Yangye Volunteer Service Station	Body-building class activities in the Women's Home
	
Party-Mass Service Center	Housekeeping Skills Training
	
Community Job Fair	Odd Job Station

	
Property Service Center	Yangye Community No.1 Nursery School
	
Ground-floor store of Yangye Community	Community Greening Construction
	
Resident Leisure	Resident Leisure
Yanji Resettlement Community	
	
Children's Playroom	Popular Science Publicity Room

	
Vegetable Gardens Allocated to Landless Elderly People	Social Work Station of Yanji Town
	
Children's Service Station	Fitness Room
	
Volunteer Home	Work Plan of Cultural Activity Room
	
Intangible Cultural Heritage Activity Room	Volunteer Points Exchange Supermarket

	
Duwan Village	Zouma Village

Appendix C: List of Symposiums in the Project Area

Date	Survey Community/Institution	Participants in the Symposium	Detailed Information of the Symposium Participants	Main Contents
Morning, December 4, 2023 9:30–11:30	Headquarters of Ezhou Linkong Group Co., Ltd.	Female: 4, male: 8, total: 12.	1) Ezhou Linkong Group: 6 people; 2) Survey Team: 6 people.	1) The survey team coordinated with the Headquarters of the Ezhou Linkong Group Co., Ltd. to further clarify the resettlement and social assessment survey plan and schedule (review and supplement the list of materials, arrange socio-economic surveys, institutional meetings, meetings with resettlement representatives, etc.) in combination with the project situation, determine the schedule for the physical quantity survey of resettlement impacts; provide a series of forms for the physical quantity survey, review the physical quantity of resettlement impacts, and provide a list of policy materials; 2) Determine the specific arrangements for questionnaire surveys and field inspections in each project area, and select survey communities and sampling quantities.
14:00-17:30, December 4, 2023	Management Committee of Linkong Economic Zone	Female: 8, male: 10, total: 18.	1) Organization and Human Resources Bureau: 3 people; 2) Social Affairs Bureau: 1 person; 3) Rural Revitalization Bureau: 3 people; 4) Urban Construction Bureau: 1 person; 5) Rural Revitalization Bureau: 1 person; 6) Natural Resources and Planning Sub-bureau: 3 people; 7) Survey Team: 6 people.	In this meeting, the survey team learned about the project's construction and operation, the impact on resettlement, the project's impact on local women and vulnerable groups, and socio-economic development, as well as public participation in the project and the grievance mechanism and records.

Date	Survey Community/Institution	Participants in the Symposium	Detailed Information of the Symposium Participants	Main Contents
Morning, December 5, 2023 9:30–11:30	Yangye Town Government and Yanji Town Government	Female: 2, male: 8, total: 10.	1) Yangye Town Government Key Informant Interview: female: 1, male: 5, total: 6; 2) Yanzi Town Government Key Informant Interview: female: 1, male: 3; Youth (under 30): 5, middle-aged (30-55): 2, elderly (over 55): 2, total: 9; 3) Vulnerable Groups Symposium: female: 1, male: 3, total: 4.	1) The survey team members conducted key informant interviews at Yangye Town Government and Yanzi Town Government. 2) Coordinated with the secretaries of Yangye Community and Yanzi Community, informed them about the survey content, and finalized the itinerary and schedule.
Morning, December 6, 2023 9:30–11:30	Yangye Community	Female: 9, male: 11, total: 20. 1) Yangye Community Residents Committee and Resident Representatives: 15 people; 2) Survey Team: 5 people.	1) Symposium with Yangye Community Residents Committee and Residents, female: 9, male: 11, total: 20; 2) Women's Symposium: youth (under 30): 4, middle-aged (30-55): 2, elderly (over 55): 3, total: 9; 3) Vulnerable Groups Symposium: female: 1, male: 2, total: 3.	1) The survey team members conducted symposiums, interviews, and questionnaire surveys in Yangye Community, completing 30 questionnaires on site. 2) Learned about the awareness and participation of the residents in the project area, project impact symposiums, residents' main concerns and impacts, public participation implementation, employment development information, construction and operation safety impacts, etc. 3) Inspected the Guanyin Temple Site in Huaqing Community.
14:00-17:30, December 6, 2023	Project Department of CCCC Third Highway Engineering Co., Ltd., Project Department of	Female: 2, male: 18, total: 20. 1) Construction Site Managers and	1) Project Department Meeting, female: 2, male: 15, total: 17; 2) Random Interviews with Construction	1) Understand the industrial development layout and trends driven by project construction, the project's absorption of local employment, workers' wage levels and labor intensity, occupational health and safety

Date	Survey Community/Institution	Participants in the Symposium	Detailed Information of the Symposium Participants	Main Contents
	Co., Ltd., and Project Department of Hubei First Metallurgical Construction Engineering Co., Ltd.	people; 2) Survey Team: 6 people.		information and materials. 2) Workers' understanding of the project, their views and suggestions on the project construction, etc.
18:00-19:00, December 6, 2023	Huahu Airport Operation Department	The survey team conducted a key informant interview with the head of the Huahu Airport Operation Department, who, as an important stakeholder, expressed support for the project construction from the perspectives of future enterprise planning, promoting industrial employment, enhancing city image, regional coordinated development, etc.		
Morning, December 7, 2023 9:30–11:30	Yanji Community	Female: 21, male: 34, total: 55. 1) Yanzi Community Residents Committee: 3 people; 2) Yanzi Resident Representatives: 47 people; 3) Survey Team: 5 people.	1) Yanzi Community Residents Committee Interview: female: 2, male: 1, total: 3; 2) Chehu Village Symposium: youth (under 30): 5, middle-aged (30-55): 2, elderly (over 55): 5, total: 12; 3) Bajiao Village Symposium: youth (under 30): 4, middle-aged (30-55): 5, elderly (over 55): 6, total: 15; 4) Duwan Village Symposium: youth (under 30): 3, middle-aged (30-55): 6, elderly (over 55): 6, total: 15.	1) The survey team members entered Yanzi Community, conducted interviews with the community residents committee; held village representative symposiums and conducted questionnaire surveys with Chehu Village, Bajiao Village, and Duwan Village, completing 42 questionnaires on site; in close cooperation with the village committees, distributed and collected 250 questionnaires. 2) Learned about the awareness and participation of the residents in the project area, project impact symposiums, residents' main concerns and impacts, public participation implementation, employment development information, construction and operation safety impacts, etc.
14:00-17:30, December 7, 2023	Zouma Village Committee Chehu Village Committee Wuchu Avenue	Female: 6, male: 16, total: 22. 1) Zouma Village Committee and Resident Representatives: 12	1) Zouma Village Committee and Resident Symposium: female: 4, male: 8, total: 12; 2) Chehu Village Committee Interview: 3 people; 3) Wuchu Avenue Key Informant	1) The survey team members entered Zouma Village, conducted an interview with the Zouma Village Committee and residents' representatives, and carried out questionnaire surveys and interviews, completing 15 questionnaires; 2) Interviewed the party secretary of Chehu Village,

Date	Survey Community/Institution	Participants in the Symposium	Detailed Information of the Symposium Participants	Main Contents
		Committee: 3 people; 3) Wuchu Avenue Construction Head: 1 person. 2) Survey Team: 6 people.		questionnaires; 3) Conducted an interview with the head of the Wuchu Avenue construction project. 4) Learned about the residents' awareness and satisfaction with the project, employment development information, public participation situation, noise impact, etc.; learned about the wage levels and labor intensity, occupational health and safety education, construction safety protection, etc., of workers involved in the Wuchu Avenue project.
9:00-12:00, December 8, 2023	Headquarters of Ezhou Linkong Group Co., Ltd.	Female: 2, male: 6, total: 8. 1) Linkong Group: 2 people; 2) PowerChina Zhongnan: 1 person; 3) Survey Team: 5 people.	Symposium of the Headquarters of Ezhou Linkong Group Co., Ltd.: 8 people.	1) The survey team summarized the information collected over the week and provided a brief explanation. 2) The head of Ezhou Linkong Group provided evaluations and specific suggestions. 3) Assigned responsibility to specific personnel for collecting the missing data and materials required for the report.

Appendix D: Interview Records

Time	December 6, 2023
Location	Conference Room, 2F, Yanji Community
Organized by	AIIB Special Work Office
Participants	Survey Team, relevant persons in charge of Yanzi Community Representatives, relevant personnel of Ezhou Linkong Group Co., Ltd.
Topic	Socio-economic conditions of the resettlement community, residents' attitudes towards the project, residents' needs, etc.
Main Content and Results	1. Residents are generally satisfied with their current lives. The compensation for the demolition was paid in one lump sum. Their living environment has improved significantly, and it is more convenient for children to attend school. They expressed their gratitude for the policies of the Party. 2. Younger residents can work at the airport and nearby areas, mainly in cleaning and security roles. There are fewer residents in technical positions, but their income greatly supplements household expenses. However, older residents stated that they are unemployed and stay at home, with limited economic income. The national pension and compensation for landless farmers are sufficient for their monthly expenses. 3. Residents learned about the project through traditional media (news), new media (Douyin, WeChat Official Accounts), village representative meetings, and household surveys. They believe that the construction of the project can promote the development of the surrounding economy, providing residents with more income opportunities. The benefits outweigh the disadvantages for their lives. 4. The needs of residents are as follows: 1) Due to different batches of land acquisition and demolition, the compensation standards received by villagers differ, causing some psychological imbalance. However, after multiple coordination meetings, there is a general understanding. 2) Employment opportunities generated by the project should be prioritized for the village residents.

On-site Photos	

Appendix E: Photos of Site Investigation

Bajiao Village Symposium

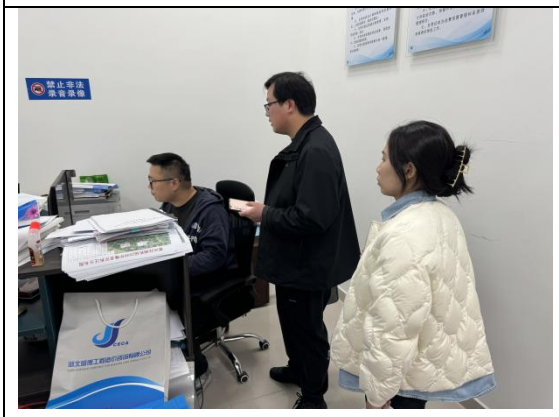
Huahu Airport Symposium

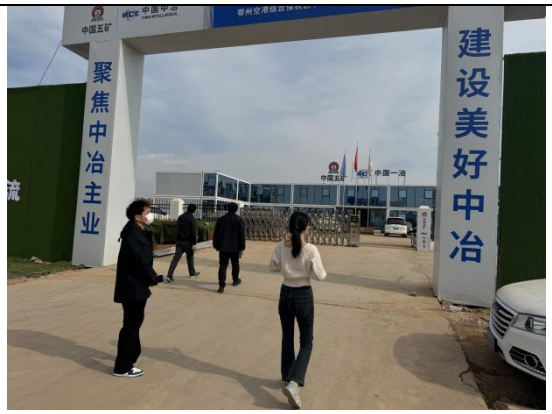
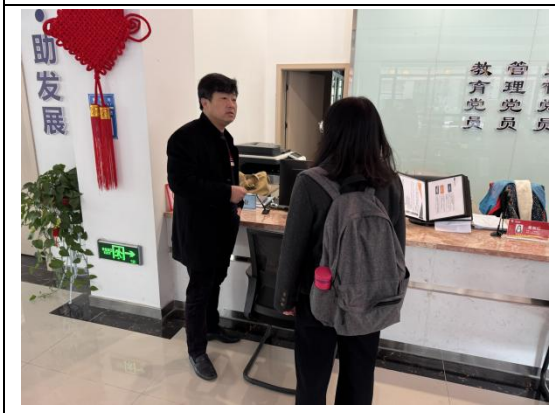
Duwan Village Symposium

Women's Symposium in Chehu Village

Gutang Village Interview

Meeting with Forestry Department

	
Visit to the Social Affairs Department	Visit to the Land Resources Department
	
Understanding the Situation from General Manager Peng	Symposium with General Manager Zhou of the Linkong Group
	
Collecting Information from the Land Acquisition Office	Surrounding Area Survey of the Project Area

	
Visit to Chehu Village Committee	Understanding Poverty Alleviation Information
	
Collecting Information from the Social Affairs Bureau	Symposium on Survey and Summary of Linkong Group
	
Construction Site	Visit to Construction Contractors
	

Interview with Yangye Community Staff	Collecting Information from Construction Contractors
	
Interview with the Head of Hubei Construction Engineering	Visit to Yangye Community

Appendix F: List of Contractor's Responsibilities during Project Implementation

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
Preparation				
Environmental and social aspects	Institutional strengthening	Arrangement of suitable environmental and social safeguards personnel	Appoint at least one full-time and qualified safeguard personnel within the project implementation unit. This person will be responsible for coordinating the implementation of the Environmental and Social Management Plan. The project implementation unit will hire a third-party environmental and social monitoring company to provide external support.	
	Bidding	Implementation of environmental management requirements during project implementation	Incorporate the environmental and social intervening measures from the Environmental and Social Management Plan into the project bidding documents and the contracts for civil works and equipment installation. All contractors are required to strictly implement the Environmental and Social Management Plan.	Incorporate the management plan into bidding documents and contracting contracts
	Grievance redress mechanism	Affected people and workers	The project implementation unit and construction contractors will establish a grievance redress mechanism for the affected people and workers before construction begins and appoint specific personnel in charge; relevant training will be provided to those responsible for the grievance redress mechanism. The contact information for the	/

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			grievance redress mechanism, including phone numbers, addresses, and emails, will be made public.	
			The AIIB has established a Project-affected People's Mechanism (PPM). When the affected people believe that the AIIB project has failed to implement its Environmental and Social Policy (ESP) and has or may adversely affect them, and their concerns cannot be satisfactorily resolved through the Project or AIIB management mechanisms, the PPM provides an independent and impartial review opportunity. Relevant information about PPM can be accessed through the following link: https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html.	/
Design Stage				
Environmental aspects	Greenhouse effect		Use environmentally friendly refrigerants; the selected unit refrigerant should have an ozone depletion potential (ODP) value of 0 and a global warming potential (GWP) value of less than 150. Optional refrigerants include R1234yf, R1234ze, and other fourth-generation refrigerants (HFOs). The R507 and R410A refrigerants in the installed cooling equipment will be replaced with new environmentally friendly refrigerants by 2027.	Comply with domestic and EU requirements.
	Photovoltaic impact		(1) Solar cell mounting brackets will be designed with a 10° installation angle, and the brackets will be about 1.5m high to minimize sunlight reflection. (2) Polycrystalline silicon solar cells are adopted in the design, which has an outer layer of special tempered glass with a very high light transmittance of over 95%, resulting in very low reflectivity and no significant light pollution.	/
Construction Period				
Environmental	Waste	Constructi	The Construction Contractor shall strictly abide by the Management Measures for Prevention and Control of Dust Pollution in Ezhou City (EZZF [2008] No. 21) and other relevant regulations during construction. The details are as follows:	Integrated Emission Standard of Air

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			enclosures. Joints between the enclosures, as well as between the enclosures and the anti-overflow seats, shall be closed; (2) The ground and carriageways of the living areas, office areas, processing yards in operation areas and material storage yards within the construction site shall be hardened, or materials with the equivalent functions shall be laid on such ground and carriageways, supplemented by wet operations; (3) The operations such as earthwork excavation, filling and transfer as well as the demolition of houses or other buildings (structures) shall not be carried out in the weather with wind force above Grade 5 according to the meteorological forecast; (4) For the removal and transportation of construction materials and wastes in buildings (structures), transport vehicles shall not leave the workplace until they are free of silt and washed clean, and containers or pipelines shall be adopted for transportation. It is forbidden to throw them from high places; (5) If the items such as construction wastes cannot be removed and transported away within 24 hours, a temporary stacking yard shall be provided at the construction site, and dust prevention measures such as enclosures and covering shall be taken for the temporary stacking yard; (6) For the construction operations producing a large amount of slurry, corresponding slurry pits and ditches shall be provided to ensure that the slurry does not overflow, and waste slurry shall be transported in a sealed manner; (7) Cement or other fine-grained building materials that are easy to fly shall be stored in a sealed manner or covered; (8) When ready-mixed concrete and mortar are used on the construction site according to regulations, dust prevention measures such as sealing, fencing, watering, and flushing shall be taken; (9) Permanent dust prevention measures such as building closed or semi-closed awnings and wind-break walls shall be taken for the material stacking yard of the concrete mixing	

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			maintenance of vehicles shall be strengthened.	
		Construction waste gas	(1) Strengthen the overhaul and maintenance of construction vehicles and machinery. It is strictly prohibited to use vehicles with overdue service life and excessive tail gas. (2) Use electric equipment or high-quality fuel as much as possible to reduce harmful gas emissions from equipment and vehicles. (3) Strengthen the personnel management of the construction contractors and carry out HSE-compliant construction.	
	Wastewater	Domestic sewage	Temporary septic tanks, oil-water separators, and other domestic sewage treatment facilities shall be set up for the treatment of the sewage, which shall then be discharged into the surrounding municipal pipe network.	Integrated Wastewater Discharge Standard (GB 8978-1996)
		Construction wastewater	A sedimentation tank will be set up for the treatment of construction wastewater. The construction wastewater shall be reused for site dust reduction and washing of machinery and vehicles after being treated by the three-stage sedimentation tank.	No external discharge
		Rainwater containing silt from surface runoff on the construction site and water gushing in the foundation pit	(1) Cover topsoil stockpiles, material storage yards, and other sites, set up intercepting ditches around the site, and set up grit chambers at low-lying areas. Surface runoff during the rainy season shall be reused after sedimentation treatment, and the portion that cannot be reused shall be discharged after obtaining permission from relevant departments. It is prohibited to discharge water containing large amounts of silt or untreated wastewater into municipal pipe networks or water bodies. (2) For water gushing in the foundation pit, set up dewatering wells or use pumps to drain water to grit chambers. After sedimentation, reuse the water for site dust suppression or greening.	

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			far as possible during the preparation of the construction plan. In addition, the construction period shall be shortened as far as possible on the premise of ensuring the project quality. High-noise construction shall be arranged in the daytime as far as possible to reduce the construction at night. Except for emergency repair and rescue, no bulldozer, excavator, grader, road roller or other similar machinery shall be used for night construction (from 22:00 to 6:00 the next day). If noise pollution around the city cannot be avoided during night construction due to the continuity of the production process or other special reasons, the construction must be reported to relevant government departments for approval in advance and announced to surrounding residents. (2) Reasonable layout of construction site It is necessary to avoid arranging a large number of power mechanical equipment in the same place; otherwise, the local sound level will be excessive. (3) Reasonable arrangement of operation time for transport vehicles The speed shall be strictly controlled and honking shall be prohibited after transport vehicles enter the vicinity of the construction area. (4) Reduction of sound level of equipment Low-noise equipment shall be selected as far as possible, such as hydraulic machinery (instead of fuel machinery) and high-frequency oscillator; For fixed loading and unloading equipment and earth-moving machinery, such as excavators and bulldozers, the noise can be reduced by exhaust pipe silencers and isolation of vibrating parts of engines; Power mechanical equipment shall be regularly repaired and maintained. The sound level of poorly maintained equipment often increases during operation due to vibration of loose parts or damage to silencers. (5) Reduction of man-made noise Operate mechanical equipment according to regulations. During the disassembly of formwork and support, comply with operation regulations to reduce collision noise; use modern equipment (instead of whistles) to direct operations as much as possible. With the implementation of the above corresponding measures and scientific and strict	Site (GB12523-2011)

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			is minimal. Moreover, this impact is only temporary and will cease immediately once the construction operations are completed. (6) Strengthening of construction management During the construction period, the construction method with low noise and vibration shall be adopted as far as possible for foundation and structural construction on the premise of not affecting the construction quality; The foundation of the equipment with a fixed base shall be treated separately to reduce the transmission of ground vibration and structural noise; The operation shall be standardized and the maintenance of equipment shall be strengthened to maintain normal operation of the equipment; Noise equipment with less movement can be set in the sound insulation enclosure made of corrugated plates. The declaration and registration system of the construction noise shall be strictly implemented. A declaration shall be submitted to the local ecological environment department within 15 days after the commencement of the Project. The Approval Form for Noise Management on Construction Sites shall be filled in and approved before commencement. It is necessary to avoid disturbing residents with noise, make the noise at the boundary of the construction site conform to relevant regulations in the Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011), and make the vibration conform to relevant regulations in the Standard of Vibration in Urban Area Environment (GB10070-88).	
	Solid waste	Domestic waste	Temporary waste containers shall be installed at the construction camp, and domestic waste shall be sorted for management, and regularly cleaned and transported in accordance with the regulations of the local sanitation department.	Regular removal
		Construction waste	Construction waste will be sorted out by special personnel and useful steel bars, wood, cables, etc. will be recycled. Unusable construction waste will be disposed of at designated places in Ezhou City.	The construction waste shall be subject to the provisions of Measures for Construction Waste Management of Ezhou City (revised in 2022).

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			of hazardous waste.	18597-2023); all entrusted disposal units have corresponding hazardous waste disposal qualifications
		Waste earthwork	Backfilling is carried out in the adjacent backfilling areas of Bajiao Village and Woertang.	/
	Ecology	Water and soil conservation	(1) Topsoil stripping shall be carried out in the construction area, and the exposed surface formed by excavation shall be covered with dust-proof nets. (2) Loosely stacked construction materials shall be covered with dust-proof nets to prevent rain erosion and reduce water and soil loss. (3) Enclosures and temporary drainage ditches shall be designed around the construction site and construction camp, and a grit chamber shall be designed at the outlet of the drainage ditch. (4) Vegetation shall be restored in time after construction. (5) Billboards and warning signs: Water and soil conservation billboards and warning signs shall be set up at the entrance and exit of the construction camp.	/
	Occupational Health and Safety		(1) A water supply system shall be established in the construction camp to ensure a clean and sufficient fresh water supply; a sufficient number of portable toilets shall be set up and kept clean and sanitary; waste bins shall be set up and cleaned regularly to prevent disease outbreaks. (2) Personal protective equipment that meets domestic requirements shall be provided, such as safety boots, helmets, gloves, protective clothing, goggles, and earplugs; (3) Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish an emergency hotline with Ezhou Central Hospital (Linkong Branch) in the project area, and provide each construction camp with a fully-equipped first aid station. (4) A professional safety management team shall be established, a construction safety	/

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			(6) A full-time safety and health department shall be established and full-time personnel shall be assigned to be responsible for the occupational health, work safety, and working and living environment inspections for laborers; (7) The equipment shall be regularly maintained and inspected to ensure its normal operation, and the maintenance and inspection records shall be kept and signed by relevant personnel. A system for the identification and rectification of potential safety hazards shall be formulated and improved. Any identification and rectification shall be truthfully documented, and a report shall be immediately made to the on-site work safety management personnel. The recipient of the report shall promptly address the issue. (8) Nationally regulated safety signs, danger warning signs and other signs and slogans shall be hung in the construction area to prevent residents from entering the building protection scope and dangerous areas.	
	Cultural relics protection		Corresponding procedures shall be established for handling material cultural resources discovered during the construction phase. Handling procedures will be initiated as soon as material cultural resources are discovered. (1) If any material cultural resources are found, the construction activities will be stopped immediately and corresponding protective measures will be taken; (2) In accordance with the laws of China, it is strictly prohibited to destroy, damage, deface, or conceal material cultural resources; (3) The Cultural Relics Protection Bureau will be informed and consulted in time; Construction activities can only continue after a thorough investigation and permission from the local cultural relics bureau.	
Social aspects	Land acquisition and demolition risk		Implement the resettlement plan in accordance with the approved brief resettlement action plan.	/
	Risks related to community traffic		(1) Increase traffic safety publicity, publicize and implement various transportation safety laws, regulations and provisions;	

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			traffic regulations and operating procedures, resist violations, and ensure safe driving; (4) Vehicle safety management: Implement the national and company vehicle management rules and regulations, and ensure vehicle annual inspections, technical filing, and use management. (5) Establish a community communication mechanism, strengthen the communication with surrounding communities and respond to residents' questions in time;	
	Impact of migrant workers on local residents		(1) Enhance community management by implementing a shift rotation for duty personnel, ensuring timely registration of non-residents entering the community to guarantee the safety of the community inhabitants; (2) Encourage township/sub-district and community/village communities to proactively engage in the promotion of local social and cultural customs through materials such as brochures and posters; (3) Intensify health education efforts, including the dissemination of information on the prevention of AIDS and other communicable diseases, which must be incorporated into contractual agreements;	/
	Worker Management Risk		(1) Employ project staff based on the principles of equal opportunity and fair treatment, without discrimination against specific groups such as women, disabled persons, migrant workers, and legal working-age youth; 2) Provide appropriate protection and assistance measures. For instance, equip the construction site with adequate and comprehensive labor protection supplies to address hazard factors as well as labor safety and hygiene needs; (3) Improve employee training plans; (4) Set up sufficient gender-specific temporary toilet facilities at the construction site according to the number of female workers; (5) Establish and clarify the complaint mechanism for handling labor complaints and reports, clarify the supervision mechanism for labor protection, and protect individual privacy according to the law when handling sexual harassment complaints.	/

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			from its subcontractors and suppliers of the SPV Project Products; abide by workforce requirements consistent with AIIB's ESF and require similar representations and compliance from their subcontractors and suppliers of identical products to the Project; and if necessary, the Bank will have the right to inspect and audit compliance with these requirements.	
Operation period				
Environmental aspects	Waste gas	Production waste gas	(1) Use fume hoods, gas collection hoods + multi-stage activated carbon adsorption devices + 20m high exhaust funnels in chemical laboratories; (2) Install UV light deodorizing facilities and an exhaust funnel not lower than 15m high in the animal room of the international cargo terminal; (3) Set up multi-stage activated carbon adsorption boxes + 15m high exhaust funnel in the fumigation room of the quarantine treatment center; (4) Discharge the waste gas from the harmless incinerator through a 15m high exhaust funnel after deacidification by water bath curtain, cooling dust removal + bag dust removal, and activated carbon treatment; (5) Utilize multi-stage activated carbon adsorption devices + 15m high exhaust funnels for bonded processing waste gases.	*Integrated Emission Standard of Air Pollutants (GB 16297-1996); methyl bromide waste gas from the fumigation warehouse follows the Integrated Emission Standard of Air Pollutants in Shanghai* (DB31/933-2015); animal house odor follows the *Emission Standards for Odor Pollutants* (GB14554-93); incinerator exhaust follows the special emission concentration limits for air pollutants in Table 3 of *Emission Standard of Air Pollutants for Coal-burning Oil-burning Gas-fired Boiler* (GB13271-2014).
		Vehicle tail gas	(1) Motor vehicles entering the project area must meet China's Stage VI pollutant emission standard for motor vehicles. (2) Green belts shall be set up around the project roads and parking lots.	*Limits and Measurement Methods for Emissions from Light-Duty Vehicles (China Stage VI)* (GB18352.6-2016) and *Limits and*

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
				Vehicles (China Stage VI) (GB17691-2018)
		Oil fume in canteen	Install cooking fume purifiers and set up cooking fume emission outlets	*Emission Standard of Cooking Fume (Trial)* (GB 18483-2001);
		Odor from waste treatment stations and waste transfer stations	Locate these stations away from densely populated activity areas, strengthen surrounding greenery, and clean regularly.	*Emission Standard for Odor Pollutants* (GB14554-93)
	Wastewater	Domestic sewage and general warehouse cleaning wastewater	Pre-treat in septic tanks before collection and sending through the project sewage pipelines and municipal sewage pipelines to the reclaimed water plant of the aviation metropolitan area for centralized treatment.	Integrated Wastewater Discharge Standard (GB 8978-1996)
		Catering wastewater	Construct oil-water separators, pre-treat before collection and sending through the project sewage pipelines and municipal sewage pipelines to the reclaimed water plant of the aviation metropolitan area for centralized treatment.	
		Production wastewater	Set up pre-treatment facilities for wastewater in animal rooms, customs inspection centers, bonded processing centers, and waste transfer stations. Collect pre-treated wastewater and send it through the project sewage pipelines and municipal sewage pipelines to the reclaimed water plant of the aviation metropolitan area for centralized treatment.	
	Noise	Ground	(1) Set clear speed limit and horn prohibition signs at the entrances and exits, and strengthen the management of incoming and outgoing vehicles to maintain smooth traffic	Emission Standard for Industrial Enterprises Noise at Boundary (GB

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			foundations to reduce noise impact from the source; (3) Adopt measures such as mufflers, sound insulation, and soundproof covers to reduce the adverse environmental impact of noise through transmission paths; (4) Place noise-generating equipment indoors to achieve noise reduction through building sound insulation; (5) Set up green landscape around roads and buildings to absorb noise through greenery.	
	Solid waste	Domestic waste	Set up sufficient waste containers for collection, and have project cleaning staff collect and transport them to the project's garbage transfer station daily. The Ezhou City sanitation department will regularly clean up.	No external discharge
		Kitchen waste	Entrust a qualified unit for kitchen waste collection, transportation, and disposal.	No external discharge
		General industrial solid waste	The sludge from wastewater treatment is regularly transported by the operating unit to a domestic waste landfill for disposal; Waste packaging materials and waste battery panels are recycled by the manufacturer; Incinerator slag is planned for comprehensive utilization through external sale.	
		Hazardous waste	Temporarily stored by the generating unit, and then handed over to a qualified hazardous waste disposal unit for safe disposal.	Temporary storage facilities must meet the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597—2023)
	Environmental risk	Environmental risks such as **leakage, fire and explosion** of hazardous substances	(1) Design 1) Hazardous substances shall be stored in different areas by classification; 2) Dangerous goods and chemicals are transported by special vehicles into and out of a separately built dangerous goods warehouse or designated laboratory. Dangerous goods may be stored in storage rooms for dangerous goods of the whole ULD (referring to the unit load device used to carry cargo by air), kept on trailers. Chemical agents should be stored in designated reagent cabinets within the laboratory. 3) The fumigation chamber, special transportation depot, customs inspection center	Minimise the risk of environmental emergencies.

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
		factors and secondary environmental impacts;	protection, moisture prevention, ventilation, lightning protection, fire prevention, and anti-static electricity, and be provided with obvious warning signs. 4) Smoke alarms and fire warning facilities shall be provided to realize accident early warning and rapid response, and shall be managed by special personnel. 5) The quality, quantity, packaging, and leakage of hazardous chemicals and chemical materials shall be strictly inspected during warehousing; The warehoused hazardous chemicals shall be regularly inspected during the storage period. If any quality change, package damage, or leakage is found, it shall be handled in time; Dangerous goods and chemical agents shall be loaded, unloaded, and transported as per relevant regulations for gentle loading and unloading. It is strictly prohibited to fall, hit, strike, drag, dump and roll them; 6) A management record for dangerous goods and chemicals shall be established. Dangerous goods and chemicals shall be inspected, accepted, and registered before warehousing and delivery in terms of quantity, packaging, danger signs, etc., and can only be warehoused and delivered after verification; 7) Special personnel shall be assigned to regularly inspect the fumigation chamber, special transportation depot, customs inspection center laboratory, and dangerous goods warehouse, and make inspection records; 8) The management personnel and employees for dangerous goods and chemicals shall be regularly trained to improve their management, operation level, and prevention awareness. (2) Management 1) The project owner shall establish a dangerous goods management system, appoint dedicated personnel for dangerous goods management, and provide regular training for management staff; 2) Establish a dangerous goods risk investigation system, regularly inspect dangerous goods storage areas, maintain records, and promptly report any identified risks to	

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			environmental risks, the Emergency Plan for Environmental Emergencies shall be prepared and emergency drills shall be conducted regularly. (3) Emergency response 1) Emergency supplies meeting the requirements shall be provided for the storage areas of Class 9 dangerous goods transported by air (chemical agents shall be stored according to their properties with reference to corresponding dangerous goods): 2) With a safety protection distance of 50m in the vicinity, the Dangerous Goods Warehouse will be a separate courtyard surrounded by protective nets. Open flame and smoking are strictly prohibited in the warehouse and its nearby areas. The dangerous goods warehouse shall be equipped with protective clothing, gas masks, and other necessary items to ensure timely and effective emergency measures and personal protection in case of dangerous goods leakage or accidents, minimizing the risk of sudden environmental incidents. Protective masks mainly include filtered gas masks and isolated oxygen or air masks. The dangerous goods warehouse shall be equipped with personal protective articles. Protective articles frequently used by individuals mainly include work clothes, work caps, boots and shoes, rubber gloves, and masks; 4) An emergency pool with a volume of not less than 1550m^2 shall be set up, and the accident wastewater generated by water sprinkler extinguishers shall flow into the accident pool through the accident wastewater collection well in the warehouse.	
	Occupational health and safety		(1) Prepare the environmental and social management plans for the operation phase, and regularly provide workers with relevant training. (2) Provide workers with free personal protective equipment, including goggles, gloves, and safety shoes; provide noise insulation equipment for workers in high-noise environments. (3) Develop an Emergency Preparedness and Response Plan for accidents and emergencies, specifying the reporting procedures. This includes environmental and public health emergencies related to hazardous substance spills and similar incidents. Establish	/

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			personnel in positions in contact with chemicals and hazardous wastes in special occupational health and safety, appropriate to the content of their job responsibilities. (5) Restrict the access of the public to the project operation area.	
	Waste gas from Wuchu Avenue	Vehicle tail gas	(1) Strengthen traffic management, enforce strict vehicle management systems, and strictly implement national motor vehicle emission standards. Prohibit vehicles with excessive tail gas emissions and vehicles carrying bulk materials without covering measures from accessing the road. (2) Improve road maintenance and cleaning to keep road conditions good and reduce dust and vehicle tail gas pollution. (3) Complete the construction of green belts as soon as the main works are finished, combining points, lines, and surfaces with a reasonable mix of trees, shrubs, flowers, and grasses. Use plants' adsorption capabilities to reduce the impact of vehicle exhaust on the plots on both sides of the project. Strengthen the maintenance of the green belts along the line, reduce dead branches and diseased plants, and maintain the pollution reduction function of the greenery.	*Limits and Measurement Methods for Emissions from Light-Duty Vehicles (China Stage VI)* (GB18352.6-2016) and *Limits and Measurement Methods for Emissions from Heavy-Duty Diesel Vehicles* (China Stage VI) (GB17691-2018)
	Wastewater from Wuchu Avenue	Rainwater runoff on pavement	(1) Set up rainwater and sewage pipelines for the road surface and roadbed according to the road environmental protection design specifications. Road surface drainage shall avoid direct connection with water bodies. (2) To protect the water quality of the Huama Lake water system along the route, prohibit vehicles with oil leaks, trucks without protective tarps, or overloaded vehicles from accessing the road to prevent oil leakage or cargo spillage from causing water pollution and safety hazards. Vehicles transporting coal, lime, cement, and other easily dusting bulk materials must be covered with tarpaulins to prevent runoff sewage formed by material scattering from affecting the water quality. (3) Regularly inspect and clean the road rainwater drainage system to ensure smooth flow and maintain good condition.	/
	Noise		(2) Select road materials like sound-absorbing pavement to reduce the impact of traffic	Implement Class 4a standards

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			from accessing the road, strictly limiting driving speeds throughout the road, especially preventing speeding at night strengthen the management of motor vehicle whistling (whistling is prohibited in the whole line). Set up speed limit and no-honking signs on both sides of the road to effectively control traffic noise pollution. (4) Strengthen road maintenance and promptly repair damaged road surfaces to maintain smoothness and avoid increased traffic noise due to poor road conditions. (5) Implement a regular monitoring system for predicted noise-exceeding points along the route. When noise exceeds standards, take effective noise protection measures based on actual monitoring results and environmental characteristics to ensure the acoustic environment meets the requirements.	*Noise* (GB3096-2008); implement Class 3 standards in other areas according to the *Environmental Quality Standard for Noise* (GB3096-2008).
	Solid wastes from Wuchu Avenue	Road sweeping waste	Strengthen road sanitation management by sweeping road surfaces daily, promptly cleaning waste cans and containers on both sides of the road, and having all collected garbage uniformly transported to the city garbage disposal site by the local sanitation department.	No external discharge
	Ecology of Wuchu Avenue	Ecology	To further reduce potential impacts on the aquatic ecosystem during operation, implement the following mitigation measures: ① Develop a corresponding emergency plan for potential leakage accidents during the transportation of toxic and hazardous substances. In the event of an accident, promptly handle the situation according to the plan to prevent toxic and hazardous substances from entering water bodies and causing pollution. ② Keep the pavement clean, organize maintenance personnel to clean up dust and other pollutants accumulated on both sides of the road in time, and mitigate pollution caused by pollutants entering water bodies due to runoff scouring. ③ Wastewater containing SS generated from road maintenance and flushing shall be recycled or discharged after sand setting in a water collecting tank.	/
	Environ	Environmen	(1) Vehicles and personnel engaged in the transport of dangerous goods shall refer to the	

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
	Wuchu Avenue	water	way, parking to accident handling and other links, it is necessary to strengthen management and resolutely prohibit and eliminate vehicles transporting dangerous goods with incomplete "three certificates" from driving on the road, so as to prevent the occurrence of dangerous goods transport accidents and control the expansion of emergencies. (2) Dangerous goods on roads are inspected. Check whether the personnel directly engaged in road transport of dangerous cargo hold the Operation Certificate for Road Transport of Dangerous Goods approved by the competent department; vehicles and equipment shall comply with the provisions on hanging specified signs and marker lamps; vehicles, containers, loading and unloading machinery and tools must meet the prescribed conditions. Check and verify the consignment note filled out by the consignor and relevant information provided. (3) Vehicles carrying dangerous goods are forbidden on foggy and snowy days, while other vehicles shall have a speed limit. (4) Vehicles transporting dangerous goods running on the road section shall be monitored. Warning signs such as speed limit and no overtaking shall be set up at conspicuous positions on both sides of the route, and electronic warning signs shall be set up to remind passing drivers and passengers to keep a certain distance and speed; Vehicles carrying dangerous goods shall pass at a limited speed, so as to prevent the accidental pollution of liquid hazardous chemicals or petroleum from affecting the water quality of regional waters. (5) In case of burning, explosion, pollution, poisoning, and other accidents during transport, the driver must take corresponding emergency measures according to the nature of dangerous cargo carried and the specified requirements to prevent the situation from expanding, report to relevant local departments in time, and jointly take measures with relevant departments to eliminate hazards. (6) Emergency plans shall be prepared, emergency materials shall be allocated, and emergency drills shall be strengthened.	

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
			to maintain traffic order better.	
	Impact of migrant workers on local residents		a. Ensure that all incoming population registers promptly to maintain community safety. b. Encourage township/sub-district and community/village communities to proactively engage in the promotion of local social and cultural customs through materials such as brochures and posters;	/
	Worker Management Risk		(1) Employ project staff based on the principles of equal opportunity and fair treatment, without discrimination against specific groups such as women, disabled persons, migrant workers, and legal working-age youth; (2) Provide appropriate protection and assistance measures for women, the disabled, migrant workers, minors who have reached the legal age for employment, and other specific groups of workers, to overcome the shortcomings of project staff; (3) Establish and clarify the GRM for handling labor complaints and reports, clarify the supervision mechanism for labor protection, and protect individual privacy according to the law when handling sexual harassment complaints. (4) Refer to the Gender Action Plan for measures against gender-based violence. (5) The Supplier shall provide a statement in its procurement documents that there are no labour working conditions (LWC) issues in its supply chain; obtain similar representations from its subcontractors and suppliers of the SPV Project Products; abide by workforce requirements consistent with the Bank's ESF and require similar representations and compliance from their subcontractors and suppliers of identical products to the Project; and if necessary, the Bank will have the right to inspect and audit compliance with these requirements.	/
	Protection of women's rights	Increase employment opportunitie	(1) During the project construction and operation phases, prioritize providing non-technical positions to women in the communities/villages involved in the project area. (2) During the operation phase of the logistics park, provide certain employment	(1) Prioritize employment opportunities for women in the project (the baseline proportion of female workers during the

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
				(2) Provide employment opportunities for female workers with the new jobs created in the logistics park (baseline: 0%; target: 20%).
		Enhance women's development ability	(1) Improve women's skills, knowledge, and opportunities for employment and entrepreneurship by organizing employment knowledge lectures, skill training courses, and employment and entrepreneurship seminars. (2) Provide suitable skill training content and appropriate training times based on women's physiological and psychological qualities, education levels, personal needs, etc., to ensure women have equal opportunities as men to improve their skills. (3) Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd., through relevant training.	(1) Increase the proportion of women participating in various training programs, including the promotion of women's rights and interests, and employment skills training (baseline: 10%; target: 20%). (2) Increase the proportion of women participating in project information disclosure and management training (baseline: 10%; target: 20%). (3) Enhance the awareness of low-carbon or green logistics among female employees of Ezhou Linkong Group Co., Ltd., through relevant training. (baseline: 10%, target: 20%)
		Expand women's participation in	(1) Increase the proportion of women participating in decision-making in relevant community affairs; (2) Increase the proportion of women signing or "jointly signing by both spouses" in land	(1) Proportion of women participating in project mobilization, targeted information disclosure, policy promotion, and

Environmental/ Social Aspects	Category	Impact	Mitigation measures	Implementation performance
				land acquisition or demolition compensation agreements (baseline: 0%, target: 100%).
		Reducing gender-based violence risks	(1) Strengthen the protection of female worker rights and interests, provide regular psychological health counseling and female worker rights protection training for female workers; (2) Enhance site supervision to prevent harmful behaviors such as gender-based violence, sexual exploitation and abuse, and sexual harassment; (3) Establish a clear grievance and complaint mechanism, set up a site grievance committee that includes at least two female members, and ensure the safety of committee members to avoid bias and fear of retaliation.	(1) Ensure 100% of female workers receive labor rights protection training. (2) Ensure equal pay for equal work for 100% of female and male workers, with zero incidents of gender-based violence. (3) Establish a grievance and complaint mechanism with at least two female members on the grievance committee.

Appendix G: Environmental and Social Management Due Diligence Report for the Hubei Global Air Cargo Logistics Hub Project

Loan from Asian Infrastructure Investment Bank

Hubei Global Air Cargo Logistics Hub Project Environmental and Social Management Due Diligence Report

Presented to

Asian Infrastructure Investment Bank

Ezhou Linkong Group Co., Ltd.

June 2024

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1 Due Diligence on Environmental Management

1.1 Investigation Object

1.1.1 Investigation Object of Phase I Project (Associated Facility)

Hubei Global Air Cargo Logistics Hub Project is located in the Ezhou Airport Comprehensive Bonded Zone, covering an area of about 1.349 km^2. Among the associated facilities involved in this due diligence, the Phase I Project is located on the south side of the AIIB project, covering an area of 0.727 km^2. The main construction contents include Type-B Bonded Logistics Center, International Cargo Terminal, Quarantine Treatment Center, Customs Inspection Center, 1# and 3# Customs Kiosks, Garbage Disposal Station, Business Logistics Center, Bonded Processing Plant, Bonded Logistics Warehouse and Dangerous Goods Warehouse. The associated facility, Phase I Project, has commenced in September 2023. At present, the Type-B Bonded Logistics Center in Phase I Project has passed on-site acceptance on April 9, 2024, and the remaining works are expected to be completed by November 30, 2024.

The object of this due diligence is the commenced part of the Phase I Project (associated facility), which was conducted in September 2023 and May 2024 respectively. See the following table for details of the Project:

1.1.2 Investigation Object of Wuchu Avenue (Associated Facility)

According to the identification results of the associated facilities of the Hubei Global Air Cargo Logistics Hub Project, Wuchu Avenue is regarded as the associated facility of the Project, and due diligence on environmental management during the construction period shall be carried out according to relevant requirements. Wuchu Avenue (associated facility) is located within the Ezhou Linkong Economic Zone. It connects to Huama Lake Bridge in the west and extends to S203 (under construction) in the east. The road has a red line width of 55 m and features six lanes in both directions, with a total length of 1,940 m and a design speed of 60 km/h. The primary construction contents include road works, water supply and drainage, cable tunnels, traffic, lighting,

landscaping, and ancillary works. The construction of Wuchu Avenue (associated facility) was commenced in June 2023, and the project was nearly completed by the due diligence period.

The Construction Contractor of the Project is CCCC Second Harbor Engineering Co., Ltd. and the Supervisor is Wuhan Feihong Engineering Management Consulting Co., Ltd. There is no construction camp on the project site, and workers live in nearby residential houses. The basic information of the project is shown in the following table:

Table 1.1-1 List of Project Construction Contents and Progress

Project Name	Construction Content	Construction Progress	Implementation of Environmental and Social Impact Assessment	Remarks
Wuchu Avenue (associated facility)	Water supply and drainage, cable tunnel, traffic, lighting, landscaping, and ancillary works	Construction was commenced in June 2023 and completed at the end of June 2024	The environmental and social management plan for the construction period has been included in the construction contract, and due diligence has been carried out on the commenced part	Belongs to associated facilities of AIIB project

1.2 Investigation Purpose

To ensure that the environmental and social management measures for project construction can meet AIIB's environmental and social policies, due diligence is carried out on the implementation of environmental and social management measures during the construction period of the Project.

1.3 Investigation Method

The requirements of existing documents related to environmental and social management during the construction period of the Project mainly include: Environmental and Social Policy (ESP) requirements in Environmental and Social Management Plan (ESMP) and relevant agreements on mitigation measures for environmental and social impacts during the construction period in Construction Contract.

This due diligence will be carried out on the construction site and construction camp by means of site survey and data collection, so as to clarify the implementation of environmental management requirements, and ensure the implementation of environmental management at construction site and construction camp fully meets the

Environmental and Social Policy (ESP) requirements in the Environmental and Social Management Plan (ESMP) and relevant requirements in the Construction Contract. If necessary, rectification measures and suggestions will be put forward.

1.4Due Diligence Results on Environmental Management of Phase I Project (Associated Facility)

1.4.1 Environmental Management Organization and Staffing

Associated facility—Environmental management organization and staffing for Phase I Project are as follows:

Table 1.4-1 Environmental Management Organization and Staffing

Management personnel	Contact Number	Position	Duty
Xiao Yuan	15972557970	Environmental Management Team Leader	Mainly responsible for the formulation of environmental management plans and regulations, organization of environment and safety training, etc.
Xie Mingshi	15811585616	Environmental and Safety Officer	Mainly responsible for the implementation of environmental management plan, supervision and coordination of site environmental compliance, etc.

1.4.2 Construction Camp Management

1.4.2.1 Management Requirements during Construction Period

(1) Living conditions of workers: The living camp must be equipped with temporary buildings and facilities such as guard rooms, dormitories, canteens, toilets, washing facilities, shower rooms, laundry rooms, boiling water rooms or drinking water insulation barrels, closed dustbins, etc. The living camp must be reasonably hardened and afforested, with effective drainage measures provided. Rainwater and sewage must be drained smoothly without ponding in the site area. The canteen in the living camp shall be a single-storey building and shall maintain a safe distance from the dormitories. Drinking water must meet the national hygiene standards, and temporary boiled water supply points must be provided.

(2) Site selection: The construction camp site shall be far from nature reserves, scenic spots, basic protected farmland, and other environmentally sensitive areas. The construction camp will be built mainly for living functions, and the production

equipment and materials will be stored at local construction sites.

(3) Treatment of waste gas, wastewater and solid waste: The camp is equipped with a canteen, and the cooking fume in the canteen shall meet the requirements of Emission Standard of Cooking Fume (Trial) (GB 18483-2001) after being treated by high-efficiency electrostatic cooking fume purifier. Each camp shall be equipped with oil-water separators and septic tanks. Domestic wastewater undergoes treatment through measures such as oil separation and septic tank treatment to meet the Class III standard of the Integrated Wastewater Discharge Standard and then discharged into the surrounding municipal pipeline network. Several waste containers are placed at each construction camp this time, and the domestic waste will be sent to the landfill in Ezhou City for sanitary landfill after being uniformly collected by the sanitation department.

(4) Materials storage: The canteen in the construction camp involves the use of liquefied petroleum gas (LPG), and the standby generator in the construction site involves the use of diesel. Therefore, the construction camp shall be equipped with storage rooms for LPG tanks and diesel drums. The storage room shall be separated from the workers' dormitories, kept cool and ventilated, and provided with signs of no smoking and open flame.

1.4.2.2 Actual Situation on Construction Site

During Due Diligence in September 2023:

(1) The canteen is equipped with cooking fume purifiers, sinks are equipped with oil-water separators, and the liquefied gas storage room is set up, with the storage quantity strictly controlled. The dormitory is a two-floor house with indoor air conditioners and bunk double beds. Each bed can only accommodate one person at most. Domestic waste collection facilities are provided in the camp. The canteen is a single-storey building, with good sanitary conditions in the kitchen, rich dishes and reasonable matching. The camp is equipped with special hot water supply points, toilets and bathrooms for men and women, independent compartments, public wash areas and washing machines.

(2) The construction camp site does not involve nature reserves, scenic spots, basic protected farmland, and other environmentally sensitive areas. The construction camp will be built mainly for living functions, and the production equipment and materials will be stored at local construction sites.

(3) During the investigation period, the camp was equipped with cooking fume

purification devices, domestic sewage treatment facilities and waste containers. The disposal of waste gas, wastewater and solid waste met relevant requirements

(4) During the investigation period, there was no cooking fume purification and separate liquefied petroleum gas storage room in the camp, but it has been rectified subsequently.

During Due Diligence in May 2024:

By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled. According to relevant records, the management of construction camp during the construction period was carried out as required, and there were no environmental pollution, worker complaints and other problems.

1.4.3 Waste Gas Management

1.4.3.1 Management Requirements during Construction Period

(1) Construction sites shall be enclosed and fenced to the construction boundary according to the standard; Technical Standards for Setting Construction Boundary of Ezhou Construction Project shall be implemented, and access control management at the entrance and exit of the construction site shall be strengthened. For the height of the enclosure, the site enclosure constructed along the landscape avenue shall not be lower than 5m. The site enclosure for main road sections in urban areas shall not be lower than 2.5m and that for general road sections shall not be lower than 1.8m;

(2) There is no obvious road damage and no sewage or mud polluting the surrounding environment in the construction site and around the site within 50 meters of it.

(3) Cement, lime and other construction materials prone to generating dust on the construction site shall be stored in warehouses and containment areas. Surplus soil and construction waste shall be piled up centrally, and open burning of any kind of waste on-site is strictly prohibited.

(4) The uncovered ground/earthwork at the construction site shall be covered with fine-mesh nets or promptly removed.

(5) Targeted special plans for construction dust prevention and control shall be formulated.

(6) Spraying and dust suppression facilities shall be installed as required, and

water shall be sprayed to suppress dust according to the site conditions.

(7) Vehicle washing and cleaning facilities that meet the requirements shall be set up at the construction entrance/exit according to regulations, and three-level washing facilities must be set up at the excavation site: Flushing tank (flushing platform) or automatic flushing equipment and sedimentation basin (drainage ditch), wheel washer, and high-pressure water gun; Vehicles leaving the site shall be washed clean before driving away from the construction site, and vehicles are not allowed to drive with mud on the road; Full-time cleaners shall be assigned at the entrance and exit of the road in the excavation stage, with no less than 1-2 persons for daily cleaning. They are responsible for washing and cleaning vehicles entering and leaving the site. Sedimentation and drainage facilities shall be set up to prevent sewage overflow.

(8) For construction machinery and vehicles, select vehicles with environmental protection qualifications and vehicle inspection qualification marks, with emissions up to standard. Use low-sulfur gasoline or low-sulfur diesel oil and strengthen routine maintenance to ensure their proper use and avoid excessive tail gas emissions.

1.4.3.2 Actual Situation on Construction Site

During Due Diligence in September 2023:

(1) The construction site is surrounded by 5m high fences.

(2) There is no obvious road damage and no sewage or mud polluting the surrounding environment in the construction site and around the site within 50 meters.

(3) The construction process does not involve the use of materials such as cement and lime. Temporary excavation is temporarily stored at the construction site and stacked in a centralized manner.

(4) Covering measures have been taken for the exposed ground in the non-construction operation area.

(5) A special plan for dust prevention and control has been formulated.

(6) The construction site is equipped with water spraying and dust suppression facilities, with water sprayed regularly.

(7) There is a vehicle washing pool at the exit of the construction site. Construction vehicles will leave the construction site after being washed; full-time personnel are assigned to wash vehicles; a three-level sedimentation tank has been built.

(8) Regular inspections shall be carried out and register books shall be maintained.

During Due Diligence in May 2024:

(1) By the time of due diligence, #1 and #3 customs kiosks, quarantine treatment center, customs inspection center, No.3 customs kiosk, bonded logistics center and international cargo terminal have been completed, some enclosures have been removed, and there are still 5m high enclosures in some areas.

(2) There is no obvious road damage and no sewage or mud polluting the surrounding environment in the construction site and around the site within 50 meters.

(3) By the time of due diligence, all buildings in Phase I have been completed except for the International Express Center, the Business Logistics Center, the Dangerous Goods Warehouse, Bonded Processing Plant, and the Bonded Logistics Warehouse, and the remaining soil, construction waste and various wastes have been cleaned up.

(4) By the time of this due diligence, all projects under construction have been completed without bare ground.

(5) A special plan for dust prevention and control has been formulated.

(6) By the time of this due diligence, all projects under construction have been completed, water spraying and dust suppression measures have been removed, and water spraying and dust suppression facilities have been set up as required during the construction period.

(7) By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled.

(8) By the time of this due diligence, the construction period has ended. During the construction period, construction machinery and vehicles were selected as required, and daily maintenance and tail gas emission control were strengthened.

The site conditions are shown in the following figure:

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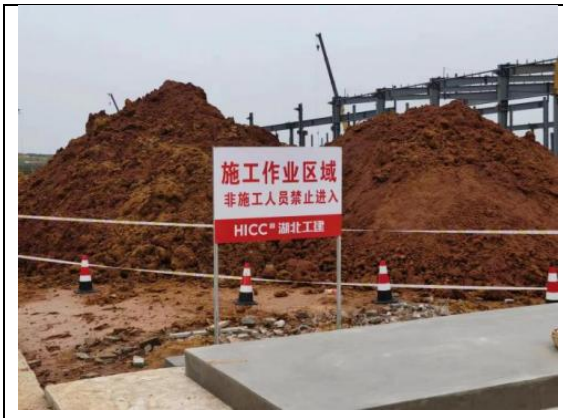
<td> 
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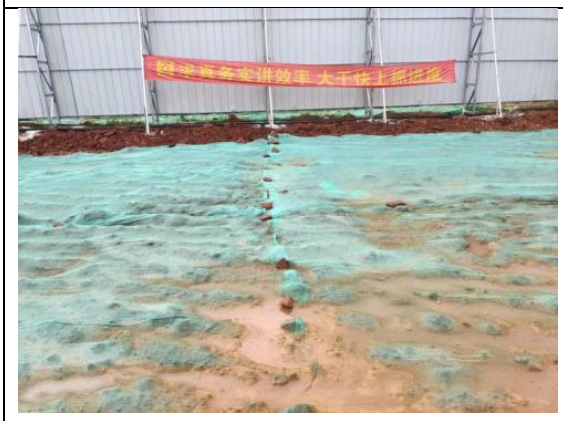
<td>  </td>
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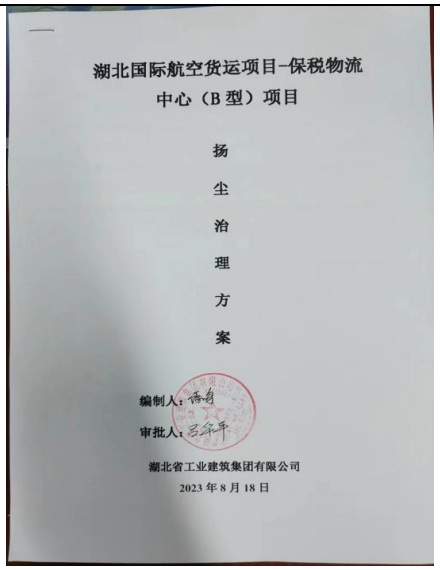
<td> 
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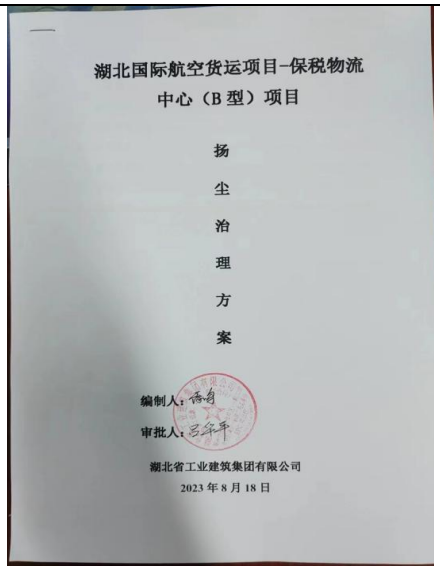
<td> 
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	Dismantled
Site Photos in September 2023	Site Photos in May 2024

Figure 1.4-1 Photos of Waste Gas Management Survey Site in Two Due Diligence Investigations

1.4.4 Wastewater Management

1.4.4.1 Management Requirements during Construction Period

(1) Temporary septic tanks, oil-water separators and other domestic sewage treatment facilities shall be set up at the construction personnel's camp.

(2) Intercepting ditches shall be set up around the construction site to intercept rainwater runoff, and oil-water separators and sedimentation tanks shall be set up in the construction site to treat the collected construction wastewater and rainwater with oil separation and sedimentation, which shall be used for sprinkling and dust prevention at the construction site as well as for washing of vehicles and machinery, and shall not be discharged outwardly;

(3) Large-scale earthwork excavation shall not be carried out during the rainy season. Necessary soil and water conservation measures shall be taken for the temporary storage site for construction materials and waste (slag), and the drainage system of the construction site shall be kept unobstructed.

(4) Oil and chemical solvents stored at the construction site shall be provided with a special warehouse, and proper anti-leakage treatment shall be carried out on the ground. Abandoned oil and chemical solvents shall be disposed of in a centralized way and shall not be dumped at will.

1.4.4.2 Actual Situation on Construction Site

During Due Diligence in September 2023:

(1) Domestic sewage treatment facilities such as temporary septic tanks and

oil-water separators have been set up.

(2) Drainage systems such as intercepting ditches around the construction site are under construction.

(3) The main earth-rock excavation works have been completed, the temporary soil storage yard in the site is covered, and the construction site is fenced as a whole. However, the drainage system is still under construction.

(4) At present, no oil, chemical solvents or other dangerous goods are used or stored on the construction site or in the construction camp.

During Due Diligence in May 2024:

(1) By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled.

(2) By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled. No complaint has been received during the construction period.

(3) By the time of this due diligence, all projects under construction have been completed. The rainstorm season was avoided during the construction period, and the water and soil conservation is in good condition.

(4) By the time of this due diligence, all projects under construction have been completed, and no corresponding complaints have been received during the construction period.

The site conditions are shown in the following figure:

	Dismantled

	Construction period has ended
Site Photos in September 2023	Site Photos in May 2024

Figure 1.4-2 Photos of Wastewater Management Site Conditions in Two Due Diligence Investigations

1.4.5 Noise Management

1.4.5.1 Management Requirements during Construction Period

(1) Reasonably schedule the construction time and work duration, and prohibit nighttime construction (22:00 to 6:00); if nighttime construction is necessary due to construction processes, a Nighttime Construction Permit must be obtained as required, and nearby residents must be notified;

(2) When developing a construction plan, select low-noise equipment and plan the layout of machinery and equipment reasonably. Try to avoid the centralized use of a large number of power mechanical equipment at the same time or in the same location; for machines used intermittently, close the throttle or minimize it during the working interval.

(3) Strengthen regular equipment maintenance and adhere to strict operating procedures to avoid abnormal equipment noise;

(4) Provide noise personal protective equipment for workers engaged in high-noise operations;

(5) Reasonably formulate the transportation route and time. During transportation, try to avoid passing through residential areas, densely populated sections with sensitive points, and peak hours. When transport vehicles pass through noise-sensitive areas such as residential areas, schools and hospitals, they shall travel at a low speed and avoid using horns to ensure the normal lives of surrounding residents.

1.4.5.2 Actual Situation on Construction Site

(1) There are no residential areas within 500m around the Project, which does not involve the impact of noise on the lives of the surrounding residents.

(2) There is no site where a large number of construction machines are centrally arranged and operated at the same time on the construction site. During the lunch break from 12: 00 to 14: 00, the operation of construction machines in the airport construction camp is suspended to ensure that workers in the construction camp can rest.

(3) Construction equipment is regularly inspected on site by the equipment supplier.

(4) During the investigation of the Project, no high-noise construction process is involved.

(5) The muck transportation route of the Project has been reported to the relevant administrative departments in the district. There is no school or hospital along the route, and the residential areas along the route are far away from the red line of the road.

1.4.6 Solid Waste Management

1.4.6.1 Management Requirements during Construction Period

(1) Dispose of construction waste in strict accordance with the relevant regulations on construction waste management in Ezhou City.

(2) Keep the construction site clean and tidy. The waste (domestic waste and construction waste) shall be collected separately and stored centrally. For waste that cannot be reused, ensure it is properly handled by the sanitation department to ensure harmless treatment.

(3) It is strictly prohibited to pile up construction waste, muck, domestic waste and other wastes generated during construction on the slope protection along the surrounding port canal or lake water body or dump them into the water body.

(4) The management of hazardous chemicals and hazardous wastes during construction will comply with laws and regulations.

1.4.6.2 Actual Situation on Construction Site

During Due Diligence in September 2023:

(1) The remaining soil of the Project is topsoil, which is a resource with high utilization value. It is integrated and balanced in other construction sites within the

Linkong Economic Zone, and all of them are backfilled. This is in line with the requirements of the Management Measures for Construction Waste in Ezhou City.

(2) The construction camp is equipped with domestic waste collection facilities, which are regularly removed by the district sanitation department every day.

(3) The phenomenon does not exist.

(4) The use of hazardous chemicals is not involved in the construction of the Project. The hazardous wastes are mainly mineral oils such as lubricating oil and engine oil used for machine maintenance, and there is only minor oil leakage, which has little impact on the environment. The management of hazardous wastes during construction is legal and compliant.

During Due Diligence in May 2024:

(1) By the time of this due diligence, all projects under construction have been completed, and the construction waste during the construction period has been disposed of in strict accordance with the relevant regulations on the management of construction waste in Ezhou City.

(2) By the time of this due diligence, all projects under construction have been completed. The site is free of waste and the road surface is clean.

(3) During the construction period, no construction waste, muck, domestic waste and other wastes generated during construction are piled up on the slope protection along the surrounding port canal or lake water body or dumped into the water body.

(4) According to the investigation, during the construction period, there are no environmental risk events caused by hazardous wastes, and the management of hazardous wastes is legal and compliant.

1.4.7 Management Measures for Water and Soil Conservation

1.4.7.1 Management Requirements during Construction Period

(1) Strictly control the construction site boundary and minimize the disturbance to surface vegetation.

(2) Apply temporary covering measures for the exposed surface disturbed by construction to reduce water and soil loss.

(3) Avoid earth-rock excavation in the rainy season to prevent erosion or direct scouring of newly filled and excavated exposed surfaces by rainwater.

(4) Construct drainage ditch systems in the main project area, ensure the stability

of temporary stacking yards' slopes, use filled woven bags for stacking and blocking, and cover with shelter during rainy days.

1.4.7.2 Actual Situation on Construction Site

During Due Diligence in September 2023:

(1) The boundary of the construction site does not exceed the red line of the Project, and enclosure measures conforming to the regulations of Ezhou City are set up around the boundary.

(2) The exposed surface of the non-operation area is covered.

(3) Temporary covering measures have been taken for easily eroded surfaces on rainy days.

(4) Covering measures have been taken for the exposed surface and temporary soil storage yard on the site, but the drainage ditch system has not been established.

During Due Diligence in May 2024:

(1) During the construction period, the site boundary does not exceed the red line of the Project.

(2) By the time of this due diligence, all projects under construction have been completed, and no water and soil loss has occurred during the construction period.

(3) By the time of this due diligence, all projects under construction have been completed and temporary covering measures have been removed.

(4) By the time of this due diligence, all projects under construction have been completed, and no relevant complaints or reports have been received during the construction period.

1.4.8 Ecological Management

1.4.8.1 Management Requirements during Construction Period

(1) Train workers on the requirements for wildlife protection measures and prohibit fishing within the turnaround waters;

(2) Restrict the construction area and prohibit damage to vegetation beyond the construction area;

(3) Prohibit the use of herbicides and pesticides that have been expressly banned during construction;

1.4.8.2 Actual Situation on Construction Site

(1) Pre-job training is provided to construction workers and the phenomenon did not occur.

(2) The construction scope is strictly limited to the red line of the Project.

(3) This phenomenon does not occur.

1.4.9 Health and Safety

1.4.9.1 Management Requirements during Construction Period

(1) The Contractor shall prepare a construction safety measure plan according to the actual safety construction requirements of the Project and submit it to the Engineer and Employer for approval within 7 days before commencement; The Contractor shall formulate construction safety operation procedures in strict accordance with national safety standards, strictly implement the provisions of relevant national laws and regulations, provide necessary work safety and labor protection facilities, strengthen safety education for its personnel, and distribute safety protective equipment; The Contractor shall also pay full attention to and ensure the safety of all personnel working on site, and take measures to keep the site and the implementation of the contract project in an orderly manner so as not to endanger the safety of relevant personnel. The Contractor shall allocate full-time work safety management personnel in accordance with the provisions of the Work Safety Law of the People's Republic of China and the Administrative Regulations on the Work Safety of Construction Projects. Full-time work safety management personnel shall be responsible for supervising and inspecting the work safety site and making inspection records. If any hidden danger of work safety accident is found, they shall report to the project leader and the work safety leader in time. In case of violations of command, operation and labor discipline, they shall stop them immediately.

(2) The Contractor shall carry out safety education and training for its employees to ensure that they have the necessary knowledge of work safety, are familiar with relevant safety production rules and regulations and safety operation procedures, and master the safety operation skills of their posts. Employees who have not passed the qualification examination of work safety education and training shall not be allowed to work.

(3) The Contractor shall provide necessary safety protection equipment and safety

protection clothing to the operators, inform them in writing the operational procedures of dangerous posts, and ensure that the operators are familiar with and have mastered the relevant contents and the hazards of illegal operations. Operators have the right to criticize, report, and accuse safety problems in the operating conditions, procedures, and methods at the construction site, and have the right to refuse unauthorized commands and forced risky operations. In the event of an emergency that could endanger personal safety during construction, the operators shall have the right to stop the operation immediately or evacuate from the dangerous area after taking necessary emergency measures.

(4) The Contractor shall set up eye-catching safety warnings and safety protection facilities at the entrances and exits of the construction site or all intersections along the route, mixing plants, construction machinery, temporary electric facilities, blasting materials and storage of harmful and hazardous gases and liquids, as well as in hazardous areas such as hole and foundation pit edges, scaffolding, wharf edges, and bridge edges. The Contractor shall take corresponding safety construction measures at the construction site according to different construction stages and changes in the surrounding environment, seasons and climate.

(5) The Contractor shall establish a fire safety responsibility system at the construction site, determine the person responsible for fire safety; formulate various fire control management systems and operational procedures for the use of fire, electricity, and explosive and flammable materials; set up firefighting accesses, and provide with corresponding fire prevention facilities and fire extinguishing equipment.

(6) Special types of work (electricians, elevator workers, lifting workers, electric welders, vehicle and vessel drivers, blasters, divers and gas operators) shall receive professional training and hold certificates issued by relevant departments. The Contractor's vertical transportation machinery operators, installation and dismantling workers, lifting signalmen, electricians and welders, and other special operation personnel specified by the state shall pass special safety operation training and obtain qualification certificates for special operations before taking up their posts.

(7) Full-time work safety management personnel shall be responsible for supervising and inspecting the work safety site and making inspection records. If hidden dangers of work safety accidents are found, they shall report to the project leader and the person in charge of work safety in a timely manner; In case of violations of command, operation and labor discipline, they shall stop them immediately.

(8) The Contractor shall establish workers' health records and conduct regular physical examinations for workers; Carry out health education for construction personnel, encourage individuals to take protective measures and avoid transmitting diseases to others by using condoms; In addition, encourage the use of mosquito repellents, clothing, mosquito nets and other blocking methods to avoid mosquito bites from transmitting diseases; Comply with national and local regulations and guidelines for COVID-19 prevention and control, as well as successful international health and safety practices.

(9) To prevent the Project from being damaged, or for the safety and convenience of the people near the site and passing by, the Contractor shall provide protective measures such as lighting, guards, and fences.

1.4.9.2 Actual Situation on Construction Site

During Due Diligence in September 2023:

(1) Full-time safety management department and work safety management personnel are set as required, and construction safety plan is formulated and regular safety inspections are conducted; construction workers are provided with safety protection equipment.

(2) Work safety education and training have been carried out regularly.

(3) Protective equipment has been provided and occupational health hazards have been notified.

(4) Warning signs are provided at the construction site.

(5) Fire prevention facilities and fire extinguishing equipment are available at the construction site.

(6) Holding certificates before taking posts is strictly implemented for all special types of work.

(7) Daily inspections and records are carried out by full-time work safety management personnel, and on-site corrective requirements are made.

(8) The Construction Contractor shall strengthen the health management related to diseases of construction personnel.

(9) The entrance and exit of the construction site are access-controlled and guarded, and there are fences around.

During Due Diligence in May 2024:

(1) By the time of this due diligence, all projects under construction have been

completed and workers have been withdrawn. During the construction period, production management has been carried out according to relevant requirements without accidents or disputes.

(2) Regular training is carried out as required during the construction period.

(3) By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. Protective equipment is provided as required during construction, and occupational health hazards are notified.

(4) By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. Relevant management requirements are followed during construction.

(5) By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. Relevant management requirements are followed during construction.

(6) By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. During the construction period, holding certificates before taking posts is strictly implemented for all special types of work.

(7) By the time of this due diligence, all projects under construction have been completed. Relevant management requirements are followed during construction.

(8) By the time of this due diligence, all projects under construction have been completed. During the construction period, rectification and implementation are carried out according to relevant management requirements.

(9) By the time of this due diligence, all projects under construction have been completed. The site is arranged according to relevant requirements during the construction period.

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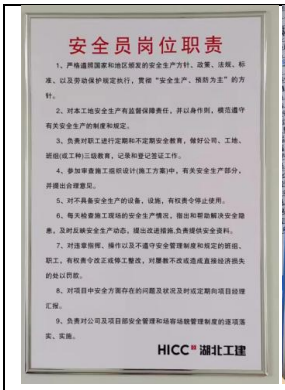

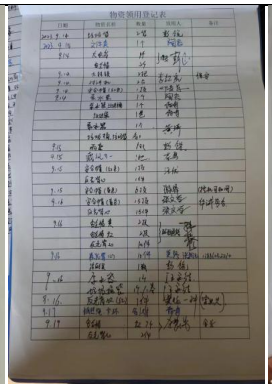
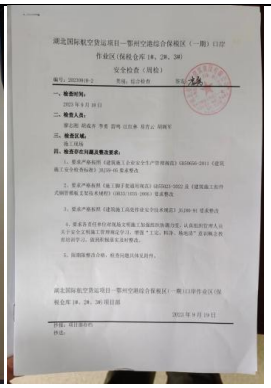

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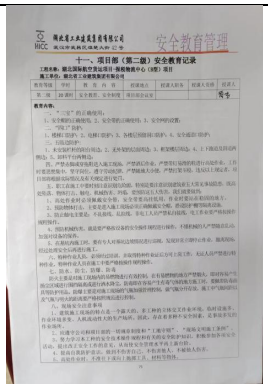
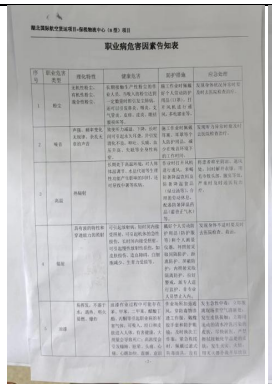
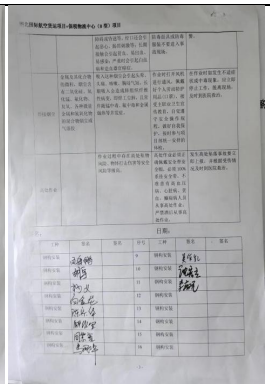
	/
 	/
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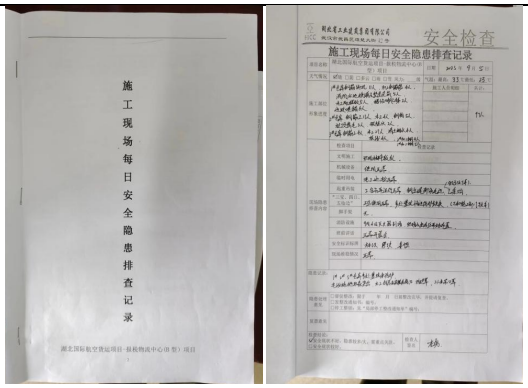	/
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Site Photos in September 2023	Site Photos in May 2024

Figure 1.4-3 Photos of Health and Safety Management Site Conditions in Two Due Diligence Investigations

1.4.10 Publicity of Grievance Redress Mechanism

1.4.10.1 Actual Situation on Construction Site

According to the on-site due diligence, the grievance redress mechanism has been implemented. The site disclosure information is shown in the following table. AIIB PPM is publicized at the construction site.

Table 1.4-2 Information on Environmental and Social Grievance Redress Mechanism

Project Name	Phase I of Hubei Global Air Cargo Logistics Hub Project (Phase I)		
Project Management Office (PMO)	Ezhou Linkong Group Co., Ltd.	Contact	Peng Xiangguo
		Contact Number	13995808260
PIU	Ezhou Linkong Group Co., Ltd.	Contact	Xiao Yuan
		Contact Number	15972557970
Construction Contractor	CCCC Third Highway Engineering Co., Ltd.	Contact	Xie Mingshi
		Contact Number	15811585616
Complaints Hotline	Mayor's Hotline	Contact	/
		Contact Number	0711-12345

AIIB PPM	https://www.aiib.org/en/about-aiib/index.html

The photos of site conditions are shown in the following table:

Notice Board of Grievance Redress Mechanism

Figure 1.4-4 Publicity and Implementation of Grievance Redress Mechanism

1.4.11 Due Diligence List

The due diligence list is attached as Annex 1.

1.4.12 Description of Works Not Commenced in Phase I Project

By the due diligence period, the construction of International Express Center, Business Logistics Center, Dangerous Goods Warehouse, Bonded Logistics Warehouse and Bonded Processing Plant has not yet started.

The main function of the International Express Center is ground handling of air cargo, including professional loading and unloading, handling, sorting, measuring, packaging, tallying and warehousing of air cargo; the main function of the Business Logistics Center is providing office, living and duty rooms for the operation management company in the international freight area; the main function of the Dangerous Goods Warehouse is bonded storage and supervision of dangerous goods; the main functions of the Bonded Logistics Warehouse are bonded warehousing,

bonded distribution and international transfer; the main function of the Bonded Processing Plant is bonded processing.

All of the above unbuilt projects are undergoing feasibility study report preparation and related design, and none of the above structures have environmental risks. The Dangerous Goods Warehouse belongs to the "Multi-functional Logistics and Warehousing Center Project of Ezhou Airport Comprehensive Bonded Zone". According to the feasibility study report, the design of Dangerous Goods Warehouse shall be implemented with reference to relevant standards and requirements such as the *Emergency Response Law of the People's Republic of China* (Presidential Decree No. 69 of 2007 of the People's Republic of China), the *Measures on the Management of Physical Hazard Identification and Classification for Chemicals* (Decree No. 60 of the State Administration of Work Safety), the *Regulations on the Safety Management of Dangerous Chemicals* (State Council Decree No. 645) and the *General Rules for the Hazardous Chemicals Warehouse Storage* (GB15603-2022); the anti-seepage of the Dangerous Goods Warehouse meets the relevant requirements of standards such as the *Standard for Pollution Control on Hazardous Waste Storage* (GB 18597-2023) and the *Standard for Pollution Control on the Non-Hazardous Industrial Solid Waste Storage and Landfill* (GB 18599-2020). A mechanical exhaust system is set up in the Dangerous Goods Warehouse. Labyrinth mufflers and medium-efficiency air filters are set at the inlet of exhaust fans, radiation leakage monitoring facilities are set up indoors, temperature and humidity meters are set up in each storage room to observe and record on time, and anti-seismic supports and hangers are used for smoke control and exhaust pipes, accident ventilation pipes and related equipment; in terms of explosion venting design, lightweight materials are used for the pressure relief surface on the roof (or outer wall) of the storage room for explosives in the Dangerous Goods Warehouse, and the pressure relief area is not less than 15% of the room area; relevant emergency safety measures such as emergency accident pool shall be set up in the Dangerous Goods Warehouse Area.

To sum up, the projects that have not yet been commenced conform to relevant pollution prevention and control and safety standards.

1.5Due Diligence Results on Environmental Management of Wuchu Avenue (Associated Facility)

1.5.1 Environmental Management Organization and Staffing

Associated facility—Environmental management organization and staffing for Wuchu Avenue are as follows:

Table 1.5-1 Environmental Management Organization and Staffing

Management personnel	Contact Number	Position	Duty
Wu Di	17762607789	Responsible person for environment and safety	Be responsible for the environment and safety of the whole project, formulate regulations and plans for safety and environmental management measures, and guide the orderly implementation of site environmental supervision.
Li Zixia	15269561361	Environmental Safety Technician	Mainly responsible for site environmental management, safety management, personnel training and other management and plan implementation.

1.5.2 Strengthening of Organizational Management

1.5.2.1 Management Requirements during Construction Period

(1) Appoint at least one full-time and qualified support personnel in the project implementation unit. This person will be responsible for coordinating the implementation of the Environmental and Social Management Plan.

(2) The project implementation unit will hire a third-party environmental and social monitoring company to provide external support.

1.5.2.2 Actual Situation on Construction Site

(1) The Project is provided with 1 full-time safety and environment officer, who holds the qualification certificate of safety engineer and is responsible for coordinating the implementation of the environmental management plan.

(2) The Project Implementation Unit has a real-time online monitoring system, and the Supervisor has carried out corresponding tracking monitoring at the construction site to monitor the noise and atmospheric particulates at the site boundary in real time. The monitoring data meet the Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011), Integrated Emission Standard of Air

Pollutants (GB16297-1996), etc.

The photos of site conditions are shown in the following table:

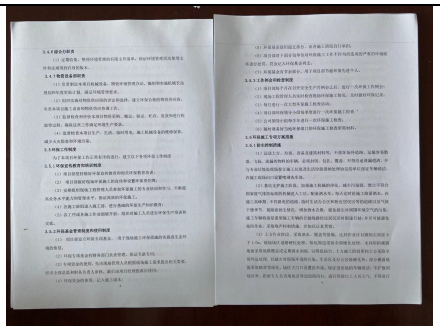
	
Environmental Management Plan (Excerpt)	Tracking and Monitoring Board on Construction Site

Figure 1.5-1 On-site Situation and Supporting Photos of Strengthening of Organizational Management

1.5.3 Contract Management

1.5.3.1 Management Requirements

(1) Incorporate the environmental protection measures in the environmental and social management plan into the contract for civil works and equipment installation of the Project. All contractors are required to strictly implement the Environmental and Social Management Plan.

1.5.3.2 Implementation

(1) The environmental protection measures in the Environmental and Social Management Plan have been incorporated into relevant contracts as required.

The supporting photos are shown in the following table:

11.4 环境保护 11.4.1 承包人在履行合同过程中，应遵守有关环境保护的法律，履行合同约定的环境保护义务，并对违反法律和合同约定义务所造成的环境破坏、人身伤害和财产损失负责。 11.4.2 承包人应按合同约定的环保工作内容，编制环保措施计划，报送监理人批准。 11.4.3 承包人应确保施工过程中产生的气体排放物、粉尘、噪声、地面排水及排污等，符合法律规定和发包人要求。
Environmental Management Plan (Excerpt)

Figure 1.5-2 Supporting Photos for Contract Management

1.5.4 Ecological Management

1.5.4.1 Management Requirements during Construction Period

(1) Earth-rock allocation

In the design of subgrade excavation, embankment and ancillary work filling for main works, the earthwork excavated from subgrade shall be reasonably allocated for embankment filling, etc.

(2) Slope engineering protection and greening

For fill sections and soil excavation sections, the slope protection method of spraying grass seeds + shrub seeds shall be adopted; for excavation sections of soft rock (including completely weathered hard rock) such as mudstone, argillaceous limestone and argillaceous shale, mortar rubble facing walls shall be built, and the slope protection method of spraying grass seeds + shrub seeds shall be adopted.

(3) Subgrade drainage

Drainage systems for the subgrade and pavement shall be designed, consisting mainly of side ditches, drainage ditches, intercepting ditches, and rapids.

(4) Temporary sludge stacking yard and construction access road

Masonry intercepting ditches shall be set up around the sludge stacking yard. At the same time, retaining walls shall be set up to prevent the subgrade from being affected by unstable soil piling in the sludge stacking yard, and drainage ditches shall be set up in front of the toe of the retaining wall to collect rainwater on the slope surface. A grit chamber shall be set up at the outlet of the drainage ditch, and the water shall be discharged into nearby natural channels after sedimentation in the grit chamber. After the construction is completed, the occupied cultivated land and forest land shall be re-cultivated. After the sludge is solidified and dried, it shall be uniformly transported to the backfilling areas of Bajiao Village and Woertang by municipal muck trucks. Before the construction road is built, the topsoil within its occupied area shall be stripped and transported to the set temporary topsoil stacking yard. After the construction is completed, the pavement gravel layer shall be removed and covered with topsoil, and the occupied cultivated land and forest land shall be re-cultivated.

(5) Recovery of permanent land occupation

After the completion of all permanent buildings, vegetation restoration shall be carried out immediately in exposed areas, including excavated slopes, front and back of houses, both sides of waterways, etc. During restoration, according to the actual

situation of each section, various construction slashes shall be greened and restored according to local conditions to minimize the construction traces in the project area.

In the process of greening and restoration, local tree species and grass seeds shall be used as much as possible. It is better to use constructive species of original natural vegetation for restoration.

(6) Restoration of road construction slash

The construction access road shall be constructed in strict accordance with the requirements of design specifications. Manual slope cutting and filling must meet the requirements of stable slope, and corresponding engineering slope protection measures shall be taken according to the geological conditions along the route. The balance between excavation and filling shall be achieved as far as possible. A small amount of waste slag shall be piled up in the nearest project spoil yard in a centralized manner, and it is strictly prohibited to pile up or dump at random along the way. For the exposed surface, grass plant protection or mortar grid turf protection shall be adopted according to the excavation height. After the construction is completed, the pits on the road surface shall be leveled, and fast-growing arbors and shrubs shall be used for land restoration. Tree species suitable for local growth, such as Alnus cremastogyne, Cryptomeria fortunei, Cunninghamia lanceolata, Chinese ash, Coriaria sinica and Vitex negundo, shall be mainly selected for greening, with grass seeds sowed under the forest.

(7) Restoration measures for construction and production facilities area

During the construction of temporary construction facilities, the comprehensive utilization requirements shall be fully considered and the building landscaping design shall be carried out. After the completion of the Project, except that some temporary buildings and temporary roads in the temporary construction facilities shall be retained and reconstructed in combination with the planning of the assessment area, other temporary facilities and roads unrelated to the project construction shall be completely demolished. Temporary construction buildings and waste sundries shall be cleaned up in time, the exposed surface excavated during construction shall be treated, and the original use function of the occupied cultivated land shall be restored. Non-cultivated land shall be planted with local species according to site conditions after the removal of temporary construction facilities.

(8) Vegetation restoration along the road

If the landfill of road excavation will cause the road and the surrounding vegetation to be damaged, the steep slope formed after earth excavation shall be

covered with corresponding grasses, and certain greening tree species shall be planted along the channel to achieve the functions of water and soil conservation, canal bank reinforcement and landscaping.

1.5.4.2 Actual Situation on Construction Site

(1) During the construction period, excess earth-rock is transported to the backfilling area of Bajiao Village and the backfilling area of Woertang.

(2) The slope is protected with green cloth.

(3) In the construction stage, there were corresponding drainage systems for subgrade and pavement. By the time of this due diligence, the construction was close to completion and relevant systems had been removed.

(4) In the construction stage, there were corresponding sludge stacking yards and construction access roads. By the time of this due diligence, the construction was close to completion and relevant facilities had been removed. The topsoil stripped during the construction period is placed in a temporary stacking yard, partially backfilled after the completion of construction, and the excess topsoil is transported to the backfill area of Bajiao Village and the backfill area of Woertang.

(5) ~ (8) As of the due diligence period, the construction is still in progress, and ecological restoration will be performed as required upon completion of construction.

The photos of site conditions are shown in the following table:

	
Slope Protection with Green Cloth	Construction Site Condition

Figure 1.5-3 On-site Situation and Supporting Photos of Ecological Management

1.5.5 Waste Gas Management

1.5.5.1 Management Requirements during Construction Period

(1) Before construction, the site boundary wall or simple enclosure shall be built first. For example, corrugated boards or polypropylene cloth shall be used to build a

fence with a height of 2.5 ~ 3.0m around the construction area to reduce the escape of dust and the impact on the surrounding environment.

(2) In the residential areas near the proposed road, such as Lijiadun, Majiawan, Wangjiaranpu and Duwan Village environmental protection target areas, water shall be sprayed during construction and excavation to keep a certain humidity on the working face. The loose and dry topsoil in the construction site shall also be frequently sprayed with water to suppress dust; when backfilling earthwork, proper water shall be sprayed when the topsoil is dry to prevent dust from flying. Special personnel shall be assigned to take charge of cleaning on the construction site, and sprinkle water in time to reduce flying dust. One employee shall be arranged for each construction section to sprinkle water on the construction site regularly. The frequency of watering depends on the weather conditions. In general, water shall be sprinkled once in the morning (7:30-8:30), noon (12:00-13:00) and evening (17:30-19:00) during rush hours every day. When the wind speed is greater than Grade 3 and it is sunny in summer, water shall be sprinkled every 2 hours.

(3) To enhance the management of temporary soil storage yards, measures on compaction, regular water spraying, coverage of earthwork surface and so on shall be formulated, and the unwanted soil and building material dregs shall be removed in time and cannot be accumulated for a long time.

(4) During construction, a fully enclosed construction method shall be adopted to prevent dust pollution. Materials that are easy to produce dust pollutants such as sand and gravel stacked on the construction site shall be classified and centralized, with a stacking height of less than 0.7m. A closed fence shall be set around them and covered with dense mesh nets or other covering materials. All connecting flanges must be tight during the transportation of dust materials, and the drop of equipment discharge shall be minimized without affecting the construction.

(5) It is prohibited to burn the discarded construction material as fuel. At the end of construction, vegetation restoration shall be carried out in a timely manner on sites occupied by construction.

(6) Efficient vehicle transportation management and deployment on the site shall be achieved to reduce idling time. The running route and time of transport vehicles shall be planned, and driving in sensitive areas such as prosperous areas, traffic concentration areas and residential buildings shall be avoided as far as possible. For sections with high environmental requirements, night transportation shall be selected

according to the actual situation to reduce the impact of dust on the environment.

(7) Earth-moving trucks and building material transport vehicles shall be equipped with overflow prevention equipment according to regulations, and the load should not be too full to ensure that it will not scatter during transportation. Materials like lime and fine sand must be compacted during transportation. The filling height is forbidden to exceed the guardrail of the hopper. Powdery materials (cement, etc.) shall be canned or bagged, and bulk transportation is prohibited. Earthwork, sand and gravel materials and spoil shall be transported by covering with tarpaulin and wet method to prevent leakage of materials during transportation. Cement concrete shall be transported by enclosed tank trucks.

(8) The Employer and the Construction Contractor shall clearly define the HSE-compliant construction responsibility in the contract according to law, and strictly implement the system of HSE-compliant construction measures and the "three guarantees" responsibility system on site. The construction of the Project shall be fully enclosed with retaining walls. The roads on the construction site shall be hardened, and the exposed soil on non-construction working faces shall be covered with dust screens or greened with simple plants. It is recommended to install atomizing spraying dust suppression facilities on the construction site.

(9) The Employer shall cover the sludge in the storage yard or spray deodorant and dust suppressant; set up walls or other protective fences in the sludge storage yard, and set up obvious warning signs; set up enclosures around treatment facilities such as slurry storage tank and slurry preparation tank in the sludge storage yard, and carry out disinfection after use every day. In addition, the Construction Contractor shall arrange the construction progress of dredging works in a compact manner to minimize the impact on residents along the route during the construction period.

1.5.5.2 Actual Situation on Construction Site

(1) By the time of due diligence, the construction was close to completion and the enclosure in the construction area had been removed.

(2) ~ (4) During the construction period, dust suppression operation and management were carried out as required. No relevant complaints have been received by the time of due diligence.

(5) During the construction period, waste building materials are not burned as fuel. After the construction is completed, vegetation restoration will be carried out in time

for the construction site.

(6) Vehicle allocation and transportation route and time during the construction period are reasonable, which does not cause great impact.

(7) During the construction period, vehicle loading is managed as required.

(8)~(9) During the construction period, they were managed according to the requirements of waste gas management, and no complaints were received from residents along the route by the time of due diligence.

The photos of site conditions are shown in the following table:

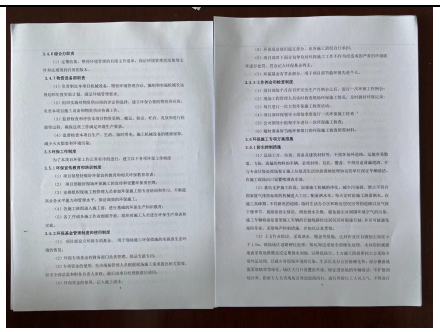
	
Waste Gas Management System (Excerpt)	Watering for Dust Suppression during Construction Period
	
Watering for Dust Suppression during Construction Period	Dust Suppression during Construction
	
Notice Board for Prevention and Control of Dust Pollution on Construction Site	Notice Board for Dust Control System and Measures

Figure 1.5-4 On-site Situation and Supporting Photos of Waste Gas Management

1.5.6 Wastewater Management

1.5.6.1 Management Requirements during Construction Period

(1) A large amount of muddy water and rainwater generated during construction contain suspended solids with high concentration, which shall not be discharged in the form of seepage pit, seepage well or overflow. Management and control shall be strengthened, and special ditches shall be set up for the discharged sewage. The Construction Contractor of the Project shall build a wastewater sedimentation tank at the construction site, and the supernatant shall be reused.

(2) The construction site shall be arranged as far away from Huama Lake as possible, leaving a green isolation buffer zone.

(3) Eye-catching signs shall be set up on the construction site. It is forbidden to pour domestic waste and sewage into surrounding ditches. A fixed domestic waste dump shall be set up and incorporated into the domestic waste removal system for timely removal.

(4) It is strictly prohibited to discharge and flow construction production wastewater randomly. Diversion channels shall be set up in the project area. Sewage shall be collected, treated centrally in sedimentation tanks, and then reused for sprinkling and greening of the project construction site. The production wastewater that cannot be reused in rainy seasons shall be discharged into the temporary water collecting tank of the Project for storage after being treated by oil separation sedimentation tanks and be reused or naturally evaporated after sunny days. It is strictly prohibited to directly discharge it into the surface water body of Huama Lake.

(5) Cofferdam construction shall be adopted for bridges crossing water bodies during the construction of pier substructure, and effective measures shall be taken to reduce suspended solids pollution generated during the construction period, shorten cofferdam filling and removal time, and reduce the pollution impact caused by production wastewater discharged into ditches.

(6) Necessary publicity and education on ecological environment protection for construction personnel shall be conducted, construction procedures and construction machinery shall be reasonably organized, and drainage design and construction shall be carried out in strict accordance with construction specifications.

1.5.6.2 Actual Situation on Construction Site

(1) At the time of due diligence, the construction entered the final stage, and no wastewater was generated at this stage. During the construction period, the construction site is well controlled and managed by the Supervisor according to wastewater management requirements without causing pollution to the surrounding areas.

(2) Wuchu Avenue, an associated facility of the Project, is a bid section far away from Huama Lake and not close to Huama Lake.

(3) Domestic waste cans are available on site to collect domestic waste and are removed regularly.

(4) The construction wastewater of the Project is collected and treated as required.

(5) The section of the Project's associated facility, Wuchu Avenue, does not involve crossing a water body.

(6) Project personnel are trained as required, and design and construction are performed as required.

The photos of site conditions are shown in the following table:

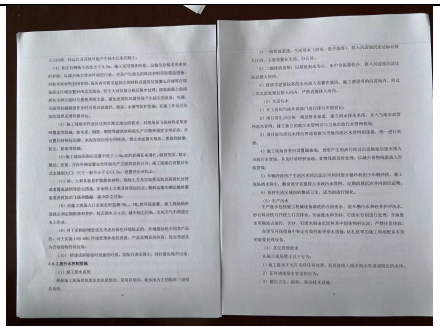
	
Wastewater Management System (Excerpt)	Domestic Waste Can on Construction Site

Figure 1.5-5 On-site Situation and Supporting Photos of Wastewater Management

1.5.7 Noise Management

1.5.7.1 Management Requirements during Construction Period

(1) Reasonable arrangement of construction time

Simultaneous construction of a large number of high-noise equipment shall be avoided as far as possible during the preparation of the construction plan. In addition, the construction period shall be shortened as far as possible on the premise of ensuring the project quality. High-noise construction shall be arranged in the daytime as far as possible to reduce the construction at night. Except for emergency repair and rescue, no bulldozer, excavator, grader, road roller or other similar machinery shall be used for

night construction (from 22:00 to 6:00 the next day). If noise pollution around the city cannot be avoided during night construction due to the continuity of the production process or other special reasons, the construction must be reported to relevant government departments for approval in advance and announced to surrounding residents.

(2) Reasonable layout of construction site

It is necessary to avoid arranging a large number of power mechanical equipment in the same place; otherwise, the local sound level will be excessive.

(3) Reasonable arrangement of operation time for transport vehicles

The speed shall be strictly controlled and honking shall be prohibited after transport vehicles enter the vicinity of the construction area.

(4) Reduction of sound level of equipment

Low-noise equipment shall be selected as far as possible, such as hydraulic machinery (instead of fuel machinery) and high-frequency oscillator; For fixed loading and unloading equipment and earth-moving machinery, such as excavators and bulldozers, the noise can be reduced by exhaust pipe silencers and isolation of vibrating parts of engines; Power mechanical equipment shall be regularly repaired and maintained. The sound level of poorly maintained equipment often increases during operation due to vibration of loose parts or damage to silencers.

(5) Reduction of man-made noise

Operate mechanical equipment according to regulations. During the disassembly of formwork and support, comply with operation regulations to reduce collision noise; use modern equipment (instead of whistles) to direct operations as much as possible.

(6) Strengthening of construction management

During the construction period, the construction method with low noise and vibration shall be adopted as far as possible for foundation and structural construction on the premise of not affecting the construction quality; The foundation of the equipment with a fixed base shall be treated separately to reduce the transmission of ground vibration and structural noise; The operation shall be standardized and the maintenance of equipment shall be strengthened to maintain normal operation of the equipment; Noise equipment with less movement can be set in the sound insulation enclosure made of corrugated plates.

(7) The declaration and registration system of the construction noise shall be strictly implemented. A declaration shall be submitted to the local ecological

environment department within 15 days after the commencement of the Project. The Approval Form for Noise Management on Construction Sites shall be filled in and approved before commencement. It is necessary to avoid disturbing residents with noise, make the noise at the boundary of the construction site conform to relevant regulations in the *Emission Standard of Environment Noise for Boundary of Construction Site* (GB12523-2011), and make the vibration conform to relevant regulations in the *Standard of Vibration in Urban Area Environment* (GB10070-88).

1.5.7.2 Actual Situation on Construction Site

(1) The simultaneous construction of a large number of high-noise equipment is avoided during the construction process, and no complaints from residents along the route are received by the due diligence period.

(2) During the construction process, the layout of the construction site is reasonable and does not result in local sound levels that exceed regulated limits.

(3) ~ (4) During the construction period, the transportation time of transport vehicles is arranged reasonably, and the equipment selection is reasonable, which does not cause great noise pollution to the surrounding areas.

(5) During the construction period, the management of personnel is strengthened to reduce man-made noise. By the due diligence period, no complaints are received from residents along the route.

(6) ~ (7) Noise management during construction is carried out in accordance with the appropriate requirements.

The photos of site conditions are shown in the following table:

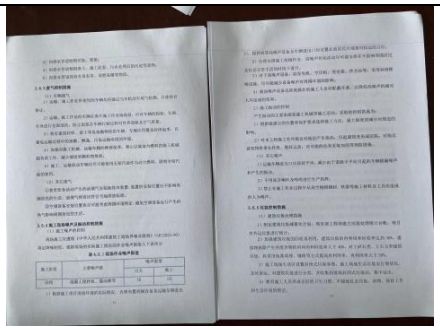
	
Noise Management System (Excerpt)	Environmental Monitoring on Construction Site

Figure 1.5-6 Site Situation and Supporting Photos of Noise Management

1.5.8 Solid Waste Management

1.5.8.1 Management Requirements during Construction Period

(1) Temporary waste containers shall be installed at the construction camp, and domestic waste shall be sorted for management, and regularly cleaned and transported in accordance with the regulations of the local sanitation department.

(2) The construction contractor shall use the excavation generated by the project as much as possible for backfilling.

(3) Temporary soil storage yards shall be spread in layers and evenly across the entire area, and the spoil shall be neutral materials that do not contain waste, chemicals, petroleum, or other such substances.

(4) After the spoil disposal is completed, the topsoil stored shall be spread evenly on top of it, and grass and tree planting shall be carried out across the entire area.

(5) The spoil banks of different heights shall be provided with side slopes and platforms with corresponding gradients according to the requirements of the drawings. Generally, dry rubbles shall be laid on the side slope of the spoil bank as required by the drawings for protection, and mortar rubble shall be used to protect the foot of the part eroded by water.

(6) Mortar rubble drainage ditches shall be set up at the periphery of the temporary soil storage yard. At the top surface of the temporary soil stack, soil or rubble drainage ditches shall be set up about 80 ~ 120m, and slag retaining walls shall be set up inside to ensure the smooth flow of surface water and slope water in the spoil bank.

(7) In the process of transferring waste earthwork, the unit transporting the muck shall go through registration procedures with relevant units according to the Management Measures for Construction Wastes in Ezhou City. The abandoned muck shall be uniformly organized by the urban management department. The construction muck shall not leak or fly along the way, and the vehicles removing the construction muck shall not pollute the road surface with mud.

(8) The transportation of spoil must be limited to the specified time, and the vehicle shall run on the designated road section. When transporting bulk materials and wastes, the transport vehicles must be properly loaded and covered with cloth. Before leaving the construction site, the exterior shall be cleaned to prevent mud leakage and flying along the way.

(9) Hazardous waste management shall meet the requirements of management

specifications.

1.5.8.2 Actual Situation on Construction Site

(1) Domestic waste cans are provided on the construction site to collect waste, which is regularly removed and disposed of by the sanitation department.

(2) During the construction period, excavations are adopted for backfilling as far as possible, and excess spoils are transported to the backfill area of Bajiao Village and the backfill area of Woertang.

(3) ~ (4) By the time of due diligence, the construction entered the final stage and temporary measures had been removed. It is understood that solid waste management requirements are followed during the construction stage.

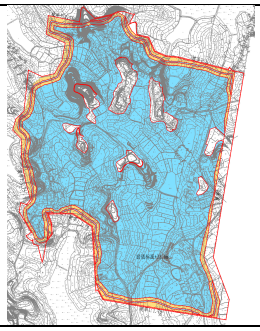
(5) ~ (6) The spoils are transported to the backfill area of Bajiao Village and the backfill area of Woertang, and the spoil grounds are designed according to corresponding requirements.

(7) ~ (8) By the time of due diligence, the construction entered the final stage and there was no spoil transportation. During the construction period, the transportation route of spoil is designed as required, and the transportation is also conducted as required, and the vehicles transporting muck conform to the Management Measures for Construction Wastes in Ezhou City.

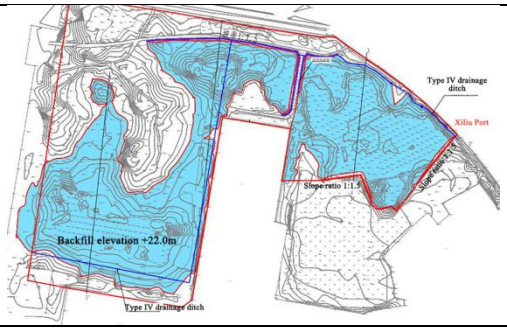
(9) The use of hazardous chemicals is not involved in the construction of the Project. The hazardous wastes are mainly mineral oils such as lubricating oil and engine oil used for machine maintenance, and there is only minor oil leakage, which has little impact on the environment. The management of hazardous wastes during construction is compliant.

The photos of site conditions are shown in the following table:

	
Domestic Waste Can on Construction Site	Layout Plan of Soil Storage Yard



Layout Plan of Storage Yard in Bajiao Village



Layout Plan of Woertang Storage Yard

Figure 1.5-7 Site Situation and Supporting Photos of Solid Waste Management

1.5.9 Environmental Risk Management

1.5.9.1 Management Requirements during Construction Period

(1) Enhance environmental management throughout the construction process, improve the handling and disposal of construction wastewater and waste residue, and strictly prohibit arbitrary discharges or dumping of such wastes;

(2) Erect fences in areas close to water bodies to minimize the spread of materials and construction debris; place asphalt heating sites and facilities at a considerable distance from any water bodies.

1.5.9.2 Actual Situation on Construction Site

(1) By the time of due diligence, the construction has entered the final stage. According to the visit, there was no arbitrary discharge or dumping of construction wastewater and waste residue during the construction period. Construction wastewater and waste residue are transported to the designated place after sedimentation treatment in the sedimentation tank.

(2) The Project does not involve adjacent water areas, which are managed according to the requirements of environmental risk management.

The photos of site conditions are shown in the following table:

Environmental Management of Construction Site

Figure 1.5-8 Site Situation and Supporting Photos of Environmental Management

1.5.10 Construction Safety and Occupational Health

1.5.10.1 Management Requirements during Construction Period

(1) A professional safety management team shall be established, a systematic construction safety regimen shall be formulated, and adequate funding for safety measures shall be guaranteed.

(2) Before construction, the site shall be subject to "three supplies and one leveling". When constructing temporary access roads, it is necessary to ensure the safety of passing vehicles and pedestrians and provide clear signs and traffic control measures. Temporary water use on the construction site shall be provided with health and safety guarantees, all staff shall be educated on water and electricity safety, and the system of special operation personnel working with certificates shall be strictly implemented.

(3) Nationally regulated safety signs, danger warning signs and other signs and slogans shall be hung in the construction area to prevent residents from entering the building protection scope and dangerous areas.

1.5.10.2 Actual Situation on Construction Site

(1) A professional safety management team is established for the Project, and construction safety management requirements and measures are formulated.

(2) Corresponding safety and health guarantee, relevant safety education and testing have been carried out for the Project as required.

(3) By the due diligence period, the construction is nearing completion and no

safety accident has been caused during the construction period.

The photos of site conditions are shown in the following table:

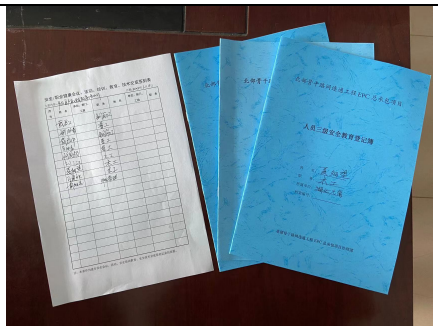
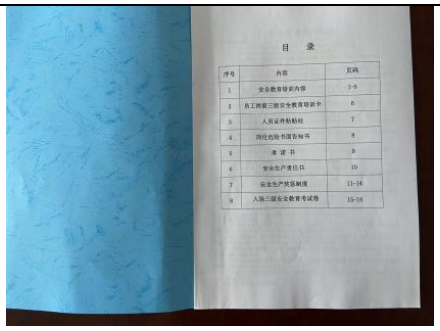
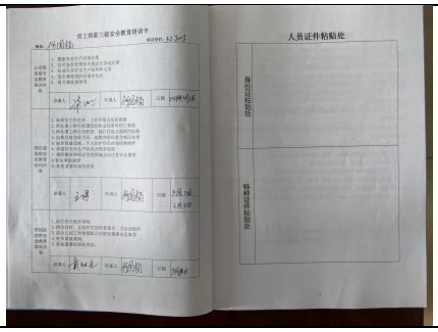
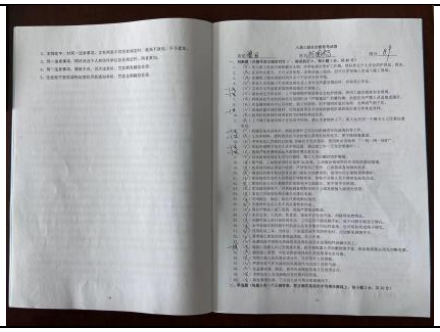
	
Safety Education Register	Contents of Safety Education Register
	
Safety Education and Training	Safety Education Test

Figure 1.5-9 Site Situation and Supporting Photos of Construction Safety Management

1.5.11 Publicity of Grievance Redress Mechanism

1.5.11.1 Management Requirements during Construction Period

(1) The Project Implementation Unit and the Construction Contractor shall establish a grievance redress mechanism before construction, designate special personnel to be responsible for the grievance mechanism, and provide relevant training for the person in charge of the grievance mechanism.

(2) The contact information of the grievance redress mechanism contact person, including phone number, address and email, shall be publicly disclosed.

1.5.11.2 Actual Situation on Construction Site

According to the on-site due diligence, the grievance redress mechanism has been implemented. The site disclosure information is shown in the following table. AIIB PPM is publicized at the construction site.

Table 1.5-2 Information on Environmental and Social Grievance Redress Mechanism

Name of associated project	Wuchu Avenue	Construction date	June 2023 - June 2024

AIIB PMO	Ezhou Linkong Group Co., Ltd.	Contact	Peng Xiangguo
		Contact Number	13995808260
Project Implementation Unit	Ezhou Linkong Real Estate Co., Ltd.	Contact	Wu Di
		Contact Number	17762607789
Construction Contractor of the Project	CCCC Second Harbor Engineering Co., Ltd.	Contact	Li Zixia
		Contact Number	15269561361
Complaints Hotline	Mayor's Hotline	Contact	/
		Contact Number	0711-12345
AIIB PPM	https://www,aiib.org/en/about-aiib/who-weare/project-affected-peoples-mechanism/how-we-assist-you/index.html.		

The photos of site conditions are shown in the following table:

Notice Board of Grievance Redress Mechanism

Figure 1.5-10 Publicity and Implementation of Grievance Redress Mechanism

1.5.12 Due Diligence List

The due diligence list is attached as Annex 2.

2 Due Diligence on Social Management (Resettlement)

2.1 Project Overview

The associated projects identified in the Project are the associated facilities of the Hubei Global Air Cargo Logistics Hub Project, Phase I works and Wuchu Avenue Road Project. The construction of Phase I Project (associated facility) includes customs infrastructure, bonded warehousing and processing, trade and cargo service facilities, digitalization, supporting facilities, etc., covering an area of 1,090.5 mu. The Wuchu Avenue (associated facility) section will connect the bonded zone and provincial highway to improve logistics efficiency. The Avenue is located within the Ezhou Linkong Economic Zone. It connects to Huama Lake Bridge in the west and extends to S203 (under construction) in the east. The road has a red line width of 55 m and features six lanes in both directions, with a total length of 1,940 m and a design speed of 60 km/h. The primary construction contents include road works, water supply and drainage, cable tunnel, traffic, lighting, landscaping, and ancillary works. The construction of Wuchu Avenue (associated facility) was commenced in June 2023 and completed at the end of June 2024. The land acquisition and house demolition required for associated facilities have been completed from 2020 to March 2024. These land acquisition and demolition, as well as resettlement activities, are implemented in accordance with the master plan of Ezhou Linkong Economic Zone and Huahu Airport, not completely caused by the AIIB loan project.

It is identified that a total of 933 mu of land required for the AIIB Project has not yet been expropriated, but there are 49,348.75 m^2 of house demolition within this scope, affecting 883 people in 192 households. Due to the noise impact of Ezhou Huahu Airport, the house demolition was completed from 2021 to 2023. The demolition activities are implemented in accordance with the reply of the Department of Ecology and Environment of Hubei Province on the Environmental Impact Report of the Hubei Ezhou Civil Airport Project. It is not caused by the AIIB loan project.

The object of this due diligence is the land acquisition and demolition, as well as resettlement completed within the scope of the associated facility — Phase I Project and AIIB Project, as well as the associated facility — Wuchu Avenue.

2.2 Resettlement Due Diligence Background

Given the house demolition work within the scope of the Hubei Global Air Cargo Logistics Hub Project supported by the AIIB loan and the land acquisition compensation and house demolition work of the two associated projects has been implemented and completed in accordance with the master plan of Ezhou Linkong Economic Zone and Huahu Airport in 2020-2023, the due diligence report is therefore prepared.

In accordance with the Asian Infrastructure Investment Bank's involuntary resettlement business policy and bank procedures, it is required to conduct due diligence on resettlement for collective land acquisition and house demolition activities of Hubei Global Air Cargo Logistics Hub Project's associated facilities — Phase I Project and Wuchu Avenue Road Project, as well as house demolition within the scope of the Hubei Global Air Cargo Logistics Hub Project supported by the AIIB loan, to review whether they comply with relevant laws, regulations and policies of the People's Republic of China, whether the legitimate rights and interests of affected migrants are fully and effectively protected, whether effective measures have been taken to fully restore the livelihood of affected migrants, and whether there are any leftover problems related to land acquisition.

With the assistance of the consulting team, Ezhou Linkong Group Co., Ltd. is responsible for preparing the resettlement due diligence report for the project. To this end, under the guidance of resettlement consultation experts, the PMO organized the project Employer's personnel and consulting teams to conduct investigations and visits on the project site in December 2023 and April 2024, collect relevant resettlement data, and prepare this Due Diligence Report on Resettlement.

2.3 Impact of Land Acquisition for the Project

2.3.1 Overview of Collective Land Acquisition

In the 12th batch in 2020, the 81st batch in 2020, the 27th batch in 2021, the 16th batch in 2023, the 60th batch in 2023 and the land acquisition activities to the south of Wuchu Avenue (including 32 batches), 1,979.54 mu of collective land has been acquired in Gutang Village, Bajiao Village and Chehu Village, affecting 4,207 people from 978 households. 425.2 mu of land acquired in the Phase I Project (associated facility) is included in the scope of 1,979.54 mu. Since the batches of land mentioned above are not acquired for the AIIB investment project, the land within the project scope cannot be separated.

The associated facility, Wuchu Avenue Road Project, has completed the acquisition of 90.99 mu of collective land in Chehu Village and Duwan Village from 2022 to 2023, affecting a total of 443 people from 105 households.

Including associated facilities of the Hubei Global Air Cargo Logistics Hub Project, Phase I Project and Wuchu Avenue Road Project, the completed land acquisition activities involved a total of 2,070.53 mu of land, affecting 1,083 households and 4,650 people. See Table 2.3-1 for details.

Table 2.3-1 Collective Land Acquisition of the Project

Land Acquisition Batch	Town/Township	Village	Actual area of collective land acquired	Affected Population	
				Number of households	Number of people
12th batch of 2020	Yangye Town	Gutang Village	886.77	487	2047
	Yanji Town	Bajiao Village	26.22	14	60
	Subtotal		912.99	501	2107
81st batch of 2020	Yangye Town	Gutang Village	198.27	108	545
	Yanji Town	Bajiao Village	1.72	2	4
	Subtotal		199.99	110	549
27th batch of 2021	Yangye Town	Gutang Village	175.95	96	403
	Yanji Town	Bajiao Village	196.9	46	193
		Chehu Village		61	256
	Subtotal		372.85	107	449

Land Acquisition Batch	Town/Township	Village	Actual area of collective land acquired	Affected Population	
				Number of households	Number of people
16th batch of 2023	Yangye Town	Gutang Village	1.32	2	7
	Yanji Town	Chehu Village	48.8	24	103
	Subtotal		50.12	26	110
60th batch of 2023	Yanji Town	Chehu Village	165.47	81	350
South of Wuchu Avenue (including 32 batches)	Yanji Town	Chehu Village	278.12	153	642
	Subtotal		278.12	153	642
Subtotal			1979.54	978	4207
Associated Facility — Wuchu Avenue Road Project	Yanji Town	Chehu Village	90.99	50	212
		Duwan Village		55	231
Subtotal			90.99	105	443
Total			2070.53	1083	4650

2.3.2 Impact on Young Crops and Ground Attachments

In the land use scope of associated projects, some young crops and ground attachments will be affected, mainly involving 1,957.65 mu of cultivated land containing green crops and other ground attachments, and the main crops are rice, corn and peanuts.

2.3.3 Affected Persons and Analysis of Impact Degree

2.3.3.1 Affected Persons

Land acquisition activities, including land for associated projects, affect a total of 1,083 households and 4,650 people, of whom 2,301 are women, in Gutang Village, Yangye Town; Chehu Village, Yanji Town; Duwan Village; and Bajiao Village. Urban residents and ethnic minority populations are not involved.

2.3.3.2 Affected Degree

Agricultural income is a relatively small part of the income sources of some households. The project site is located in the airport economic zone, close to the main urban area of Ezhou City. Farmers have more work and business opportunities, and

their family income does not completely depend on land and agricultural income. Therefore, on the whole, the land acquisition of the Project has a limited impact on the income of affected households. At the same time, the construction and operation of the Project will bring a large number of business and employment opportunities to this area. The investigation showed that the respondents all expressed their support for land acquisition. After land acquisition, the government has provided corresponding compensation in full and on time, which is of great help in restoring normal production and life. They all expect that the Project can be started and implemented as soon as possible so as to obtain more jobs and income opportunities. They believe that the Project will bring them good opportunities to improve their incomes and change their lifestyles. The construction and operation of the Project is expected to bring a lot of business and employment opportunities for affected villages and villagers.

2.3.4 Demolition of Housing and Buildings

The house demolition within the scope of the Hubei Global Air Cargo Logistics Hub Project supported by an AIIB loan and the house demolition caused by land acquisition activities including the land required for associated projects are located in Duwan Village and Chehu Village of Yanji Town (since it is carried out at the same time as the demolition activities of the master plan of Ezhou Linkong Economic Zone and Huahu Airport, the associated projects cannot be separated), with a total residential housing demolition area of 170,945.75m^2. A total of 713 households and 2,776 people are affected; another temple (Polong Temple) with an area of 1,275.34 m^2 is involved, which affects 2 people in total and has been demolished in March 2024. Refer to Table 2.3-2 for details.

Table 2.3-2 Area of House Demolition

Scope of work	Town /Township	Village/sub-village	Compensation for demolition				Resettlement house	
			Number of households	Number of people	Building area (m^2)	Compensation for demolition	Number of resettlement houses	Resettlement area (m^2)
AIIB Project	Yanji Town	Chehu Village	192	883	49348.75	9271.95	345	38926
Associated Facilities - Phase I	Yanji Town	Chehu Village	323	1252	72700.76	13659.47	489	55174
		Subtotal	323	1252	72700.76	13659.47	489	55174

Scope of work Project	Town /Township	Village/sub-village	Compensation for demolition				Resettlement house	
			Number of households	Number of people	Building area (m^2)	Compensation for demolition	Number of resettlement houses	Resettlement area (m^2)
Associated Facility — Wuchu Avenue Road Project	Yanji Town	Duwan Village	14	21	4574.05	834.86	6	604
		Chehu Village	184	620	44322.19	8625.49	267	28629
		Subtotal	198	641	48896.24	9460.35	272	29233
Total			713	2776	170945.75	32391.77	1106	123333

The investigation found that the affected households have moved to the Yanji Resettlement Area, which is divided into Phase I and Phase II. There are 6,919 sets of resettlement houses in total, and Ezhou Urban Development Investment (Holding) Group Co., Ltd. is responsible for financing. The Employer is the Municipal Engineering Management Center, and the construction contractors are China Construction Third Engineering Bureau Co., Ltd. and China National Chemical Engineering Sixth Construction Co., Ltd. The project was commenced in November 2017 and delivered in December 2020; The allocation of Phase I has been completed, and Phase II is under construction, which is expected to be allocated in 2024-2026. All households affected by demolition have obtained one or more resettlement houses from 2022 to April 2024, and the remaining 261 resettlement houses are planned to be delivered in 2026.

Table 2.3-3 Progress and Plan of Resettlement Housing Allocation

Scope of work	**Town/Township**	**Village/sub-village**	**Resettlement compensation**		**Progress of resettlement housing allocation**		
			Number of resettlement houses	**Resettlement area (m^2)**	**2022**	**2023-2024**	**2025-2026**
AIIB Project	Yanji Town	Chehu Village	345	38926	192	92	61
Associated Facilities - Phase I Project	Yanji Town	Chehu Village	489	55174	146	176	167
		Subtotal	489	55174	146	176	167
Associated	Yanji Town	Duwan Village	6	604	6	/	/

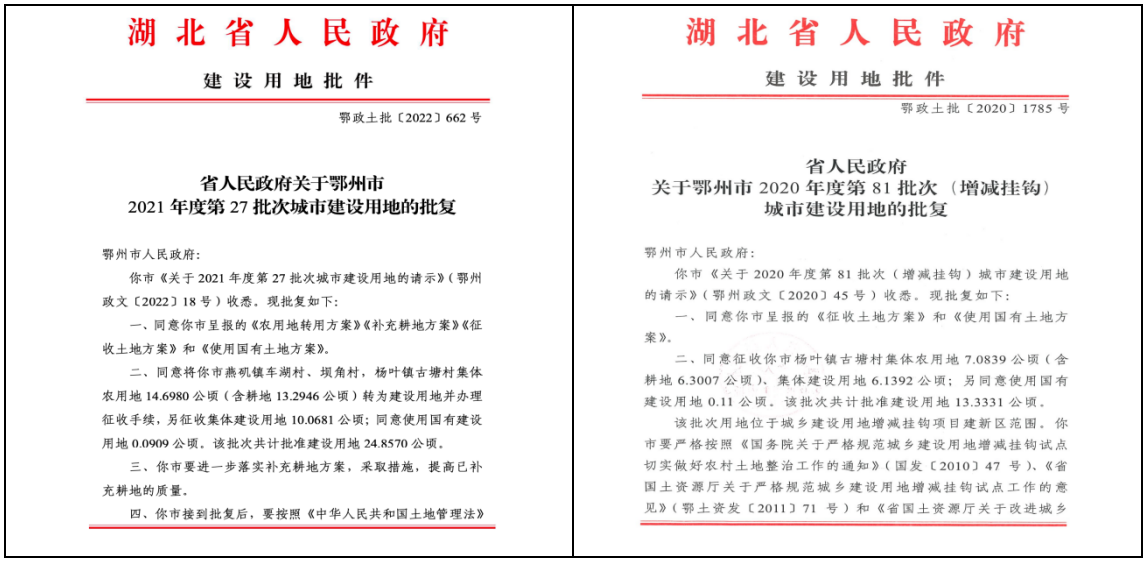
Facility — Wuchu Avenue Road Project		Chehu Village	267	28629	184	50	33
		Subtotal	272	29233	190	50	33
Total			1106	123333	528	318	261

Figure 2.3-1 Current Situation of Yanji Resettlement Area

2.4Land Acquisition Process and Compensation Implementation

2.4.1 Handling of Land Use Procedures

For the land acquisition activities including the land required for the associated facilities, the 12th and 81st batches of 2020, the 27th batch of 2021, the 16th batch of 2023, the 32nd batch of 2023, and the associated facility of the Huahu Airport North Passage Project — the Wuchu Avenue Project, have obtained the approval of the Hubei Provincial People's Government for the land used for construction, and the approvals of the remaining construction land are under process. The Wuchu Avenue is one of the roads of the Huahu Airport North Passage Project, so the land acquired under the approval fully covers the 90.99 mu required for the construction of the Wuchu Avenue Project, an associated facility. The remaining 60th batch of construction land in 2023 is being approved and is expected to be approved by the end of August 2024. The specific batch number is shown in Figure 2.4-1.



湖北省人民政府

建设用地批件

鄂政土批〔2022〕662号

省人民政府关于鄂州市
2021年度第27批次城市建设用地的批复

鄂州市人民政府：

你市《关于2021年度第27批次城市建设用地的请示》（鄂州政文〔2022〕18号）收悉。现批复如下：

一、同意你市呈报的《农用地转用方案》《补充耕地方案》《征收土地方案》和《使用国有土地方案》。

二、同意将你市燕矶镇车湖村、坝角村，杨叶镇古塘村集体农用地14.6980公顷（含耕地13.2946公顷）转为建设用地并办理征收手续，另征收集体建设用地10.0681公顷；同意使用国有建设用地0.0909公顷。该批次共计批准建设用地24.8570公顷。

三、你市要进一步落实补充耕地方案，采取措施，提高已补充耕地的质量。

四、你市接到批复后，要按照《中华人民共和国土地管理法》

湖北省人民政府

建设用地批件

鄂政土批〔2020〕1785号

省人民政府
关于鄂州市2020年度第81批次（增减挂钩）
城市建设用地的批复

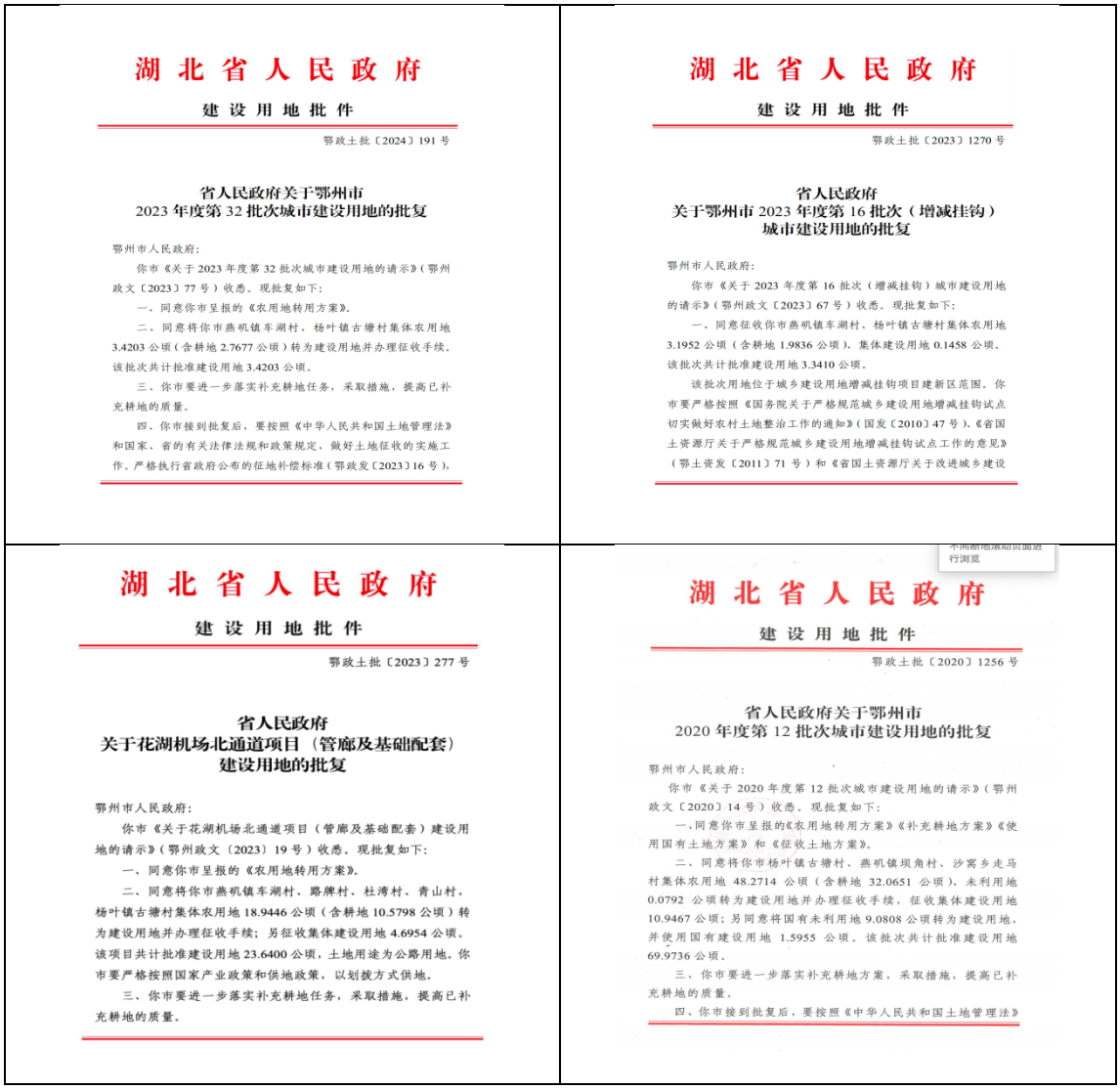
鄂州市人民政府：

你市《关于2020年度第81批次（增减挂钩）城市建设用地的请示》（鄂州政文〔2020〕45号）收悉。现批复如下：

一、同意你市呈报的《征收土地方案》和《使用国有土地方案》。

二、同意征收你市杨叶镇古塘村集体农用地7.0839公顷（含耕地6.3007公顷）、集体建设用地6.1392公顷；另同意使用国有建设用地0.11公顷。该批次共计批准建设用地13.3331公顷。

该批次用地位于城乡建设用地增减挂钩项目建新区范围。你市要严格按照《国务院关于严格规范城乡建设用地增减挂钩试点切实做好农村土地整治工作的通知》（国发〔2010〕47号）、《省国土资源厅关于严格规范城乡建设用地增减挂钩试点工作的意见》（鄂土资发〔2011〕71号）和《省国土资源厅关于改进城乡



湖 北 省 人 民 政 府

建 设 用 地 批 件

鄂政土批〔2024〕191 号

省人民政府关于鄂州市
2023 年度第 32 批次城市建设用地的批复

鄂州市人民政府：

你市《关于 2023 年度第 32 批次城市建设用地的请示》（鄂州政文〔2023〕77 号）收悉。现批复如下：

一、同意你市呈报的《农用地转用方案》。

二、同意将你市燕矶镇车湖村、杨叶镇古塘村集体农用地 3.4203 公顷（含耕地 2.7677 公顷）转为建设用地并办理征收手续。该批次共计批准建设用地 3.4203 公顷。

三、你市要进一步落实补充耕地任务，采取措施，提高已补充耕地的质量。

四、你市接到批复后，要按照《中华人民共和国土地管理法》和国家、省的有关法律法规和政策规定，做好土地征收的实施工作。严格执行省政府公布的征地补偿标准（鄂政发〔2023〕16 号）。

湖 北 省 人 民 政 府

建 设 用 地 批 件

鄂政土批〔2023〕1270 号

省人民政府
关于鄂州市 2023 年度第 16 批次（增减挂钩）
城市建设用地的批复

鄂州市人民政府：

你市《关于 2023 年度第 16 批次（增减挂钩）城市建设用地的请示》（鄂州政文〔2023〕67 号）收悉。现批复如下：

一、同意征收你市燕矶镇车湖村、杨叶镇古塘村集体农用地 3.1952 公顷（含耕地 1.9836 公顷）、集体建设用地 0.1458 公顷。该批次共计批准建设用地 3.3410 公顷。

该批次用地位于城乡建设用地增减挂钩项目建新区范围。你市要严格按照《国务院关于严格规范城乡建设用地增减挂钩试点切实做好农村土地整治工作的通知》（国发〔2010〕47 号）、《省国土资源厅关于严格规范城乡建设用地增减挂钩试点工作的意见》（鄂土资发〔2011〕71 号）和《省国土资源厅关于改进城乡建设

湖 北 省 人 民 政 府

建 设 用 地 批 件

鄂政土批〔2023〕277 号

省人民政府
关于花湖机场北通道项目（管廊及基础配套）
建设用地的批复

鄂州市人民政府：

你市《关于花湖机场北通道项目（管廊及基础配套）建设用地的请示》（鄂州政文〔2023〕19 号）收悉。现批复如下：

一、同意你市呈报的《农用地转用方案》。

二、同意将你市燕矶镇车湖村、路牌村、杜湾村、青山村，杨叶镇古塘村集体农用地 18.9446 公顷（含耕地 10.5798 公顷）转为建设用地并办理征收手续；另征收集体建设用地 4.6954 公顷。该项目共计批准建设用地 23.6400 公顷，土地用途为公路用地。你市要严格按照国家产业政策和供地政策，以划拨方式供地。

三、你市要进一步落实补充耕地任务，采取措施，提高已补充耕地的质量。

湖 北 省 人 民 政 府

建 设 用 地 批 件

鄂政土批〔2020〕1256 号

省人民政府关于鄂州市
2020 年度第 12 批次城市建设用地的批复

鄂州市人民政府：

你市《关于 2020 年度第 12 批次城市建设用地的请示》（鄂州政文〔2020〕14 号）收悉。现批复如下：

一、同意你市呈报的《农用地转用方案》《补充耕地方案》《使用国有土地方案》和《征收土地方案》。

二、同意将你市杨叶镇古塘村、燕矶镇坝角村、沙窝乡走马村集体农用地 48.2714 公顷（含耕地 32.0651 公顷）、未利用地 0.0792 公顷转为建设用地并办理征收手续，征收集体建设用地 10.9467 公顷；另同意将国有未利用地 9.0808 公顷转为建设用地，并使用国有建设用地 1.5955 公顷。该批次共计批准建设用地 69.9736 公顷。

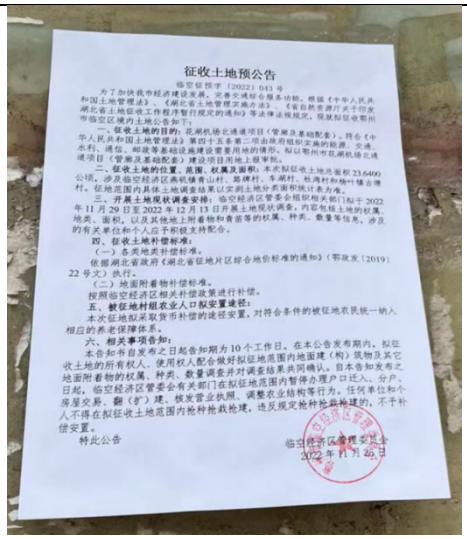
三、你市要进一步落实补充耕地方案，采取措施，提高已补充耕地的质量。

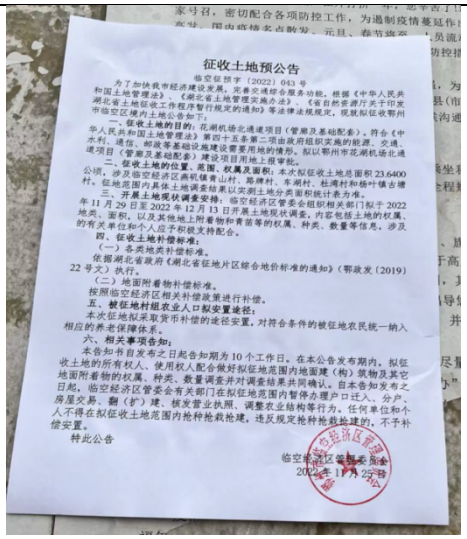
四、你市接到批复后，要按照《中华人民共和国土地管理法》

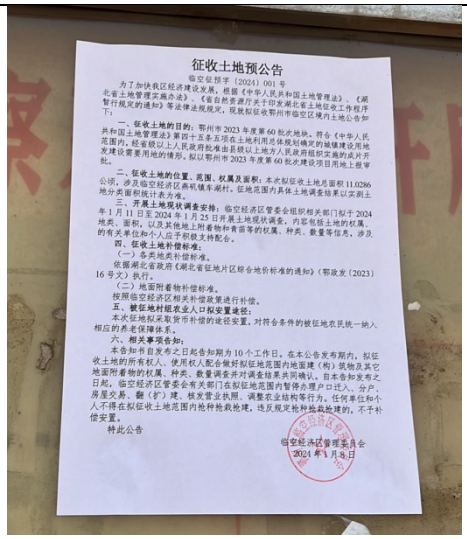
Figure 2.4-1 Approval of Construction Land

2.4.2 Public Notice of Land Acquisition

From November to December 2022, the Management Committee of Linkong Economic Zone issued a pre-announcement on land acquisition for the Huahu Airport North Passage Project including the associated facility Wuchu Avenue Project, which announced the scope of land use, planning red line map, prohibition regulations, compensation and resettlement basis, hearing regulations, etc.







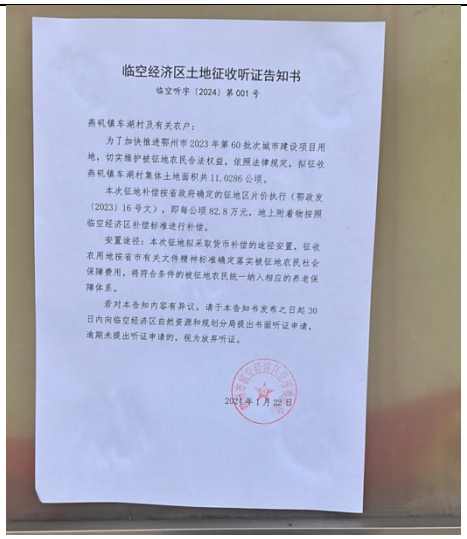


Figure 2.4-2 Part of Public Notice of Land Acquisition

2.4.3 Compensation Standards for Land Acquisition

According to the *Land Administration Law of the People's Republic of China*, *Regulations on the Implementation of the Land Administration Law of the People's Republic of China*, *Measures for the Implementation of Land Management in Hubei Province*, *Measures for the Administration of Land and Resources in Ezhou City*, *Notice on Publishing and Implementing the District-based Comprehensive Land Price Standards for Land Acquisition in Hubei Province* (EZF [2019] No. 22), *Notice on Publishing and Implementing the District-based Comprehensive Land Price Standards for Land Acquisition in Hubei Province* (EZF [2023] No. 16) and relevant provisions of compensation standards for young crops and ground attachments made by Ezhou Linkong Economic Zone according to the above standards, Compensation for

collective land acquisition includes land compensation, resettlement subsidy and compensation for young crops and ground attachments. Compensation for collective land acquisition in Chehu Village and Duwan Village of Yanji Town is made according to the standard for collective land acquisition. The district-based comprehensive compensation standards are implemented for land acquisition, as shown in Table 2.4-1. See Table 2.4-2 for the analysis of the replacement cost of compensation standard for land acquisition.

Table 2.4-1 District-based Comprehensive Compensation Standards for Collective Land in Yanji Town and Yangye Town

Town/Township	Year	Compensation standard for land acquisition (RMB/mu)	Compensation Standards for Young Crops (RMB/mu)	Compensation standard for ground attachments (RMB/mu)
Yanji Town	2020	55200	1700	5000
	2021-2024		2100	
Yangye Town	2020	55200	1700	5000
	2021-2024		2100	

Policy basis: Notice on Publishing and Implementing the District-based Land Price Standards for Land Acquisition in Hubei Province (EZF [2019] No. 22) and Notice on Publishing and Implementing the District-based Land Price Standards for Land Acquisition in Hubei Province (EZF [2023] No. 16).

Table 2.4-2 Analysis of Replacement Cost of Compensation Standard for Land Acquisition

Compensation for land acquisition (RMB/mu)	Risk-free return of compensation investment (RMB/year.mu) (A)	Average annual income loss due to land acquisition (RMB/year.mu) (B)	Difference (A-B)	Remarks
55200	2208	1800	408	The risk-free return on compensation investment is calculated at an average annual rate of 4% from the purchase of bank financial products.

2.4.4 Process of Land Acquisition, House Demolition and Compensation

Yanji Town People's Government of Ezhou Linkong Economic Zone is the land acquisition implementation unit of the Project, and Ezhou Natural Resources and Planning Bureau is responsible for the overall management and supervision of land acquisition and compensation.

The progress of land acquisition activities, including the land required for the associated facility of the Hubei Global Air Cargo Logistics Hub Project — Phase I Project, is as follows:

For the 12th and 81st batches of land acquisition activities of 2020, the status survey registration and field measurement of the land area were carried out in early 2020, the compensation agreement was signed in April 2020, and the compensation payment was completed by the end of 2020. Land compensation was made according to the standard of land compensation and resettlement subsidy of RMB 55,200/mu, young crops compensation of RMB 1,700/mu and ground attachments compensation of RMB 5,000/mu.

For the 27th batch of land acquisition activities of 2021, the status survey and registration and field measurement of land area were carried out in 2020, the compensation agreement was signed in February 2021, and the compensation payment was completed in September-October 2021. Land compensation was made according to the standard of land compensation and resettlement subsidy of RMB 55,200/mu, young crops compensation of RMB 2,100/mu and ground attachments compensation of RMB 5,000/mu.

For the land acquisition activities to the south of Wuchu Avenue (including 32 batches), the status survey and registration and field measurement of the land area were carried out in 2022, the compensation agreement was signed in August 2023, and the compensation payment was completed by the end of 2023. Land compensation was made according to the standard of land compensation and resettlement subsidy of RMB 55,200/mu, young crops compensation of RMB 2,100/mu and ground attachments compensation of RMB 5,000/mu.

For the 16th and 60th batches of land acquisition activities of 2023, the status survey and registration and field measurement of the land area were carried out at the beginning of 2023, the compensation agreement was signed in April 2023, and the compensation payment was completed by the end of 2023. Land compensation was made according to the standard of land compensation and resettlement subsidy of RMB 55,200/mu, young crops compensation of RMB 2,100/mu and ground attachments compensation of RMB 5,000/mu.

For the associated facility Wuchu Avenue Project, the status survey and registration and field measurement of the land area were carried out in 2022, the compensation agreement was signed in October 2022, and the compensation payment was made in late 2022-early 2023. Land compensation was made according to the standard of land compensation and resettlement subsidy of RMB 55,200/mu, young

crops compensation of RMB 2,100/mu, surface clearance compensation of RMB 1,500/mu, and ground attachments compensation of RMB 5,000/mu.

For the land acquisition compensation involving contracting households, the method of "compensating the person whose land is acquired" is adopted. The land compensation (including land compensation and resettlement subsidy) and crop compensation are directly paid to the land-expropriated households without land reallocation. 10% is retained by the village collective, which is based on the democratic discussion and decision of the villagers' meeting. For land managed by the village collective that has not been contracted to households, the land compensation is directly owned by the village group collective and used as public welfare expenditure for all villagers.

The specific process of land acquisition and compensation is as follows: First, it shall be confirmed by the township government. Then the affected households will sign a Land Acquisition Compensation Agreement (see Attached Figure 1 for details) with the People's Government of Yanji Town in Ezhou Linkong Economic Zone to confirm the area of land acquired and the amount of compensation. After the compensation is allocated to the village collective, the village committee convenes the group leader of the villagers' group where the affected households are located to sign and receive full land compensation. Subsequently, the group leader will pay compensation to each household involved in land acquisition. Compensation work has been completed and there are no remaining issues.

The total amount of land acquisition compensation and resettlement subsidy generated by land acquisition activities including the land for associated projects is RMB 127,843,100, which has been distributed to each household. Among them, the compensation for young crops is RMB 3.7618 million; land compensation and resettlement subsidy are RMB 114.292 million; ground attachments within the scope of land acquisition are compensated according to the compensation standard of RMB 5000/mu in the Linkong Economic Zone, with a total compensation amount of RMB 9.7885 million. There are no remaining problems, as shown in Table 2.4-3.

Associated	Land Acquisit	Town/Township	Village	Compensation amount for acquisition of collective land (RMB 10,000)

projects	ion Batch			Land compensation and resettlement subsidy	Compensation for young crops	Compensation for ground attachments	Total
Associated Facilities - Phase I Project	12th batch of 2020	Yangye Town	Gutang Village	4894.78	150.75	443.39	5489.11
		Yanji Town	Bajiao Village	144.72	4.46	13.11	162.29
		Subtotal		5039.5	155.21	456.5	5651.4
	81st batch of 2020	Yangye Town	Gutang Village	1094.48	33.71	99.14	1227.32
		Yanji Town	Bajiao Village	9.51	0.29	0.86	10.66
		Subtotal		1103.99	34	100	1237.98
	27th batch of 2021	Yangye Town	Gutang Village	971.26	36.95	87.98	1096.19
		Yanji Town	Bajiao Village	1086.89	41.35	98.45	1226.69
			Chehu Village				
		Subtotal		2058.15	78.3	186.43	2322.88
	16th batch of 2023	Yangye Town	Gutang Village	7.29	0.28	0.66	8.23
		Yanji Town	Chehu Village	269.4	10.25	24.4	304.05
		Subtotal		276.69	10.53	25.06	312.28
	60th batch of 2023	Yanji Town	Chehu Village	913.39	34.75	82.73	1030.87
	South of Wuchu Avenue (including 32 batches)	Yanji Town	Chehu Village	1535.22	40.54	96.52	1672.27
		Subtotal		1535.22	40.54	96.52	1672.27
Associated Facility — Wuchu Avenue Road Project	Associated Facility — Wuchu Avenue Project	Yanji Town	Chehu Village	502.26	22.75	31.61	556.62
			Duwan Village				
Total				11429.2	376.08	978.85	12784.31

Table 2.4-3 Details of Compensation for Land Acquisition in Associated Projects

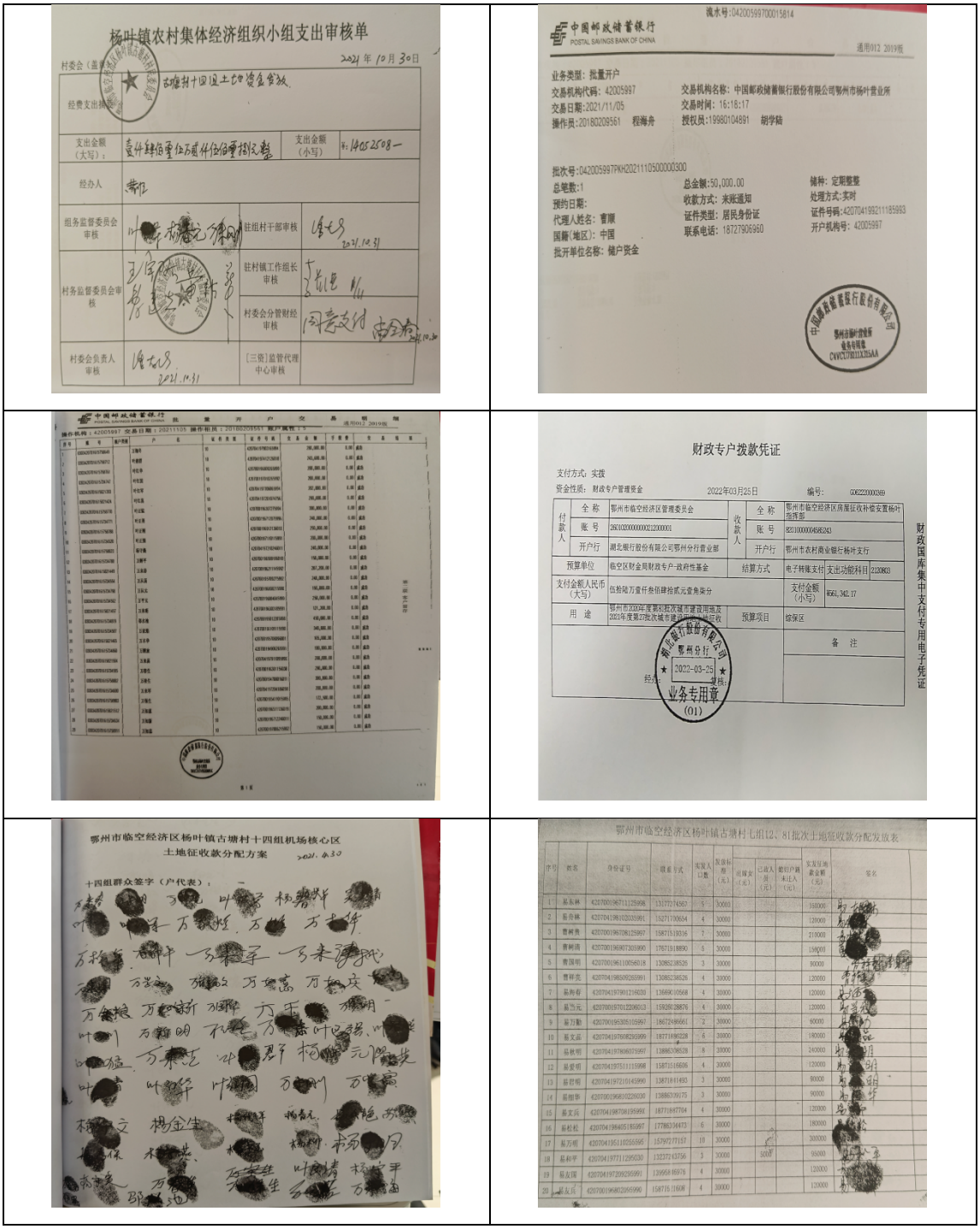
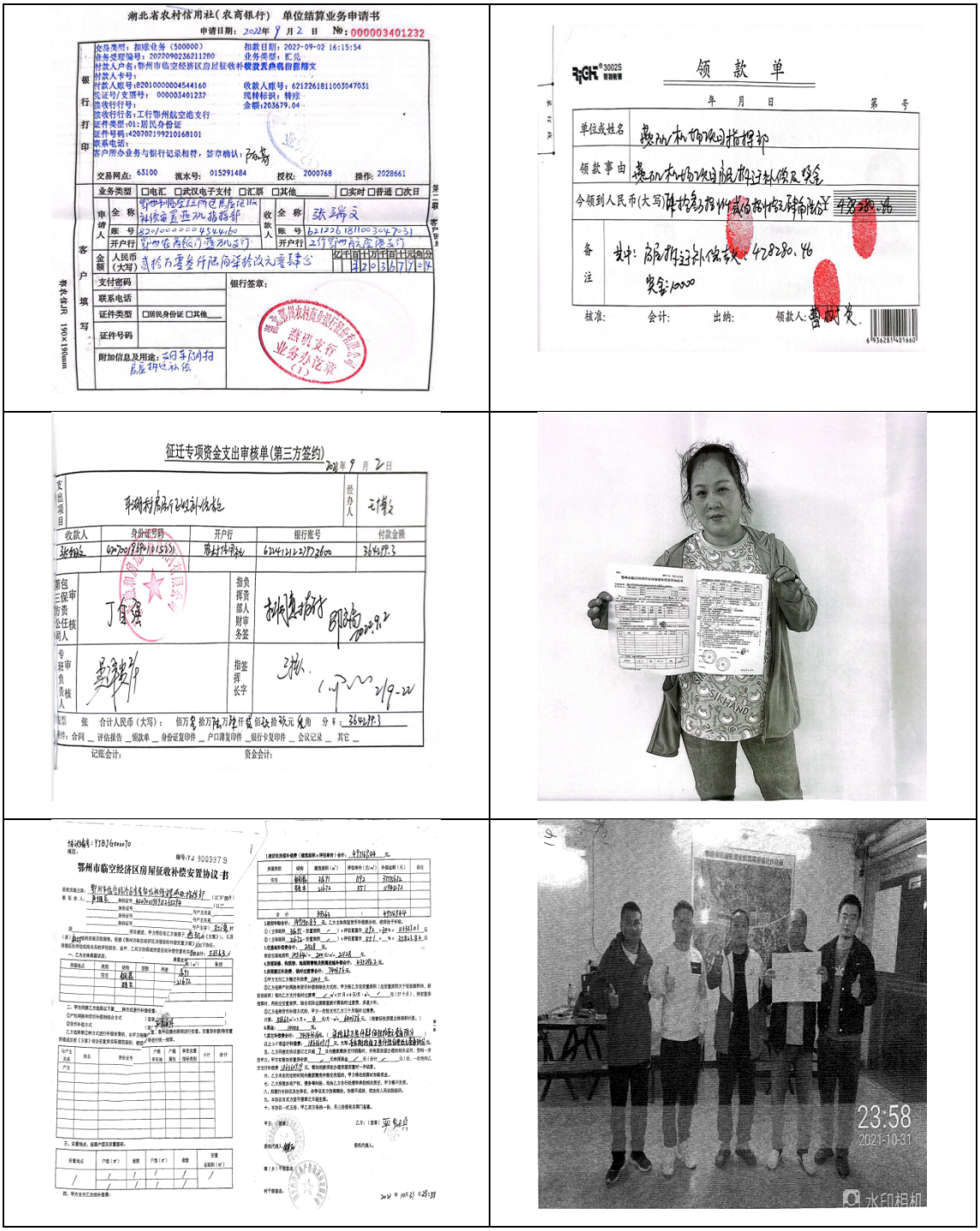


Figure 2.4-3 Part of Release and Payment Voucher of Compensation

2.4.5 House Demolition and Payment

In the house demolition within the scope of the Hubei Global Air Cargo Logistics Hub Project supported by the AIIB loan and the land use scope of two associated projects, a total of 170,945.75 m^2 residential houses need to be demolished, with a total demolition compensation of RMB 323,917,700. Moreover, one temple (Polong Temple)

involved has been demolished, and the site selection for reconstruction is under way. The reconstruction is expected to start by the end of 2024. The demolition compensation of RMB 4.3503 million has been paid. At present, the compensation for house demolition within the scope of the Project has been completed and paid in full to its owners. All households affected by demolition have obtained one or more resettlement houses from 2022 to April 2024, and the remaining 261 resettlement houses are planned to be delivered in 2026. There are no remaining issues.



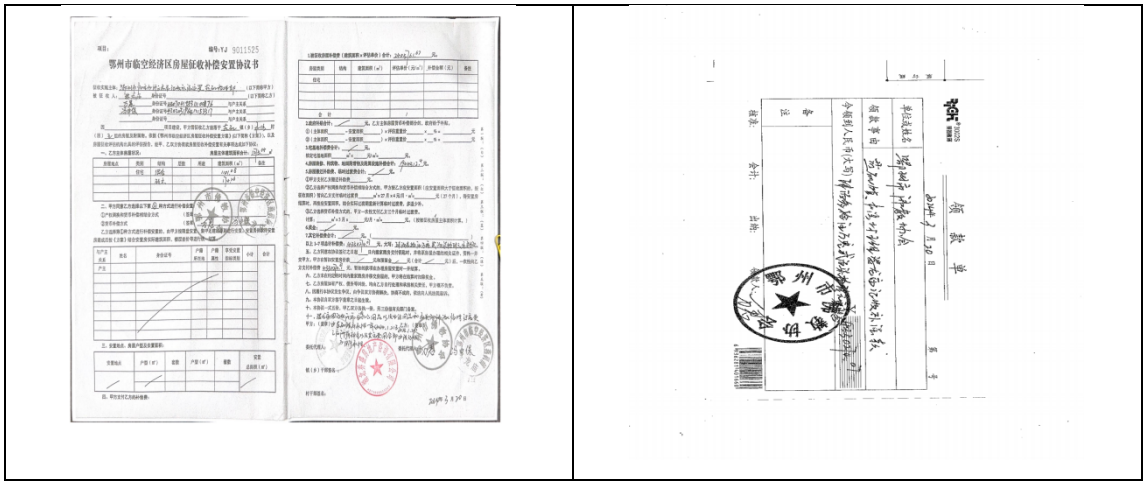


Figure 2.4-4 Part of Demolition and Resettlement Agreement and Compensation Payment (including Polong Temple)

2.5 Analysis of Livelihood Restoration Measures for Affected Households after Land Acquisition

2.5.1 Implementation of Livelihood Restoration and Development for Affected Households

According to the different degrees of land and income losses, the people's governments of Yanji Town and Yangye Town and relevant government departments of Ezhou City have taken various measures to restore the income and life of affected households, mainly including: 1) cash compensation; 2) industrial structure adjustment to increase agricultural income; 3) employment opportunities created during project construction and operation; 4) tertiary industry development combined with project construction; 5) public service job opportunities; 6) skill training (especially for jobs requiring a large number of workers nearby); 7) Social insurance measures. According to different batches of acquisition, pension insurance for 2557 land-expropriated farmers who are qualified has been provided. See Figure 2.5-1 for payment voucher, and see Attached Figure 3 for relevant policies.

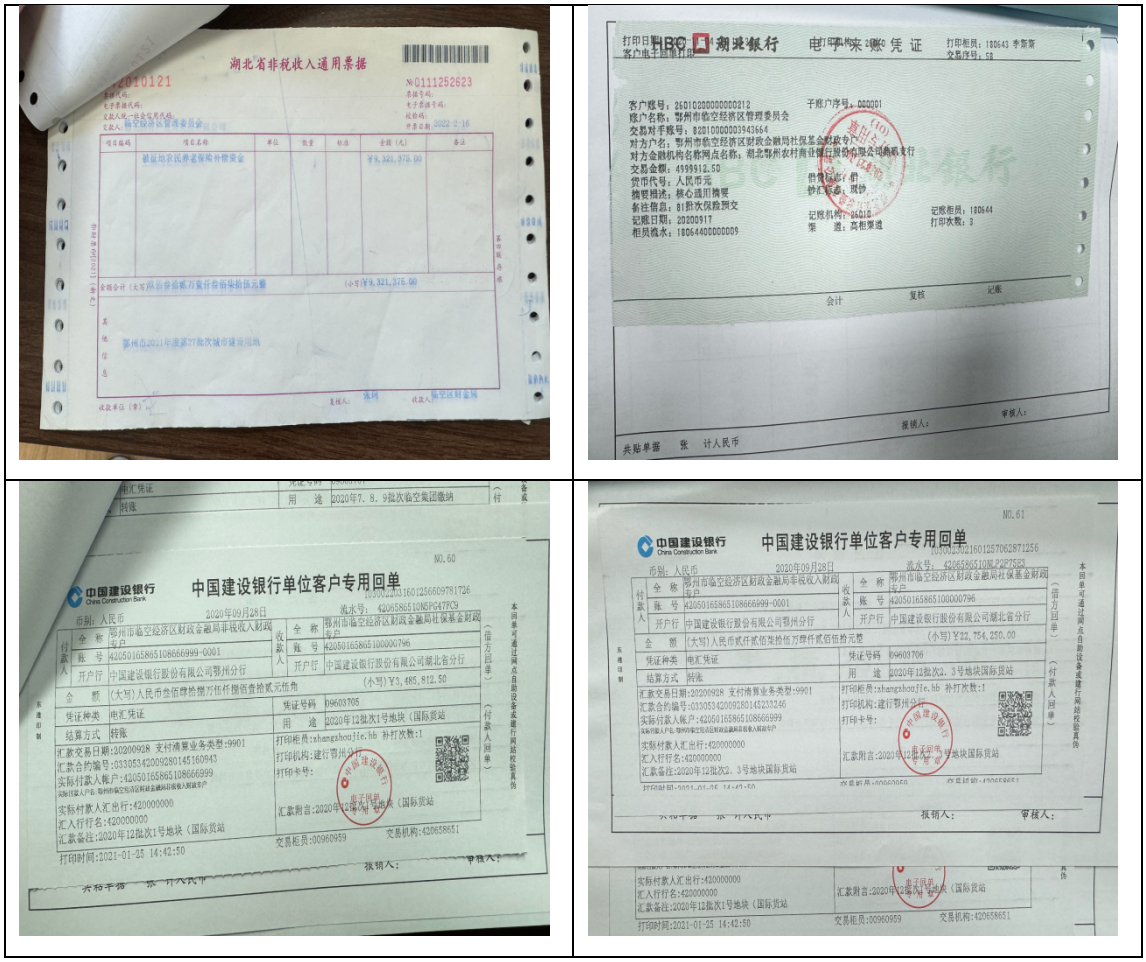


Figure 2.5-1 Part of Payment Voucher of Pension Insurance for Land-expropriated Farmers

Table 2.5-1 List of Livelihood Restoration Measures for Land-expropriated Farmers

Town/Township	Village/sub-village	Affected households (Nr.)	Coverage of diversified livelihood restoration measures (household/person)						
			Monetary compensation	Industrial structure adjustment	Project employment	Employment in the tertiary industry	Government public service positions	Social security (person)	Training
			Household(s)	Household(s)	(Person)	(Person)	(Person)		(Person)
Yanji Town	Chehu Village	369	69	66	168	321	38	389	1010
	Duwan Village	55	55	8	28	39	4	56	49
	Bajiao Village	62	62	12	26	70	22	122	100
Yangye Town	Gutang Village	693	693	120	383	898	58	1100	1860
Total		1179	879	206	605	1328	122	1667	3019

2.5.2 Livelihood Restoration and Satisfaction Evaluation of Affected Population

2.5.2.1 Livelihood Restoration of Affected Population

In the process of due diligence, a total of 220 sample households from the affected population were surveyed within the scope of Hubei Global Air Cargo Logistics Hub Project financed by AIIB and the land use scope of two associated projects to evaluate their income changes before and after land acquisition. The survey results of the income level of sample households are shown in Table 2.5-2.

Table 2.5-2 Comparison of Livelihood Sources and Income Levels of Households Affected by Land Acquisition (Unit: RMB/year/person)

Affected villages	Per capita income before land acquisition (2022)	Main sources of income before land acquisition	Main measures for income restoration	Per capita income after livelihood restoration (2024)	Main sources of income after land acquisition	Income increase percentage
Chehu Village	23111	Migrant workers, rice and peanut planting	Adjust the agricultural structure, provide jobs and carry out skill training	24610	Migrant workers, agricultural planting, transportation and commerce	6.4%
Duwan Village	23028	Migrant workers,	Adjust the agricultural	24200	Migrant workers,	5.1%

		rice and peanut planting	structure, provide jobs and carry out skill training		agricultural planting, transportation and commerce	
Gutang Village	23232	Migrant work Rice and peanut planting	Adjust the agricultural structure, provide jobs and carry out skill training	24111	Migrant workers, agricultural planting, transportation and commerce	3.78%

Data source: Due Diligence in December 2023 and April 2024 Sample size: Affected households N=30

2.5.2.2 Satisfaction Survey of Affected People

The due diligence team completed 220 livelihood restoration and satisfaction surveys for 220 affected households. The results showed that 100% of the respondents received cash compensation and distribution, 25% of households were involved in agricultural resettlement, 79.5% were involved in non-agricultural employment and 67.5% were involved in skills training. 85% of the respondents were very satisfied with these livelihood restoration measures, and there was no dissatisfaction. In addition, 92.5% of the affected households reported an increased opportunity to earn income after the implementation of the livelihood restoration measures, and 95% of the affected households reported an increase in their income level, indicating that the implementation of the livelihood restoration measures is fruitful and has been unanimously recognized by the affected households.

Table 2.5-3 Satisfaction Questionnaire on Livelihood Restoration Measures

S/N	Problems	Reply	Result (%)				
			(1)	(2)	(3)	(4)	(5)
1	What is your age?	① Young ② Middle-aged ③ Elderly	18	50	32	0	0
2	How many people are there in your family?	① <=3 ② 3<x<= 5 ③x>5	10	45	45	0	0
3	What is your education level?	① Illiterate and semi-literate ② Primary school ③ Secondary school ④ Junior college or above	5	31	59	5	0
4	What livelihood restoration measures have you received?	① Cash compensation and distribution ② Agricultural resettlement ③ Non-agricultural	100	25	79.5	67.5	45

		employment ④ Skill training ⑤ Others (multiple choices)					
5	Are you satisfied with these livelihood restoration measures?	① Very satisfied ② Satisfied ③ Just so-so ④ Dissatisfied ⑤ Very dissatisfied	55	30	15	0	0
6	In the process of livelihood restoration, how do you express your opinions and views?	①I do not know who to report ② Report directly to the neighborhood committee/village cadres or ask others to report ③ Report directly to the neighborhood committee/government above village level or ask others to report ④ Report to the media ⑤ Report to the Employer	0	60	20	0	20
7	Opportunity to earn income after livelihood restoration measures	① Obviously increased ② Slightly increased ③ Basically unchanged ④ Slightly decreased ⑤ Obviously decreased	50	42.5	7.5	0	0
8	Incomes after the implementation of livelihood restoration measures compared with before	① Obviously increased ② Slightly increased ③ Basically unchanged ④ Slightly decreased ⑤ Obviously decreased	37.5	57.5	5	0	0
9	After the implementation of livelihood restoration measures, are you satisfied with your current life?	① Very satisfied ② Satisfied ③ Just so-so ④ Dissatisfied ⑤ Very dissatisfied	32.5	62.5	5	0	0

2.6 Information Disclosure, Public Participation and Grievance Handling

2.6.1 Information Disclosure

During the preliminary preparation of the Project, relevant departments of the Ezhou Municipal Government released the project information in a timely manner.

Figure 2.6-1 Part of Project Information Publicity

2.6.2 Public Participation and Consultation

During the preparation period and land occupation implementation period of the Huahu Airport North Passage Project, including the associated facility Wuchu Avenue Project, great importance was attached to public participation and consultation, and many public participation and consultation activities were carried out to ensure a high degree of public participation. The main public participation process and results are shown in Table 2.6-1.

Table 2.6-1 Public Participation Process and Results

Location	Time	Theme	Activities	Number of participants
Yanji Town Government	August-October 2022	Physical quantity survey and publicity of compensation and resettlement plan	Detailed physical quantity survey, physical quantity verification survey, publicity of compensation policy and resettlement plan	49 (including 26 females)
Yanji Town	September	Survey of social	Learn about the	55 (including 30

Location	Time	Theme	Activities	Number of participants
Government	2022	economy and resettlement aspiration	awareness, attitude and willingness of the affected residents regarding the impact of the Project and land acquisition through such means as symposiums.	females)
Yanji Town Government	October 2022-January 2023	Advisory meetings	Consult and negotiate the compensation standard, resettlement plan and income recovery measures.	22 (including 13 females)
Yanji Town Government	April 2023	Meeting publicity and mobilization	The staff of relevant land acquisition implementation units go deep into the project site to carry out land acquisition negotiation and agreement signing.	62 (including 26 females)
Yanji Town Government	April 2024	Survey on appeals and willingness for demolition and resettlement	Understand the affected residents' awareness of the progress of resettlement housing construction and follow-up demands through symposiums, etc.	38 (18 women)
Total				226 (113 women)

2.6.3 Grievance Handling

During land acquisition and resettlement, local governments strictly abide by relevant domestic procedures for land acquisition and demolition, and actively carry out public participation and consultation activities. The detailed appeal procedure is as follows:

Stage 1 (5 days): If some one is not satisfied with any aspect of the land acquisition compensation and resettlement plan, he or she may make an oral or written complaint to the local village committee in the project area. If the grievance is oral, the project area village committee should make a written record. The village committee will: (1) Immediately require the complained subject to stop the related activities after confirming the issue; (2) Ensure that the complained subject does not resume the related activities until the complaint is resolved; (3) Immediately inform AIIB PMO of Ezhou Linkong Group of the complaint content and the proposed solution; (4) Provide

a clear response to the affected person within two days; (5) Resolve the issue as much as possible within five days of receiving the complaint.

Stage 2 (15 days): If the complainant is not satisfied with the handling results of the project area village committee, they can make an oral, telephone, or written grievance to the township-level government or the AIIB PMO of Ezhou Linkong Group after receiving the handling results. The AIIB PMO of Ezhou Linkong Group or the township government will: (1) Retrieve the original grievance records and organize a meeting with key stakeholders (including the subject of the complaint and the complainant) within five days. Develop a solution that is acceptable to all parties, outlining the key steps to resolve the issue. (2) The subject of the complaint shall immediately implement the resolution and resolve the issue within 15 days. All measures and outcomes shall be documented.

Stage 3 (15 days): If the complainant is not satisfied with the handling results of the township government or the AIIB PMO of Ezhou Linkong Group, they can make an oral, telephone, or written grievance to the Management Committee of Linkong Economic Zone or Ezhou Linkong Group, or directly file a lawsuit in the people's court after receiving the handling results. The Management Committee of Linkong Economic Zone or Ezhou Linkong Group will organize a stakeholder consultation meeting within two weeks (including the complainant, the subject of the complaint, and relevant functional departments such as the local Natural Resources and Planning Bureau, Resettlement Office, Human Resources and Social Security Bureau, Women's Federation, and Agriculture and Rural Affairs Bureau). The meeting shall establish a resolution acceptable to all parties, including clear steps for implementation. The subject of the complaint shall immediately implement the agreed-upon resolution and completely resolve the issue within 15 days. The actions and results of all these stages will be documented. At the end of Stage 3, Ezhou Linkong Group will inform the AIIB of the results.

Stage 4: If the complainant is still not satisfied with the above decisions, they may file a lawsuit with the Civil Court in accordance with the "Civil Procedure Law of the People's Republic of China" after receiving the decision.

The land acquisition work has received the support and understanding of the vast majority of affected farmers in the affected Yanji town. Compensation funds have been fully distributed according to the standard, and the affected households are highly satisfied, so there is no special complaint record.

3 Conclusions

3.1 Conclusions of Due Diligence on Environmental Management

As of the due diligence period in May 2024, the Type-B Bonded Logistics Center in Phase I Project (associated facility), has passed the on-site acceptance on April 9, 2024. The international cargo terminal, quarantine treatment center, 1# and 3# customs kiosks, and customs inspection center have been completed, the construction of International Express Center, Business Logistics Center, Dangerous Goods Warehouse, Bonded Logistics Warehouse and Bonded Processing Plant has not yet started by the due diligence, while the international express center has not started at the time of investigation; Wuchu Avenue (associated facility) is close to completion.

By the time of the due diligence, there are no work safety accidents, environmental pollution accidents, or complaints from construction personnel and surrounding residents during the construction of the Project. We have checked that the implementation of environmental management at construction site and construction camp meets the Environmental and Social Policy (ESP) requirements in the Environmental and Social Management Plan (ESMP) and relevant requirements in the Construction Contract. Associated facility—Phase I Project, construction camp management, waste gas management, wastewater management, noise management, solid waste management, soil and water conservation management, ecological management, occupational health and safety management, publicity of grievance redress mechanism during the construction period of Phase I Project, and associated facility—Wuchu Avenue, institutional strengthening, contract management, ecological management, waste gas management, wastewater management, noise management, solid waste management, environmental risk management, construction safety and occupational health management, publicity of grievance redress mechanism and other work during the construction period all meet the requirements of the Environmental and Social Policy (ESP) in the Environmental and Social Management Plan (ESMP) and the relevant provisions on environmental and social management in the corresponding Construction Contract.

The current situation of environmental and social management during the construction period of the associated facilities — Phase I Project and Wuchu Avenue Construction Project generally meets the requirements of AIIB's environmental and social policies.

3.2 Conclusions of Due Diligence on Social Management (Resettlement)

3.2.1 Impact of Land Acquisition

For the associated facility of Hubei Global Air Cargo Logistics Hub Project — Phase I Project, 425.2 mu of rural collective land has been acquired within its land use scope, which is included in the land acquisition activities of the 12th batch of 2020, the 81st batch of 2020, the 27th batch of 2021, the 16th batch of 2023, the 60th batch of 2023 and the land acquisition activities to the south of Wuchu Avenue (including 32 batches) (a total of 1,979.54 mu, affecting 978 households and 4,207 people). 90.99 mu of collective land is acquired for the Wuchu Avenue Project (associated facility), all of which are collective land in Chehu Village and Duwan Village under Yanji Town in Ezhou Linkong Economic Zone, affecting 105 households and 443 people. Including associated facilities of the Hubei Global Air Cargo Logistics Hub Project, Phase I Project and Wuchu Avenue Road Project, the completed land acquisition activities involved a total of 2,070.53 mu of land, affecting 1,083 households and 4,650 people.

The house demolition within the scope of the Hubei Global Air Cargo Logistics Hub Project supported by the AIIB loan and the house demolition caused by land acquisition activities including the land required for associated projects are located in Duwan Village and Chehu Village of Yanji Town (since it is carried out at the same time as the demolition activities in the master plan of Ezhou Linkong Economic Zone and Huahu Airport, the associated projects cannot be separated), with a total residential housing demolition area of 170,945.75m^2. A total of 713 households and 2,776 people are affected.

Agricultural income is a relatively small part of the income sources of some households. The project site is located in the airport economic zone, close to the main urban area of Ezhou City. Farmers have more work and business opportunities, and their family income does not completely depend on land and agricultural income.

Therefore, on the whole, the land acquisition of the Project has a limited impact on the income of affected households. At the same time, the construction and operation of the Project will bring a large number of business and employment opportunities to this area. The investigation showed that the respondents all expressed their support for land acquisition. After land acquisition, the government has provided corresponding compensation in full and on time, which is of great help in restoring normal production and life.

3.2.2 Implementation Progress of Land Acquisition

According to this due diligence, for the house demolition involved in the AIIB project and the land and house demolition involved in the associated facilities of the Hubei Global Air Cargo Logistics Hub Project — Phase I Project and Wuchu Avenue Project, acquisition and compensation have been completed in 2021- early 2024. The households affected by demolition have obtained one or above resettlement houses, and the remaining resettlement houses are planned to be delivered in 2026. Compensation has been paid to the affected farmers in full and on time.

3.2.3 Land Compensation Standard and Payment

Ezhou City conducted land compensation in accordance with the *Notice on Publishing and Implementing District-based Comprehensive Land Price Standards for Land Acquisition in Hubei Province* (EZF [2019] No. 22) and the *Notice on Publishing and Implementing District-based Land Price Standards for Land Acquisition in Hubei Province* (EZF [2023] No. 16). Land compensation was made according to the standard of land compensation and resettlement subsidy of RMB 55,200/mu, young crops compensation of RMB 2,100/mu, surface clearance compensation of RMB 1,500/mu, and ground attachments compensation of RMB 5,000/mu. The compensation for land, young crops and ground attachments complied with relevant laws, regulations and policies at the time of land acquisition. According to the sampling survey of 30 affected households, all compensation payments were made to households in 2022-2023 in accordance with the compensation standards, and there were no cases of misappropriation or underpayment.

3.2.4 Livelihood Restoration

On the basis of land compensation, relevant Ezhou municipal government departments, airport economic zone government and township governments have taken various measures in a timely manner to help affected farmers restore their livelihoods. The specific measures include monetary compensation, agricultural development measures, non-agricultural employment promotion, skill training, and pension insurance for land-expropriated farmers. The affected farm households are satisfied with the implementation of livelihood restoration measures and their income levels have been effectively restored. The per capita income of affected households increased from RMB 23,111 and RMB 23,028 in 2022 before land acquisition to RMB 24,610 and RMB 24,200 in 2024, an increase of 6.4% and 5.1% respectively.

3.2.5 Satisfaction Evaluation

The land required for the Wuchu Avenue Project (associated facility) is included in the land acquisition for the road construction of the Huahu Airport North Passage Project. The project road will significantly improve the local road traffic conditions, directly benefit farmers along the line, and also connect the expressway network leading to Wuhan City and Huanggang City, making local transportation more convenient, making local transportation more convenient and accelerating the promotion of the project.

According to the field investigation, the construction of roads and channels not only facilitates the travel of villagers but also facilitates the transportation of products and going out for work. The economic income of villagers has increased compared with that before. Villagers are very satisfied with this project and have high expectations and support for the following Huahu Airport Supporting Project. Relevant information on the Project and land acquisition compensation has been released in a timely manner, the affected population have effectively participated in the consultation activities in land acquisition compensation, and no complaints or dissatisfaction have been received during the social audit.

3.2.6 Outstanding Issues

According to the field investigation, there are some remaining problems in the Project, which need to be solved as soon as possible.

(I) Part of the 60th batch of construction land in 2023 belongs to the commencement land of the Project in early stage. Due to the slow handling of land acquisition procedures, the approval for construction land has not been obtained yet. It is expected that the approval will be obtained by the end of August 2024, and subsequently confirmed by the external resettlement and social monitoring agency;

(II) As the demolition activities within the land use scope of the Project are carried out together with those for the airport project, a large number of people will be affected, and it is impossible to provide sufficient resettlement houses for the affected people in time. The households affected by demolition have obtained one or more resettlement houses from 2022 to April 2024, but the resettlement community for subsequent allocation is still under construction, and 261 sets of resettlement houses have not been delivered. The Due Diligence Team has confirmed with the Land Acquisition and Demolition Office of Lingkong Economic Zone: After construction of the resettlement community, it can be ensured that people affected by demolition will obtain all unallocated houses. The resettlement community is planned to be delivered in 2026. The external resettlement and social monitoring agency needs to focus on the progress of resettlement housing delivery;

(III) As there is a temple (Polong Temple) within the scope of project construction land, it needs to be demolished and reconstructed at the selected site according to laws and regulations. After negotiation between the Project Management Office and the local government, the Polong Temple has been demolished in early 2024, and the selection of site for reconstruction is under way. The reconstruction work is expected to start by the end of 2024. Subsequently, the external resettlement and social monitoring agency needs to pay attention to the reconstruction of Polong Temple.

Table 3.2-1 Overview of Outstanding Issues and Monitoring Contents

No.	Outstanding issue	Reason	Monitoring contents
1	The approval for the 60th batch of construction land in 2023 has not been	Part of the 60th batch of construction land in 2023 belongs to the commencement land of the Project in early stage. Due to the slow handling of land	It is expected that the approval will be obtained by the end of August 2024, and subsequently confirmed by the external

	obtained yet.	acquisition procedures, the approval for land has not been obtained yet.	resettlement and social monitoring agency.
2	261 sets of resettlement houses have not been delivered.	As the demolition activities within the land use scope of the Project are carried out together with those for the airport project, a large number of people will be affected, and it is impossible to provide sufficient resettlement houses for the affected people in time. The households affected by demolition have obtained one or more resettlement houses from 2022 to April 2024, and the resettlement community for subsequent allocation is still under construction.	The resettlement community is planned to be delivered in 2026, which will ensure that demolition-affected people receive all unallocated houses, and the external resettlement and social monitoring agency will need to focus on the progress of the delivery of resettlement houses.
3	**The reconstruction of Polong Temple has not started yet.**	As there is a temple (Polong Temple) within the scope of project construction land, it needs to be demolished and reconstructed at the selected site according to laws and regulations. After negotiation between the Project Management Office and the local government, the Polong Temple has been demolished in early 2024, and the selection of site for reconstruction is under way.	The reconstruction work is expected to start by the end of 2024. Subsequently, the external resettlement and social monitoring agency needs to pay attention to the reconstruction of Polong Temple.

Annex 1: List of Due Diligence Results on Environmental Management of Phase I Project (Associated Facility)

Table 1 List of Due Diligence Results on Environmental Management during the Construction Period of Phase I Project (Associated Facility)

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
Construction camp management	(1) Living conditions of workers: The living camp must be equipped with temporary buildings and facilities such as guard rooms, dormitories, canteens, toilets, washing facilities, shower rooms, laundry rooms, boiling water rooms or drinking water insulation barrels, closed dustbins, etc. The living camp must be reasonably hardened and afforested, with effective drainage measures provided. Rainwater and sewage must be drained smoothly without ponding in the site area. The canteen in the living camp shall be a single-storey building and shall maintain a safe distance from the dormitories. Drinking water must meet the national hygiene standards, and temporary boiled water supply points must be provided. (2) Site selection: The construction camp site shall be far from nature reserves, scenic spots, basic protected farmland, and other environmentally sensitive areas. The construction camp will be built mainly for living functions, and the production equipment and materials will be stored at local construction sites. (3) Treatment of waste gas, wastewater	➢ **Situation of September 2023** (1) The canteen is equipped with cooking fume purifiers, sinks are equipped with oil-water separators, and the liquefied gas storage room is set up, with the storage quantity strictly controlled. The dormitory is a two-floor house with indoor air conditioners and bunk double beds. Each bed can only accommodate one person at most. Domestic waste collection facilities are provided in the camp. The canteen is a single-storey building, with good sanitary conditions in the kitchen, rich dishes and reasonable matching. The camp is equipped with special hot water supply points, toilets and bathrooms for men and women, independent compartments, public wash areas and washing machines. (2) The construction camp	Meet the requirements	/

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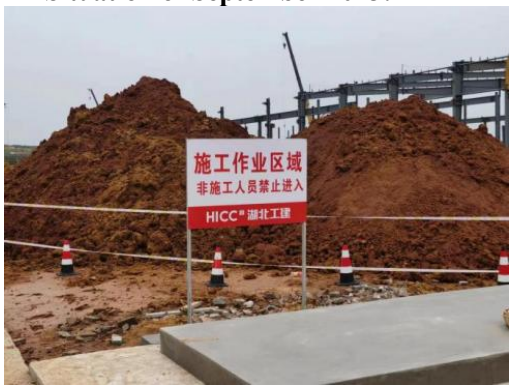
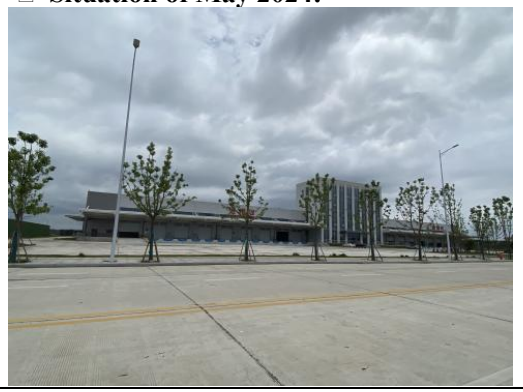
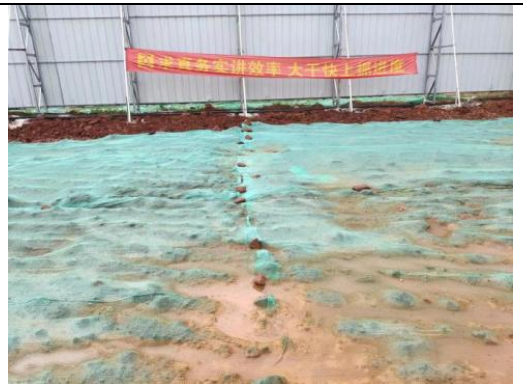
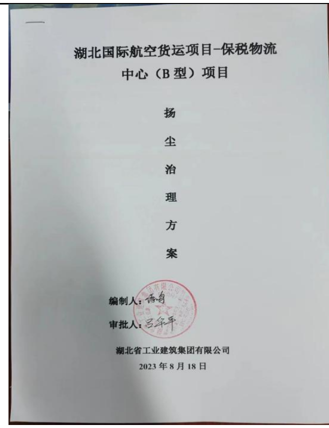
	and solid waste: The camp is equipped with a canteen, and the cooking fume in the canteen shall meet the requirements of Emission Standard of Cooking Fume (Trial) (GB 18483-2001) after being treated by high-efficiency electrostatic cooking fume purifier. Each camp shall be equipped with oil-water separators and septic tanks. Domestic wastewater undergoes treatment through measures such as oil separation and septic tank treatment to meet the Class III standard of the Integrated Wastewater Discharge Standard and then discharged into the surrounding municipal pipeline network. Several waste containers are placed at each construction camp this time, and the domestic waste will be sent to the landfill in Ezhou City for sanitary landfill after being uniformly collected by the sanitation department. (4) Materials storage: The canteen in the construction camp involves the use of liquefied petroleum gas (LPG), and the standby generator in the construction site involves the use of diesel. Therefore, the construction camp shall be equipped with storage rooms for LPG tanks and diesel drums. The storage room shall be	site does not involve nature reserves, scenic spots, basic protected farmland, and other environmentally sensitive areas. The construction camp will be built mainly for living functions, and the production equipment and materials will be stored at local construction sites. (3) During the investigation period, the camp was equipped with cooking fume purification devices, domestic sewage treatment facilities and waste containers. The disposal of waste gas, wastewater and solid waste met relevant requirements (4) During the investigation period, there was no cooking fume purification and separate liquefied petroleum gas storage room in the camp, but it has been rectified subsequently. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled		

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	with signs of no smoking and open flame.	camp during the construction period was carried out as required, and there were no environmental pollution, worker complaints and other problems.		
Waste gas management	(1) Construction sites shall be enclosed and fenced to the construction boundary according to the standard; Technical Standards for Setting Construction Boundary of Ezhou Construction Project shall be implemented, and access control management at the entrance and exit of the construction site shall be strengthened. For the height of the enclosure, the site enclosure constructed along the landscape avenue shall not be lower than 5m. The site enclosure for main road sections in urban areas shall not be lower than 2.5m and that for general road sections shall not be lower than 1.8m; (2) There is no obvious road damage and no sewage or mud polluting the surrounding environment in the construction site and around the site within 50 meters of it.	➢ **Situation of September 2023:** The construction site is surrounded by 5m high fences. There is no obvious road damage and no sewage or mud polluting the surrounding environment in the construction site and around the site within 50 meters. ➢ **Situation of May 2024:** By the time of this due diligence, 1# and 3# customs kiosks, quarantine treatment center, customs inspection center, Type-B bonded logistics center and international cargo terminal have been completed, some enclosures have been removed, and there are still some 5m high enclosures. There is no obvious road damage and no sewage or mud polluting the surrounding environment in the	Meet the requirements	➢ **Situation of September 2023:**  ➢ **Situation of May 2024:** 

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(3) Cement, lime and other construction materials prone to generating dust on the construction site shall be stored in warehouses and containment areas. Surplus soil and construction waste shall be piled up centrally, and open burning of any kind of waste on-site is strictly prohibited.	➢ **Situation of September 2023:** The current construction process does not involve the use of materials such as cement and lime. Temporary excavation is temporarily stored at the construction site and piled up in a centralized manner. ➢ **Situation of May 2024:** By the time of this due diligence, all buildings have been completed except for those not commenced, and the remaining soil, construction waste and various wastes have been cleaned up.	Meet the requirements	➢ **Situation of September 2023:**  ➢ **Situation of May 2024:** 
	(4) The uncovered ground/earthwork at the construction site shall be covered with	➢ **Situation of September 2023:** Covering measures have	Meet the requirements	➢ **Situation of September 2023:**

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		operation area. ➢ **Situation of May 2024:** By the time of this due diligence, all projects under construction have been completed without bare ground.		 ➢ **Situation of May 2024:** 
	(5) Targeted special plans for construction dust prevention and control shall be formulated.	➢ **Situation of September 2023 and May 2024:** A special plan for dust prevention and control has been	Meet the requirements	➢ **Situation of September 2023 and May 2024:**

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
				 湖北国际航空货运项目–保税物流 中心（B 型）项目 扬尘治理方案 编制人： 审批人： 湖北省工业建筑集团有限公司 2023 年 8 月 18 日
	(6) Spraying and dust suppression facilities shall be installed as required, and water shall be sprayed to suppress dust according to the site conditions.	➢ **Situation of September 2023:** The construction site is equipped with water spraying and dust suppression facilities, with water sprayed regularly. ➢ **Situation of May 2024:** By the time of this due diligence, all projects under construction have been completed, and water spraying and dust suppression facilities have been set up as required during the construction period.	Meet the requirements	➢ **Situation of September 2023:**  ➢ **Situation of May 2024:** Dismantled
	(7) Vehicle washing and cleaning	➢ **Situation of September**		

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	according to regulations, and three-level washing facilities must be set up at the excavation site: Flushing tank (flushing platform) or automatic flushing equipment and sedimentation basin (drainage ditch), wheel washer, and high-pressure water gun; Vehicles leaving the site shall be washed clean before driving away from the construction site, and vehicles are not allowed to drive with mud on the road; Full-time cleaners shall be assigned at the entrance and exit of the road in the excavation stage, with no less than 1-2 persons for daily cleaning. They are responsible for washing and cleaning vehicles entering and leaving the site. Sedimentation and drainage facilities shall be set up to prevent sewage overflow.	pool at the exit of the construction site. Construction vehicles will leave the construction site after being washed; full-time personnel are assigned to wash vehicles; a three-level sedimentation tank has been built. ➢ **Situation of May 2024:** By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled.		 ➢ **Situation of May 2024:** Dismantled
	(8) For construction machinery and vehicles, select vehicles with environmental protection qualifications and vehicle inspection qualification marks, with emissions up to standard. Use low-sulfur gasoline or low-sulfur diesel oil and strengthen routine maintenance to ensure their proper use and avoid	➢ **Situation of September 2023:** Regular inspections shall be carried out and register books shall be maintained. ➢ **Situation of May 2024:** By the time of this due diligence, the construction period has ended. During the construction period, construction	Meet the requirements	/

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		emission control were strengthened.		
Wastewater management	(1) Temporary septic tanks, oil-water separators and other domestic sewage treatment facilities shall be set up at the construction personnel's camp.	➢ **Situation of September 2023:** Domestic sewage treatment facilities such as temporary septic tanks and oil-water separators have been set up. ➢ **Situation of May 2024:** By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled.	Meet the requirements	➢ **Situation of September 2023:**  ➢ **Situation of May 2024: Dismantled**
	(2) Intercepting ditches shall be set up around the construction site to intercept rainwater runoff, and oil-water separators and sedimentation tanks shall be set up in the construction site to treat the collected construction wastewater and rainwater with oil separation and sedimentation, which shall be used for sprinkling and dust prevention at the construction site as well as for washing of vehicles and machinery, and shall not be discharged	➢ **Situation of September 2023:** Drainage systems such as intercepting ditches around the construction site are under construction. ➢ **Situation of May 2024:** By the time of this due diligence, all projects under construction have been completed and corresponding facilities have been dismantled.	Meet the requirements	➢ **Situation of September 2023:** It is required to complete the construction of the drainage system on the construction site as soon as possible, build surrounding intercepting ditches according to regulations, and set sedimentation tanks at the outlets of intercepting ditches. ➢ **Situation of May 2024:** Dismantled

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(3) Large-scale earthwork excavation shall not be carried out during the rainy season. Necessary soil and water conservation measures shall be taken for the temporary storage site for construction materials and waste (slag), and the drainage system of the construction site shall be kept unobstructed.	➢ **Situation of September 2023:** The main earth-rock excavation works have been completed, the temporary soil storage yard in the site is covered, and the construction site is fenced as a whole. However, the drainage system is still under construction. ➢ **Situation of May 2024:** By the time of this due diligence, all projects under construction have been completed. The rainstorm season was avoided during the construction period, and the water and soil conservation is in good condition.	Meet the requirements	➢ **Situation of September 2023:**  ➢ **Situation of May 2024:** Construction period has ended
	(4) Oil and chemical solvents stored at the construction site shall be provided with a special warehouse, and proper anti-leakage treatment shall be carried out on the ground. Abandoned oil and chemical solvents shall be disposed of in a centralized way and shall not be dumped at will.	➢ **Situation of September 2023:** At present, no oil, chemical solvents or other dangerous goods are used or stored on the construction site or in the construction camp. ➢ **Situation of May 2024:** By the time of this due	Meet the requirements	/

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		complaints have been received during the construction period.		
Noise management	(1) Reasonably schedule the construction time and work duration, and prohibit nighttime construction (22:00 to 6:00); if nighttime construction is necessary due to construction processes, a Nighttime Construction Permit must be obtained as required, and nearby residents must be notified;	➢ **Situation of September 2023 and May 2024:** There are no residential areas within 500m around the Project, which does not involve the impact of noise on the lives of the surrounding residents.	Meet the requirements	/
	(2) When developing a construction plan, select low-noise equipment and plan the layout of machinery and equipment reasonably. Try to avoid the centralized use of a large number of power mechanical equipment at the same time or in the same location; for machines used intermittently, close the throttle or minimize it during the working interval.	➢ **Situation of September 2023 and May 2024:** There is no site where a large number of construction machines are centrally arranged and operated at the same time on the construction site. During the lunch break from 12: 00 to 14: 00, the operation of construction machines in the airport construction camp is suspended to ensure that workers in the construction camp can rest.	Meet the requirements	/
	(3) Strengthen regular equipment maintenance and adhere to strict operating procedures to avoid abnormal equipment	➢ **Situation of September 2023 and May 2024:** Construction equipment is regularly inspected on site by the	Meet the requirements	➢ **Situation of September 2023:** The Construction Contractor shall establish an equipment maintenance register book. ➢ **Situation of May 2024:**

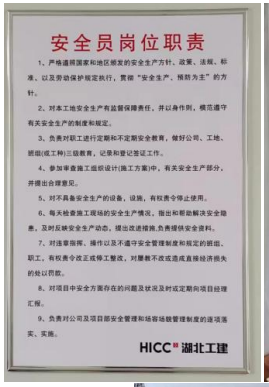
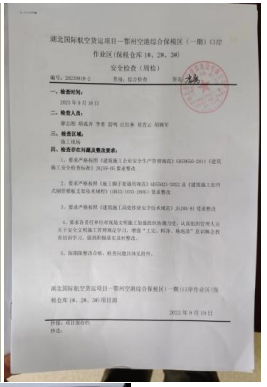
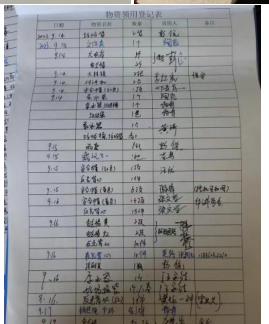
Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(4) Provide noise personal protective equipment for workers engaged in high-noise operations;	➢ **Situation of September 2023 and May 2024:** During the investigation of the Project, no high-noise construction process is involved.	Meet the requirements	/
	(5) Reasonably formulate the transportation route and time. During transportation, try to avoid passing through residential areas, densely populated sections with sensitive points, and peak hours. When transport vehicles pass through noise-sensitive areas such as residential areas, schools and hospitals, they shall travel at a low speed and avoid using horns to ensure the normal lives of surrounding residents.	➢ **Situation of September 2023 and May 2024:** The muck transportation route of the Project has been reported to the relevant administrative departments in the district. There is no school or hospital along the route, and the residential areas along the route are far away from the red line of the road.	Meet the requirements	/
Solid waste management	(1) Dispose of construction waste in strict accordance with the relevant regulations on construction waste management in Ezhou City.	➢ **Situation of September 2023** The remaining soil of the Project is topsoil, which is a resource with high utilization value. It is integrated and balanced in other construction sites within the Linkong Economic Zone, and all of them are backfilled. This is in line with the requirements of the Management Measures for	Meet the requirements	/

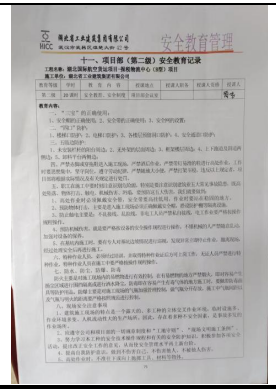
Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		By the time of this due diligence, all projects under construction have been completed, and the construction waste during the construction period has been disposed of in strict accordance with the relevant regulations on the management of construction waste in Ezhou City.		
	(2) Keep the construction site clean and tidy. The waste (domestic waste and construction waste) shall be collected separately and stored centrally. For waste that cannot be reused, ensure it is properly handled by the sanitation department to ensure harmless treatment.	➢ **Situation of September 2023** The construction camp is equipped with domestic waste collection facilities, which are regularly removed by the district sanitation department every day. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed. The site is free of waste and the road surface is clean.	Meet the requirements	/
	(3) It is strictly prohibited to pile up construction waste, muck, domestic waste and other wastes generated during construction on the slope protection along	➢ **Situation of September 2023** The phenomenon does not exist. ➢ **Situation of May 2024**	Meet the requirements	➢ **Situation of September 2023:** The Construction Contractor shall establish a register book for the transportation and disposal of construction solid wastes. ➢ **Situation of May 2024**

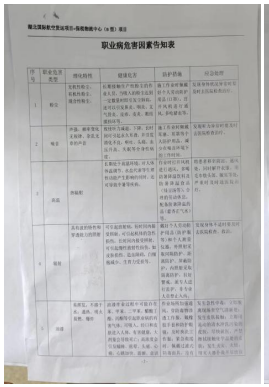
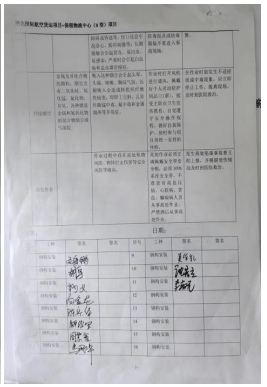
Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		muck, domestic waste and other wastes generated during construction are piled up on the slope protection along the surrounding port canal or lake water body or dumped into the water body.		construction period.
	(4) The management of hazardous chemicals and hazardous wastes during construction will comply with laws and regulations.	➢ **Situation of September 2023** The use of hazardous chemicals is not involved in the construction of the Project. The hazardous wastes are mainly mineral oils such as lubricating oil and engine oil used for machine maintenance, and there is only minor oil leakage, which has little impact on the environment. The management of hazardous wastes during construction is legal and compliant. ➢ **Situation of May 2024** According to the investigation, during the construction period, there are no environmental risk events caused by hazardous wastes, and the		

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
Measures for water and soil conservation	(1) Strictly control the construction site boundary and minimize the disturbance to surface vegetation;	➢ **Situation of September 2023** The boundary of the construction site does not exceed the red line of the Project, and enclosure measures conforming to the regulations of Ezhou City are set up around the boundary. ➢ **Situation of May 2024** During the construction period, the site boundary does not exceed the red line of the Project.	Meet the requirements	/
	(2) Apply temporary covering measures for the exposed surface disturbed by construction to reduce water and soil loss;	➢ **Situation of September 2023** The exposed surface of the non-operation area is covered. ➢ **Situation of September 2023** By the time of this due diligence, all projects under construction have been completed, and no water and soil loss has occurred during the construction period.	Meet the requirements	/
	(3) Avoid earth-rock excavation in the rainy season to prevent erosion or direct	➢ **Situation of September 2023** Temporary covering	Meet the requirements	/

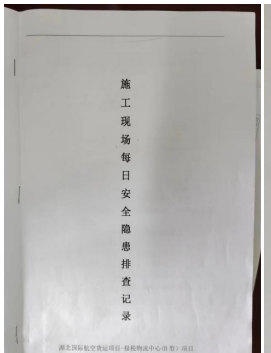
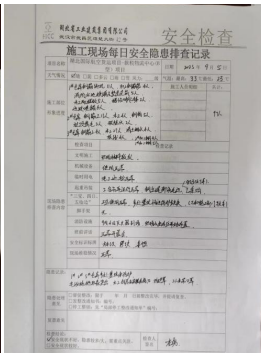
Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and temporary covering measures have been removed.		
	(4) Construct drainage ditch systems in the main project area, ensure the stability of temporary stacking yards' slopes, use filled woven bags for stacking and blocking, and cover with shelter during rainy days.	➢ **Situation of September 2023** Covering measures have been taken for the exposed surface and temporary soil storage yard on the site, but the drainage ditch system has not been established. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed, and no relevant complaints or reports have been received during the construction period.	Meet the requirements	/
Ecological measure	(1) Train workers on the requirements for wildlife protection measures and prohibit fishing within the turnaround waters;	➢ **Situation of September 2023 and May 2024** Pre-job training is provided to construction workers and the phenomenon did not occur.	Meet the requirements	/

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
		strictly limited to the red line of the Project.		
	(3) Prohibit the use of herbicides and pesticides that have been expressly banned during construction;	➢ **Situation of September 2023 and May 2024** This phenomenon does not occur.	Meet the requirements	/
Health and safety	(1) The Contractor shall prepare a construction safety measure plan according to the actual safety construction requirements of the Project and submit it to the Engineer and Employer for approval within 7 days before commencement; The Contractor shall formulate construction safety operation procedures in strict accordance with national safety standards, strictly implement the provisions of relevant national laws and regulations, provide necessary work safety and labor protection facilities, strengthen safety education for its personnel, and distribute safety protective equipment; The Contractor shall also pay full attention to and ensure the safety of all personnel working on site, and take measures to keep the site and the implementation of the contract project in an orderly manner so as not to endanger the safety of relevant	➢ **Situation of September 2023** Full-time safety management department and work safety management personnel are set as required, and construction safety plan is formulated and regular safety inspections are conducted; construction workers are provided with safety protection equipment. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. During the construction period, production management has been carried out according to relevant	Meet the requirements	  

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	provisions of the Work Safety Law of the People's Republic of China and the Administrative Regulations on the Work Safety of Construction Projects. Full-time work safety management personnel shall be responsible for supervising and inspecting the work safety site and making inspection records. If any hidden danger of work safety accident is found, they shall report to the project leader and the work safety leader in time. In case of violations of command, operation and labor discipline, they shall stop them immediately.			
	(2) The Contractor shall carry out safety education and training for its employees to ensure that they have the necessary knowledge of work safety, are familiar with relevant safety production rules and regulations and safety operation procedures, and master the safety operation skills of their posts. Employees who have not passed the qualification examination of work safety education and training shall not be allowed to work.	➢ **Situation of September 2023** Work safety education and training have been carried out regularly. ➢ **Situation of May 2024** Regular training is carried out as required during the construction period.	Meet the requirements	

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(3) The Contractor shall provide necessary safety protection equipment and safety protection clothing to the operators, inform them in writing the operational procedures of dangerous posts, and ensure that the operators are familiar with and have mastered the relevant contents and the hazards of illegal operations. Operators have the right to criticize, report, and accuse safety problems in the operating conditions, procedures, and methods at the construction site, and have the right to refuse unauthorized commands and forced risky operations. In the event of an emergency that could endanger personal safety during construction, the operators shall have the right to stop the operation immediately or evacuate from the dangerous area after taking necessary emergency measures.	➢ **Situation of September 2023** Protective equipment has been provided and occupational health hazards have been notified. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. Protective equipment is provided as required during construction, and occupational health hazards are notified.	Meet the requirements	 职业病危害因素告知录 

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(4) The Contractor shall set up eye-catching safety warnings and safety protection facilities at the entrances and exits of the construction site or all intersections along the route, mixing plants, construction machinery, temporary electric facilities, blasting materials and storage of harmful and hazardous gases and liquids, as well as in hazardous areas such as hole and foundation pit edges, scaffolding, wharf edges, and bridge edges. The Contractor shall take corresponding safety construction measures at the construction site according to different construction stages and changes in the surrounding environment, seasons and climate.	➢ **Situation of September 2023** Warning signs are provided at the construction site. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. Relevant management requirements are followed during construction.	Meet the requirements	
	(5) The Contractor shall establish a fire safety responsibility system at the construction site, determine the person responsible for fire safety; formulate various fire control management systems and operational procedures for the use of fire, electricity, and explosive and flammable materials; set up firefighting accesses, and provide with corresponding fire prevention facilities and fire	➢ **Situation of September 2023** Fire prevention facilities and fire extinguishing equipment are provided on the construction site. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and workers have	Meet the requirements	

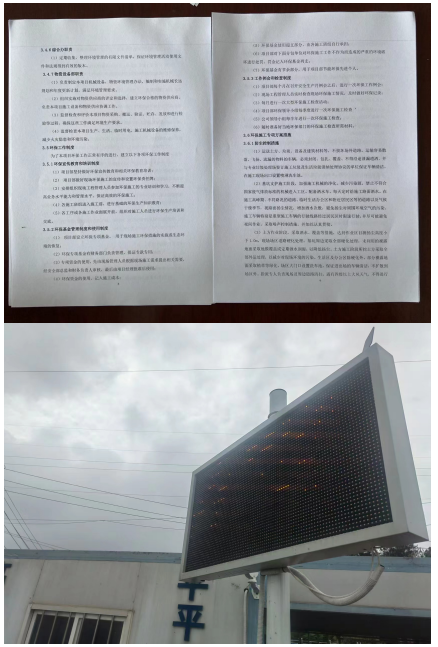
Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(6) Special types of work (electricians, elevator workers, lifting workers, electric welders, vehicle and vessel drivers, blasters, divers and gas operators) shall receive professional training and hold certificates issued by relevant departments. The Contractor's vertical transportation machinery operators, installation and dismantling workers, lifting signalmen, electricians and welders, and other special operation personnel specified by the state shall pass special safety operation training and obtain qualification certificates for special operations before taking up their posts.	➢ **Situation of September 2023** Holding certificates before taking posts is strictly implemented for all special types of work. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed and workers have been withdrawn. During the construction period, holding certificates before taking posts is strictly implemented for all special types of work.	Meet the requirements	/
	(7) Full-time work safety management personnel shall be responsible for supervising and inspecting the work safety site and making inspection records. If hidden dangers of work safety accidents are found, they shall report to the project leader and the person in charge of work safety in a timely manner; In case of violations of command, operation and labor discipline, they shall stop them	➢ **Situation of September 2023** Daily inspections and records are carried out by full-time work safety management personnel, and on-site corrective requirements are made. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been	Meet the requirements	 

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
	(8) The Contractor shall establish workers' health records and conduct regular physical examinations for workers; Carry out health education for construction personnel, encourage individuals to take protective measures and avoid transmitting diseases to others by using condoms; In addition, encourage the use of mosquito repellents, clothing, mosquito nets and other blocking methods to avoid mosquito bites from transmitting diseases; Comply with national and local regulations and guidelines for COVID-19 prevention and control, as well as successful international health and safety practices.	➢ **Situation of September 2023** The Construction Contractor shall strengthen the health management related to diseases of construction personnel. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed. During the construction period, rectification and implementation are carried out according to relevant management requirements.	Meet the requirements	/
	(9) To prevent the Project from being damaged, or for the safety and convenience of the people near the site and passing by, the Contractor shall provide protective measures such as lighting, guards, and fences.	➢ **Situation of September 2023** The entrance and exit of the construction site are access-controlled and guarded, and there are fences around. ➢ **Situation of May 2024** By the time of this due diligence, all projects under construction have been completed. The site is arranged according to relevant	Meet the requirements	

Category	Management Requirements	Implementation on construction site	Compliance with management requirements	Relevant supporting materials/rectification suggestions
Grievance redress mechanism	(1) The Project Implementation Unit and the Construction Contractor shall establish a grievance redress mechanism before construction, designate special personnel to be responsible for the grievance mechanism, and provide relevant training for the person in charge of the grievance mechanism. (2) The contact information of the grievance redress mechanism contact person, including phone number, address and email, shall be publicly disclosed.	The grievance redress mechanism has been implemented, a special grievance redress mechanism has been established and display boards have been set up on site.	Meet the requirements	

Annex 2: List of Due Diligence Results on Environmental Management of Wuchu Avenue (Associated Facility)

Table 2 List of Due Diligence Results on Environmental Management during the Construction Period of Wuchu Avenue (Associated Facility)

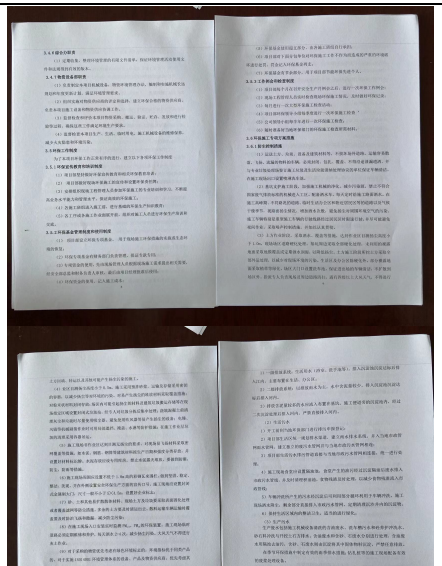
Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
Institutional strengthening	(1) Appoint at least one full-time and qualified support personnel in the project implementation unit. This person will be responsible for coordinating the implementation of the Environmental and Social Management Plan. (2) The project implementation unit will hire a third-party environmental and social monitoring company to provide external support.	(1) The Project is provided with 1 full-time safety and environment officer, who holds the qualification certificate of safety engineer and is responsible for coordinating the implementation of the environmental management plan. (2) The Project Implementation Unit has a real-time online monitoring system, and the Supervisor has carried out corresponding tracking monitoring at the construction site to monitor the noise and atmospheric particulates at the site boundary in real time. The monitoring data meet the Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011), Integrated Emission Standard of Air Pollutants (GB16297-1996), etc.	Meet the requirements	

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
Contract Management	(1) Incorporate the environmental protection measures in the environmental and social management plan into the contract for civil works and equipment installation of the Project. All contractors are required to strictly implement the Environmental and Social Management Plan.	(1) The environmental protection measures in the Environmental and Social Management Plan have been incorporated into relevant contracts as required.	Meet the requirements	11.4 环境保护 11.4.1 承包人在履行合同过程中，应遵守有关环境保护的法律，履行合同约定的环境保护义务，并对违反法律和合同的定义务所造成的环境破坏，人身伤害和财产损失负责。 11.4.2 承包人应按合同约定的环保工作内容，编制环保措施计划，报送监理人批准。 11.4.3 承包人应确保施工过程中产生的气体排放物、粉尘、噪声、地面排水及排污等，符合法律规定和发包人要求。
Ecological management	(1) Earth-rock allocation: During the design of subgrade excavation, embankment and ancillary works filling for main works, the earthwork excavated from subgrade shall be reasonably allocated for embankment filling, etc. (2) Slope engineering protection and greening: For fill sections and soil excavation sections, the slope protection method of spraying grass seeds + shrub seeds shall be adopted; for excavation sections of soft rock (including completely weathered hard rock) such as mudstone, argillaceous limestone and argillaceous shale, mortar rubble facing walls shall be built, and the slope protection method of spraying grass seeds + shrub seeds shall be adopted. (3) Subgrade drainage: Drainage systems for the subgrade and pavement shall be designed,	(1) During the construction period, excess earth-rock is transported to the backfilling area of Bajiao Village and the backfilling area of Woertang. (2) The slope is protected with green cloth. (3) In the construction stage, there were corresponding drainage systems for subgrade and pavement. By the time of this due diligence, the construction was close to completion and relevant systems had been removed. (4) In the construction stage, there were corresponding sludge stacking yards and construction access roads. By the time of this due diligence, the construction was	Meet the requirements	 

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	construction access road: Masonry intercepting ditches shall be set up around the sludge stacking yard. At the same time, retaining walls shall be set up to prevent the subgrade from being affected by unstable soil piling in the sludge stacking yard, and drainage ditches shall be set up in front of the toe of the retaining wall to collect rainwater on the slope surface. A grit chamber shall be set up at the outlet of the drainage ditch, and the water shall be discharged into nearby natural channels after sedimentation in the grit chamber. After the construction is completed, the occupied cultivated land and forest land shall be re-cultivated. After the sludge is solidified and dried, it shall be uniformly transported to the backfilling areas of Bajiao Village and Woertang by municipal muck trucks. Before the construction road is built, the topsoil within its occupied area shall be stripped and transported to the set temporary topsoil stacking yard. After the construction is completed, the pavement gravel layer shall be removed and covered with topsoil, and the occupied cultivated land and forest land shall be re-cultivated.	construction period is placed in a temporary stacking yard, partially backfilled after the completion of construction, and the excess topsoil is transported to the backfill area of Bajiao Village and the backfill area of Woertang.		
	(5) Recovery of permanent land occupation After the completion of all permanent	(5) ~ (8) As of the due diligence period, the construction is still in		

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	houses, both sides of waterways, etc. During restoration, according to the actual situation of each section, various construction slashes shall be greened and restored according to local conditions to minimize the construction traces in the project area. In the process of greening and restoration, local tree species and grass seeds shall be used as much as possible. It is better to use constructive species of original natural vegetation for restoration. (6) Restoration of road construction slash The construction access road shall be constructed in strict accordance with the requirements of design specifications. Manual slope cutting and filling must meet the requirements of stable slope, and corresponding engineering slope protection measures shall be taken according to the geological conditions along the route. The balance between excavation and filling shall be achieved as far as possible. A small amount of waste slag shall be piled up in the nearest project spoil yard in a centralized manner, and it is strictly prohibited to pile up or dump at random along the way. For the exposed surface, grass plant protection or mortar grid turf protection shall be adopted			

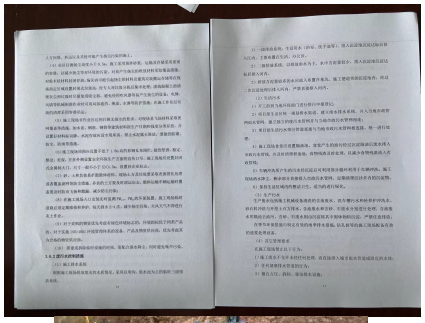
Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	arbors and shrubs shall be used for land restoration. Tree species suitable for local growth, such as Alnus cremastogyne, Cryptomeria fortunei, Cunninghamia lanceolata, Chinese ash, Coriaria sinica and Vitex negundo, shall be mainly selected for greening, with grass seeds sowed under the forest. (7) Restoration measures for construction and production facilities area During the construction of temporary construction facilities, the comprehensive utilization requirements shall be fully considered and the building landscaping design shall be carried out. After the completion of the Project, except that some temporary buildings and temporary roads in the temporary construction facilities shall be retained and reconstructed in combination with the planning of the assessment area, other temporary facilities and roads unrelated to the project construction shall be completely demolished. Temporary construction buildings and waste sundries shall be cleaned up in time, the exposed surface excavated during construction shall be treated, and the original use function of the occupied cultivated land shall be restored. Non-cultivated land shall be planted with			

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	facilities. (8) Vegetation restoration along the road If the landfill of road excavation will cause the road and the surrounding vegetation to be damaged, the steep slope formed after earth excavation shall be covered with corresponding grasses, and certain greening tree species shall be planted along the channel to achieve the functions of water and soil conservation, canal bank reinforcement and landscaping.			
Waste gas management	(1) Before construction, the site boundary wall or simple enclosure shall be built first. For example, corrugated boards or polypropylene cloth shall be used to build a fence with a height of 2.5 ~ 3.0m around the construction area to reduce the escape of dust and the impact on the surrounding environment. (2) In the residential areas near the proposed road, such as Lijiadun, Majiawan, Wangjiaranpu and Duwan Village environmental protection target areas, water shall be sprayed during construction and excavation to keep a certain humidity on the working face. The loose and dry topsoil in the construction site shall also be frequently sprayed with water to suppress dust; when	(1) By the time of due diligence, the construction was close to completion and the enclosure in the construction area had been removed. (2) ~ (4) During the construction period, dust suppression operation and management were carried out as required. No relevant complaints have been received by the time of due diligence. (5) During the construction period, waste building materials are not burned as fuel. After the construction is completed, vegetation restoration will be carried out in time for the	Meet the requirements	

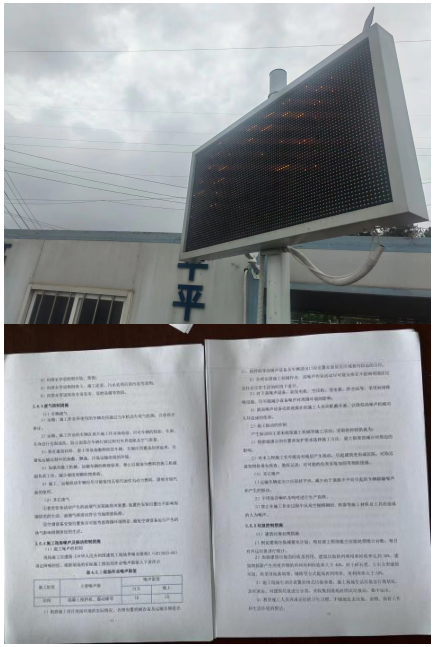
Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	assigned to take charge of cleaning on the construction site, and sprinkle water in time to reduce flying dust. One employee shall be arranged for each construction section to sprinkle water on the construction site regularly. The frequency of watering depends on the weather conditions. In general, water shall be sprinkled once in the morning (7:30-8:30), noon (12:00-13:00) and evening (17:30-19:00) during rush hours every day. When the wind speed is greater than Grade 3 and it is sunny in summer, water shall be sprinkled every 2 hours. (3) To enhance the management of temporary soil storage yards, measures on compaction, regular water spraying, coverage of earthwork surface and so on shall be formulated, and the unwanted soil and building material dregs shall be removed in time and cannot be accumulated for a long time. (4) During construction, a fully enclosed construction method shall be adopted to prevent dust pollution. Materials that are easy to produce dust pollutants such as sand and gravel stacked on the construction site shall be classified and centralized, with a stacking height of less than 0.7m. A closed fence shall	during the construction period are reasonable, which does not cause great impact. (7) During the construction period, vehicle loading is managed as required. (8)~(9) During the construction period, they were managed according to the requirements of waste gas management, and no complaints were received from residents along the route by the time of due diligence.		  

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	transportation of dust materials, and the drop of equipment discharge shall be minimized without affecting the construction. (5) It is prohibited to burn the discarded construction material as fuel. At the end of construction, vegetation restoration shall be carried out in a timely manner on sites occupied by construction. (6) Efficient vehicle transportation management and deployment on the site shall be achieved to reduce idling time. The running route and time of transport vehicles shall be planned, and driving in sensitive areas such as prosperous areas, traffic concentration areas and residential buildings shall be avoided as far as possible. For sections with high environmental requirements, night transportation shall be selected according to the actual situation to reduce the impact of dust on the environment. (7) Earth-moving trucks and building material transport vehicles shall be equipped with overflow prevention equipment according to regulations, and the load should not be too full to ensure that it will not scatter during transportation. Materials like lime and fine sand must be compacted during transportation. The filling height is forbidden			 

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	prohibited. Earthwork, sand and gravel materials and spoil shall be transported by covering with tarpaulin and wet method to prevent leakage of materials during transportation. Cement concrete shall be transported by enclosed tank trucks. (8) The Employer and the Construction Contractor shall clearly define the HSE-compliant construction responsibility in the contract according to law, and strictly implement the system of HSE-compliant construction measures and the "three guarantees" responsibility system on site. The construction of the Project shall be fully enclosed with retaining walls. The roads on the construction site shall be hardened, and the exposed soil on non-construction working faces shall be covered with dust screens or greened with simple plants. It is recommended to install atomizing spraying dust suppression facilities on the construction site. (9) The Employer shall cover the sludge in the storage yard or spray deodorant and dust suppressant; set up walls or other protective fences in the sludge storage yard, and set up obvious warning signs; set up enclosures around treatment facilities such as slurry			

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	the Construction Contractor shall arrange the construction progress of dredging works in a compact manner to minimize the impact on residents along the route during the construction period.			
Wastewater management	(1) A large amount of muddy water and rainwater generated during construction contain suspended solids with high concentration, which shall not be discharged in the form of seepage pit, seepage well or overflow. Management and control shall be strengthened, and special ditches shall be set up for the discharged sewage. The Construction Contractor of the Project shall build a wastewater sedimentation tank at the construction site, and the supernatant shall be reused. (2) The construction site shall be arranged as far away from Huama Lake as possible, leaving a green isolation buffer zone. (3) Eye-catching signs shall be set up on the construction site. It is forbidden to pour domestic waste and sewage into surrounding ditches. A fixed domestic waste dump shall be set up and incorporated into the domestic waste removal system for timely removal. (4) It is strictly prohibited to discharge and flow construction production wastewater	(1) At the time of due diligence, the construction entered the final stage, and no wastewater was generated at this stage. During the construction period, the construction site is well controlled and managed by the Supervisor according to wastewater management requirements without causing pollution to the surrounding areas. (2) Wuchu Avenue, an associated facility of the Project, is a bid section far away from Huama Lake and not close to Huama Lake. (3) Domestic waste cans are available on site to collect domestic waste and are removed regularly. (4) The construction wastewater of the Project is collected and treated as required. (5) The section of the Project's associated facility, Wuchu Avenue, does not involve crossing a water	Meet the requirements	 

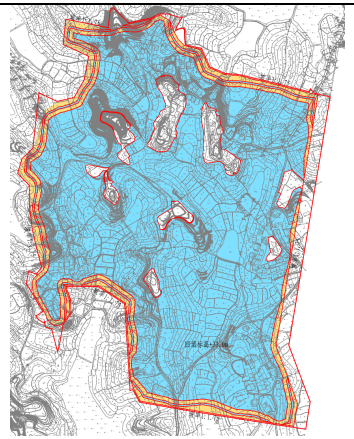
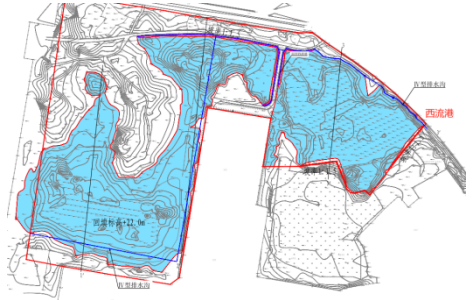
Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	then reused for sprinkling and greening of the project construction site. The production wastewater that cannot be reused in rainy seasons shall be discharged into the temporary water collecting tank of the Project for storage after being treated by oil separation sedimentation tanks and be reused or naturally evaporated after sunny days. It is strictly prohibited to directly discharge it into the surface water body of Huama Lake. (5) Cofferdam construction shall be adopted for bridges crossing water bodies during the construction of pier substructure, and effective measures shall be taken to reduce suspended solids pollution generated during the construction period, shorten cofferdam filling and removal time, and reduce the pollution impact caused by production wastewater discharged into ditches. (6) Necessary publicity and education on ecological environment protection for construction personnel shall be conducted, construction procedures and construction machinery shall be reasonably organized, and drainage design and construction shall be carried out in strict accordance with construction specifications.	construction are performed as required.		

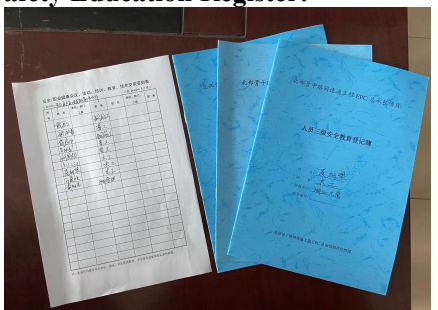
Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
Noise management	(1) Reasonable arrangement of construction time Simultaneous construction of a large number of high-noise equipment shall be avoided as far as possible during the preparation of the construction plan. In addition, the construction period shall be shortened as far as possible on the premise of ensuring the project quality. High-noise construction shall be arranged in the daytime as far as possible to reduce the construction at night. Except for emergency repair and rescue, no bulldozer, excavator, grader, road roller or other similar machinery shall be used for night construction (from 22:00 to 6:00 the next day). If noise pollution around the city cannot be avoided during night construction due to the continuity of the production process or other special reasons, the construction must be reported to relevant government departments for approval in advance and announced to surrounding residents. (2) Reasonable layout of construction site It is necessary to avoid arranging a large number of power mechanical equipment in the same place; otherwise, the local sound level will be excessive. (3) Reasonable arrangement of operation	(1) The simultaneous construction of a large number of high-noise equipment is avoided during the construction process, and no complaints from residents along the route are received by the due diligence period. (2) During the construction process, the layout of the construction site is reasonable and does not result in local sound levels that exceed regulated limits. (3) ~ (4) During the construction period, the transportation time of transport vehicles is arranged reasonably, and the equipment selection is reasonable, which does not cause great noise pollution to the surrounding areas. (5) During the construction period, the management of personnel is strengthened to reduce man-made noise. By the due diligence period, no complaints are received from residents along the route. (6) ~ (7) Noise management during construction is carried out in accordance with the appropriate	Meet the requirements	

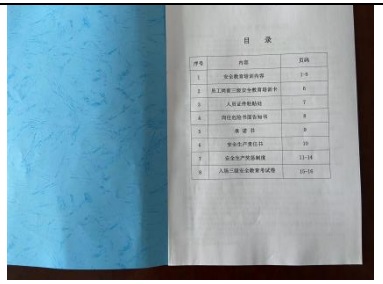
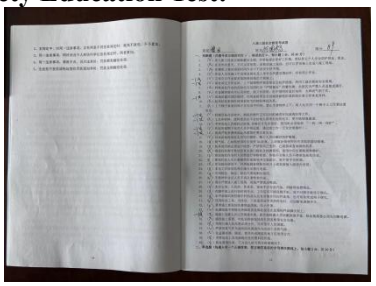
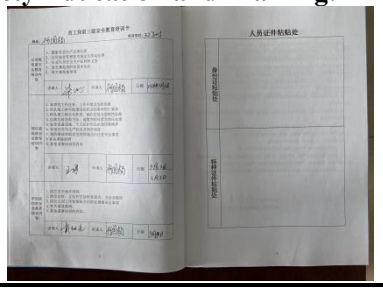
Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	honking shall be prohibited after transport vehicles enter the vicinity of the construction area. (4) Reduction of sound level of equipment Low-noise equipment shall be selected as far as possible, such as hydraulic machinery (instead of fuel machinery) and high-frequency oscillator; For fixed loading and unloading equipment and earth-moving machinery, such as excavators and bulldozers, the noise can be reduced by exhaust pipe silencers and isolation of vibrating parts of engines; Power mechanical equipment shall be regularly repaired and maintained. The sound level of poorly maintained equipment often increases during operation due to vibration of loose parts or damage to silencers. (5) Reduction of man-made noise Operate mechanical equipment according to regulations. During the disassembly of formwork and support, comply with operation regulations to reduce collision noise; use modern equipment (instead of whistles) to direct operations as much as possible. (6) Strengthening of construction management During the construction period, the			

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	for foundation and structural construction on the premise of not affecting the construction quality; The foundation of the equipment with a fixed base shall be treated separately to reduce the transmission of ground vibration and structural noise; The operation shall be standardized and the maintenance of equipment shall be strengthened to maintain normal operation of the equipment; Noise equipment with less movement can be set in the sound insulation enclosure made of corrugated plates. (7) The declaration and registration system of the construction noise shall be strictly implemented. A declaration shall be submitted to the local ecological environment department within 15 days after the commencement of the Project. The Approval Form for Noise Management on Construction Sites shall be filled in and approved before commencement. It is necessary to avoid disturbing residents with noise, make the noise at the boundary of the construction site conform to relevant regulations in the Emission Standard of Environment Noise for Boundary of Construction Site (GB12523-2011), and make the vibration conform to relevant regulations in the			

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
Solid waste management	(1) Temporary waste containers shall be installed at the construction camp, and domestic waste shall be sorted for management, and regularly cleaned and transported in accordance with the regulations of the local sanitation department.	(1) Domestic waste cans are provided on the construction site to collect waste, which is regularly removed and disposed of by the sanitation department.	Meet the requirements	
	(2) The construction contractor shall use the excavation generated by the project as much as possible for backfilling. (3) Temporary soil storage yards shall be spread in layers and evenly across the entire area, and the spoil shall be neutral materials that do not contain waste, chemicals, petroleum, or other such substances. (4) After the spoil disposal is completed, the topsoil stored shall be spread evenly on top of it, and grass and tree planting shall be carried out across the entire area. (5) The spoil banks of different heights shall be provided with side slopes and platforms with corresponding gradients according to the requirements of the drawings. Generally, dry rubbles shall be laid on the side slope of the spoil bank as required by the drawings for	(2) During the construction period, excavations are adopted for backfilling as far as possible, and excess spoils are transported to the backfill area of Bajiao Village and the backfill area of Woertang. (3) ~ (4) By the time of due diligence, the construction entered the final stage and temporary measures had been removed. It is understood that solid waste management requirements are followed during the construction stage. (5) ~ (6) The spoils are transported to the backfill area of Bajiao Village and the backfill area of Woertang, and the spoil grounds	Meet the requirements	**Layout Plan of Soil Storage Yard:**  **Layout Plan of Storage Yard in Bajiao Village:**

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	(6) Mortar rubble drainage ditches shall be set up at the periphery of the temporary soil storage yard. At the top surface of the temporary soil stack, soil or rubble drainage ditches shall be set up about 80 ~ 120m, and slag retaining walls shall be set up inside to ensure the smooth flow of surface water and slope water in the spoil bank. (7) In the process of transferring waste earthwork, the unit transporting the muck shall go through registration procedures with relevant units according to the Management Measures for Construction Wastes in Ezhou City. The abandoned muck shall be uniformly organized by the urban management department. The construction muck shall not leak or fly along the way, and the vehicles removing the construction muck shall not pollute the road surface with mud. (8) The transportation of spoil must be limited to the specified time, and the vehicle shall run on the designated road section. When transporting bulk materials and wastes, the transport vehicles must be properly loaded and covered with cloth. Before leaving the construction site, the exterior shall be cleaned to prevent mud leakage and flying along the way. (9) Hazardous waste management shall meet	(7) ~ (8) By the time of due diligence, the construction entered the final stage and there was no spoil transportation. During the construction period, the transportation route of spoil is designed as required, and the transportation is also conducted as required, and the vehicles transporting muck conform to the Management Measures for Construction Wastes in Ezhou City. (9) The use of hazardous chemicals is not involved in the construction of the Project. The hazardous wastes are mainly mineral oils such as lubricating oil and engine oil used for machine maintenance, and there is only minor oil leakage, which has little impact on the environment. The management of hazardous wastes during construction is compliant.		 **Layout Plan of Woertang Storage Yard:** 

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
Environmental risk management	(1) Enhance environmental management throughout the construction process, improve the handling and disposal of construction wastewater and waste residue, and strictly prohibit arbitrary discharges or dumping of such wastes; (2) Erect fences in areas close to water bodies to minimize the spread of materials and construction debris; place asphalt heating sites and facilities at a considerable distance from any water bodies.	(1) By the time of due diligence, the construction has entered the final stage. According to the visit, there was no arbitrary discharge or dumping of construction wastewater and waste residue during the construction period. Construction wastewater and waste residue are transported to the designated place after sedimentation treatment in the sedimentation tank. (2) The Project does not involve adjacent water areas, which are managed according to the requirements of environmental risk management.	Meet the requirements	
Construction Safety and Occupational Health Management	(1) A professional safety management team shall be established, a systematic construction safety regimen shall be formulated, and adequate funding for safety measures shall be guaranteed. (2) Before construction, the site shall be subject to "three supplies and one leveling". When constructing temporary access roads, it is necessary to ensure the safety of passing vehicles and pedestrians and provide clear signs and traffic control measures.	(1) A professional safety management team is established for the Project, and construction safety management requirements and measures are formulated. (2) Corresponding safety and health guarantee, relevant safety education and testing have been carried out for the Project as required. (3) By the due diligence period, the	Meet the requirements	**Safety Education Register:** 

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
	water and electricity safety, and the system of special operation personnel working with certificates shall be strictly implemented. (3) Nationally regulated safety signs, danger warning signs and other signs and slogans shall be hung in the construction area to prevent residents from entering the building protection scope and dangerous areas.	period.		 **Safety Education Test:**  **Safety Education and Training:** 

Category	Environmental and social management requirements	Implementation on construction site	Compliance with management requirements	On-site supporting photos
Grievance redress mechanism	(1) The Project Implementation Unit and the Construction Contractor shall establish a grievance redress mechanism before construction, designate special personnel to be responsible for the grievance mechanism, and provide relevant training for the person in charge of the grievance mechanism. (2) The contact information of the grievance redress mechanism contact person, including phone number, address and email, shall be publicly disclosed.	Established a dedicated grievance redress mechanism and set up display boards on site	Meet the requirements	

Annex 3: Reply on Environmental Impact Report of Hubei Ezhou Civil Airport Project by Provincial Department of Ecology and Environment

湖北省生态环境厅

鄂环审〔2019〕259号

省生态环境厅关于湖北鄂州民用机场项目环境影响报告书的批复

湖北国际物流机场有限公司：

你公司《关于申请批复<湖北鄂州民用机场项目环境影响报告书>的请示》（鄂机〔2019〕52号）及相关材料收悉。经研究，现批复如下。

一、该项目（项目代码：2018-420791-56-01-051877）位于湖北省鄂州市，地跨燕矶镇、沙窝乡和杨叶镇，场址距鄂州市市区中心直线距离约15公里，距离周边城市黄冈市、黄石市市区中心分别约20公里、15公里。项目为新建客运支线、货运枢纽机场，飞行区按4E等级设计，设计目标2030年达到货邮吞吐量330.0万吨、旅客吞吐量150万人次，飞机起降量9.0万架次。项目由机场工程（含空管工程）、供油工程、转运中心工程和基地工程组成，场外配套的交通、供电、供水、燃气、雨污水排放等公用工程及走马湖水系综合治理、花马湖水系治理、拆迁安置等工程不纳入本项目。

机场工程（含空管工程）建设单位为湖北国际物流机场有限公司，主要建设内容包括新建东、西2条3600米×45米、间距

1900 米的远距跑道，4 条平行滑行道、2 条垂直联络道、12 条快滑及其他滑行道，124 个各类机位的机坪工程、1.5 万平方米航站楼以及停车场、货运站、供水站、排水工程等；空管工程包括塔台、航管楼、导航工程、气象工程等。

供油工程建设单位为中国航空油料有限责任公司，主要建设内容包括油库区、加油站、机坪输油管线，配套建设 6.0 公里场外输油管线、5000 吨级油品码头（1 个泊位）以及码头辅助工程。

转运中心建设单位为鄂州丰泰启盛物流发展有限公司，主要建设内容包括建筑面积 678000 平方米分拣中心、建筑面积 41000 平方米综合业务楼、每座建筑面积 324 平方米卡口 3 座、14.6 万平方米 ULD 堆存场地及公用工程等。

顺丰航空基地工程建设单位为鄂州丰预泰合霖物流发展有限公司，主要建设内容包括 155060 平方米机务维修区工程、31050 平方米地面服务及勤务工程、面积 198080 平方米综合保障区工程、航空食品区工程、公用及环保工程。

该项目符合国家产业政策和《中国民用航空发展第十三个五年规划》。项目实施将对周边声环境、生态环境产生一定不利影响，在全面落实环境影响报告书和本批复提出的各项生态环境保护措施和相关规划管控要求后，不利影响能够得到减缓。因此，我厅原则同意环境影响报告书的环境影响评价总体结论和各项生态环境保护措施。

二、减缓项目建设生态环境影响的主要措施

（一）声环境保护主要措施。施工期应采取有效噪声防治措施，尽量减轻对周边环境敏感点的不利影响。运行期针对机场及

其周边可能受影响的声环境敏感点，建设单位须按照报告书提出的监测计划开展长期跟踪监测，安装飞机噪声实时监控系统，加强机场周边声环境敏感目标的跟踪监测，根据监测结果及时完善、强化敏感目标环境保护措施。

项目实施后，对报告书预测值超过 75 分贝（涵盖最大 A 声级大于 89 分贝的敏感点）的村庄/社区、学校、医院等环境敏感点及试车时段不能满足相应声环境功能标准的敏感目标在工程正式投运前采取环保拆迁措施；对报告书预测值 70-75 分贝的学校（含幼儿园）、医院等敏感点在工程正式投运前采取隔声措施。在项目投运前，上述措施须落实到位。

进一步优化调整飞行程序，在确保 90%以上数量货机由南向北起飞、由北向南降落前提下提高北端飞机的起降比例，力争达到 95%以上，从而有效降低飞机噪声对敏感区域的影响；同时，尽可能采用连续下降进近程序，降低飞机噪声对周边区域的噪声影响。

按照《机场周围飞机噪声环境标准》（GB9660-88）要求，在报告书预测的计权等效连续感觉噪声级 70 分贝等值线区域内，不得规划建设居民区、学校、医院等声环境敏感建筑物。根据《民用机场条例》（国务院令第 553 号）等规定，鄂州市、黄冈市、黄石市人民政府应组织落实好相关规划管控工作，严格限制周边村庄等向机场方向发展，依法在航空器起飞、降落的净空周围划定限制建设噪声敏感建筑物的区域，并按照出具的承诺函做好工程后续实施的居民搬迁等相关工作。

（二）生态环境保护主要措施。做好施工期生态保护工作，

划定施工作业范围和路线，严格控制和管理运输车辆及重型机械施工作业范围；严格控制用地范围，优化用地面积，施工营地、表土堆场、材料堆场均布设在项目永久占地范围内；做好表层土收集与保护，表层土堆放处应结合机场平面布置及施工安排，尽量堆放于规划的绿地内，分别对不同区域采用工程措施、植物措施和其他临时措施进行防护，减少工程水土流失；对本项目占用的耕地，建设单位以缴纳耕地开垦费方式补充数量相当的耕地面积。合理安排水域工程施工时间，避开四大家鱼产卵期（5-7 月）、中华鲟幼鲟洄游期（4-8 月）；合理进行施工组织，优化施工管理和施工工艺，加快施工进度，缩短水上作业时间；建立高效有力的监管体系，加强对码头工程区域珍稀水生生物的保护，组织建设单位、施工单位、水生生物方面的技术人员和经验丰富的当地渔民，在工程施工水域现场监测珍稀保护动物的活动。

对花马湖种质资源保护区实施增殖放流，补偿工程实施对花马湖鱼类资源造成的生态影响。加强机场绿化、灯光、建筑物等设计和运营期环境整治，减少对鸟类的吸引，采取科学驱鸟措施，以减缓对鸟类的不利影响。在机场及其周边持续开展鸟类监测，根据监测结果进一步采取必要的鸟类保护措施。

（三）水环境保护主要措施。按照雨污分流、分区收集原则设计排水系统，做好各类污（废）水收集和处理。除冰液交由专门机构处理处置，供油工程油库区、航空加油站、汽车加油站初期雨水收集后利用机场油库内含油污水处理设备进行处理，达到《污水排入城镇下水道水质标准》（GB/T31962-2015）表 1 中 A 级标准后经市政污水管网接入规划建设的航空都市区再生水厂。

顺丰航空基地工程、供油工程均配套建设污水预处理设施，污水经收集预处理达到《污水排入城镇下水道水质标准》（GB/T31962-2015）表1中A级标准后，与机场北工作区生活污水一并接入规划建设的航空都市区再生水厂集中处理；机场南区航站楼、转运中心、机场普货区等办公生活污水经收集接入花湖污水处理厂集中处理；外排废水经处理达到《城镇污水处理厂污染物排放标准》（GB18918-2002）一级A标准后最终均排入长江。在航空都市区再生水厂建设完成并投入使用前，本项目不得运营。

对油库区、加油站、污水处理设施及管网、垃圾中转站、危险废物暂存库和事故池等区域采取重点防渗措施。开展地下水长期监测，发现异常情况应及时采取有效应对措施。

做好施工期水环境保护工作，施工废水采取沉淀等工艺处理后回用，沉淀池采取必要的防渗措施；生活污水经污水处理设施处理后回用或综合利用，旱厕由环卫部门定期清掏。

（四）大气环境保护主要措施。施工期采取设置围挡、对施工场地进行绿化或硬化、洒水抑尘、覆盖堆存及运输等措施，防治施工扬尘。营运期燃气锅炉采用“两段燃烧+烟气再循环”低氮燃烧技术；机场维修工程喷漆间喷漆废气收集后，采用“干式过滤器过滤+活性炭催化燃烧”后通过34米排气筒排放，打磨间设置除尘系统处理粉尘；使用清洁燃料、减少使用飞机辅助动力装置，减少飞机发动机尾气排放。航空煤油储罐采用内浮顶罐，汽车加油站设置油气回收装置和汽车油气回收自动监测设备，减少挥发性有机物排放；地面保障系统车辆采用电动车，减少尾气

排放；食堂、餐厅厨房安装净化效率大于 85%的油烟净化器。运营期供油码头选用性能良好的输油设备、输油后采用氮气把装卸臂内的航油吹至船舱、加强日常维护管理等措施减少环境空气污染。

制定机场环境空气质量例行监测方案，设置机场环境空气质量自动监测系统；按报告书中的监测计划做好空气质量监测工作。

（五）环境风险防范主要措施。在油库区及相关区域设置泄漏和事故自动监控报警系统，建立巡查、检查和风险管理制度并严格落实，减少事故发生。在机场油库周边设置三级防控体系、配备必要的应急物资，码头配套事故收集池、配备溢油应急设备，保障事故污水不进入外环境。完善突发环境事件应急预案，与当地政府及相关单位应急预案实施联动，定期组织开展应急演练，严格按照报告书及有关管理要求落实各项应急管理及环境风险防范措施，一旦出现问题及时妥善处理。为保障饮用水源安全，在杨叶水厂取水口搬迁完成前，机场工程不得投运。

（六）电磁辐射环境保护主要措施。工程 110kV 进出线路采用电缆管沟敷设，无架空线路，同时在满足通信条件下尽量降低发射机发射功率，确保本项目空管工程电磁辐射设备及供电工程运行对周边环境产生的电磁辐射强度满足《电磁环境控制限值》（GB8702-2014）及《辐射环境保护管理导则 电磁辐射环境影响评价方法与标准》（HJ/T10.3-1996）中公众暴露控制限值要求。

（七）其他环境保护主要措施。项目实施产生的各类固体废物应实施分类处理、处置，做到“资源化、减量化、无害化”。

一般固体废物优先综合利用，不能利用的交由市政部门统一处置，国际航空垃圾按照有关规定妥善处置，危险废物交有资质的单位处置，危险废物暂存库应符合相关标准要求。企业应按照相关要求，自行或委托有资质的环境监测机构，对用地地块每五年开展至少1次土壤环境监测，编制土壤环境质量状况报告，监测数据和报告向当地环保部门备案并向社会公开。

（八）在工程施工和运营过程中，加强与周边公众的沟通，及时解决公众提出的环境问题，满足公众合理的环境诉求。

三、你公司应建立企业内部生态环境管理机构和制度，明确人员和生态环境保护职责，严格落实环评报告提出的环境管理和环境监测计划。项目实施必须严格执行环境保护设施与主体工程同时设计、同时施工、同时投产使用的环境保护“三同时”制度，初步设计阶段应开展生态环境保护专题设计，优化、细化、落实各项生态环境保护措施及投资概算。各项生态环境保护措施应纳入施工、工程监理等招标文件及合同，并明确责任。项目建成后，按规定程序实施竣工环境保护验收。工程在正式投运3-5年内，应组织开展环境影响后评价。

四、环境影响报告书经批准后，项目的性质、规模、地点或者防治污染、防止生态破坏的措施发生重大变动的，应当重新报批该项目的环境影响报告书。自环境影响报告书批复文件批准之日起，如超过5年方决定工程开工建设的，环境影响报告书应当报我厅重新审核。

五、在项目发生实际排污行为之前，根据经批准的环境影响评价文件确认各项环境保护措施落实情况，按照要求申领排污许

可证，并将环境影响评价文件中各项环境保护措施、污染物排放清单及其他有关内容载入排污许可证，按证排污。

六、请鄂州市生态环境局组织开展该项目的“三同时”监督检查和管理工作，黄冈市、黄石市生态环境局做好辖区内有关环境管理工作，省环境监察总队负责不定期现场检查。

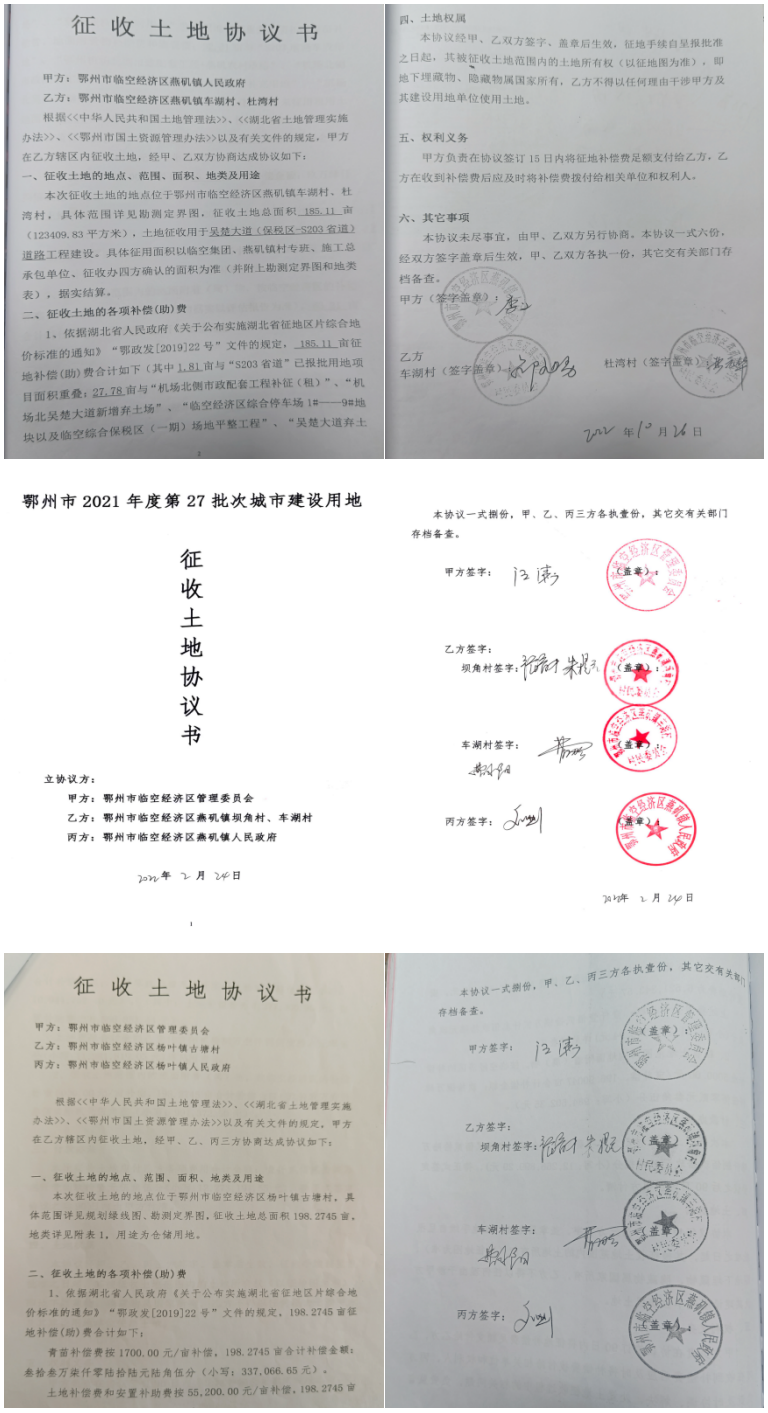
七、你公司在收到本批复后 20 个工作日内，将批准后的环境影响报告书分送鄂州市生态环境局、黄冈市生态环境局、黄石市生态环境局，并按规定接受各级生态环境主管部门的日常监督检查。

湖北省生态环境厅

2019 年 9 月 20 日

抄送：鄂州市、黄冈市、黄石市人民政府，省发改委，省环境监察总队，鄂州市、黄冈市、黄石市生态环境局，中国航空油料有限责任公司，鄂州丰泰启盛物流发展有限公司、鄂州丰预泰合霖物流发展有限公司，中南安全环境技术研究院股份有限公司，省环境工程评估中心。

Attached Figure 1: Compensation Agreement for Each Batch of Land Acquisition



征收土地协议书

甲方：鄂州市临空经济区燕矶镇人民政府

乙方：鄂州市临空经济区燕矶镇车湖村、杜湾村

根据<<中华人民共和国土地管理法>>、<<湖北省土地管理实施办法>>、<<鄂州市国土资源管理办法>>以及有关文件的规定，甲方在乙方辖区内征收土地，经甲、乙双方协商达成协议如下：

一、征收土地的地点、范围、面积、地类及用途

本次征收土地的地点位于鄂州市临空经济区燕矶镇车湖村、杜湾村，具体范围详见勘测定界图，征收土地总面积 185.11 亩（123409.83 平方米），土地征收用于吴楚大道（保税区-S203 省道）道路工程建设。具体征用面积以临空集团、燕矶镇村专班、施工总承包单位、征收办四方确认的面积为准（并附上勘测定界图和地类表），据实结算。

二、征收土地的各项补偿(助)费

1、依据湖北省人民政府《关于公布实施湖北省征地区片综合地价标准的通知》“鄂政发[2019]22 号”文件的规定，185.11 亩征地补偿(助)费合计如下（其中 1.81 亩与“S203 省道”已报批用地项目面积重叠；27.78 亩与“机场北侧市政配套工程补征（租）”、“机场北吴楚大道新增弃土场”、“临空经济区综合停车场 1#——9#地块以及临空综合保税区（一期）场地平整工程”、“吴楚大道弃土

四、土地权属

本协议经甲、乙双方签字、盖章后生效，征地手续自呈报批准之日起，其被征收土地范围内的土地所有权（以征地图为准），即地下埋藏物、隐藏物属国家所有，乙方不得以任何理由干涉甲方及其建设用地单位使用土地。

五、权利义务

甲方负责在协议签订 15 日内将征地补偿费足额支付给乙方，乙方在收到补偿费后应及时将补偿费拨付给相关单位和权利人。

六、其它事项

本协议未尽事宜，由甲、乙双方另行协商。本协议一式六份，经双方签字盖章后生效，甲、乙双方各执一份，其它交有关部门存档备查。

甲方（签字盖章）：

乙方

车湖村（签字盖章）：

杜湾村（签字盖章）：

2021 年 12 月 24 日

鄂州市 2021 年度第 27 批次城市建设用地

征收土地协议书

立协议方：

甲方：鄂州市临空经济区管理委员会

乙方：鄂州市临空经济区燕矶镇坝角村、车湖村

丙方：鄂州市临空经济区燕矶镇人民政府

2021 年 12 月 24 日

本协议一式捌份，甲、乙、丙三方各执壹份，其它交有关部门存档备查。

甲方签字：

乙方签字：

坝角村签字：

车湖村签字：

丙方签字：

2021 年 12 月 29 日

征收土地协议书

甲方：鄂州市临空经济区管理委员会

乙方：鄂州市临空经济区杨叶镇古塘村

丙方：鄂州市临空经济区杨叶镇人民政府

根据<<中华人民共和国土地管理法>>、<<湖北省土地管理实施办法>>、<<鄂州市国土资源管理办法>>以及有关文件的规定，甲方在乙方辖区内征收土地，经甲、乙、丙三方协商达成协议如下：

一、征收土地的地点、范围、面积、地类及用途

本次征收土地的地点位于鄂州市临空经济区杨叶镇古塘村，具体范围详见规划绿线图、勘测定界图，征收土地总面积 198.2745 亩，地类详见附表 1，用途为仓储用地。

二、征收土地的各项补偿(助)费

1、依据湖北省人民政府《关于公布实施湖北省征地区片综合地价标准的通知》“鄂政发[2019]22 号”文件的规定，198.2745 亩征地补偿(助)费合计如下：

青苗补偿费按 1700.00 元/亩补偿，198.2745 亩合计补偿金额：叁拾叁万柒仟零陆拾陆元陆角伍分（小写：337,066.65 元）。

土地补偿费和安置补助费按 55,200.00 元/亩补偿，198.2745 亩

本协议一式捌份，甲、乙、丙三方各执壹份，其它交有关部门存档备查。

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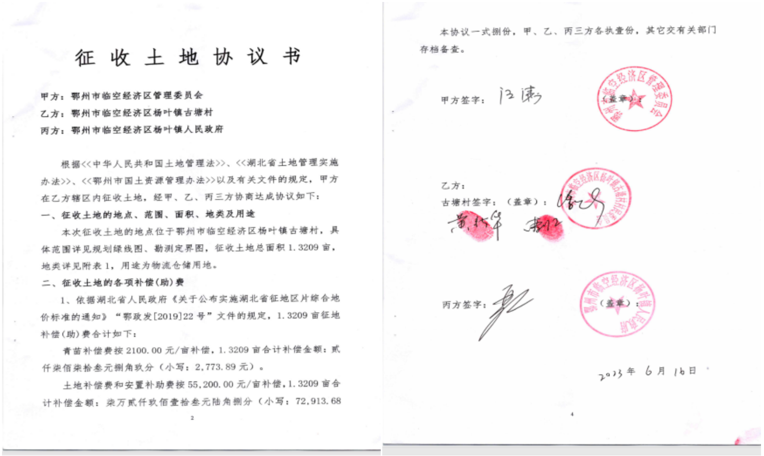
乙方签字：

坝角村签字：

车湖村签字：

丙方签字：



征 收 土 地 协 议 书

甲方：鄂州市临空经济区管理委员会
乙方：鄂州市临空经济区杨叶镇古塘村
丙方：鄂州市临空经济区杨叶镇人民政府

根据<<中华人民共和国土地管理法>>、<<湖北省土地管理实施办法>>、<<鄂州市国土资源管理办法>>以及有关文件的规定，甲方在乙方辖区内征收土地，经甲、乙、丙三方协商达成协议如下：

一、征收土地的地点、范围、面积、地类及用途

本次征收土地的地点位于鄂州市临空经济区杨叶镇古塘村，具体范围详见规划绿线图、勘测定界图，征收土地总面积 1.3209 亩，地类详见附表 1，用途为物流仓储用地。

二、征收土地的各项补偿(助)费

1、依据湖北省人民政府《关于公布实施湖北省征地区片综合地价标准的通知》“鄂政发[2019]22 号”文件的规定，1.3209 亩征地补偿(助)费合计如下：

青苗补偿费按 2100.00 元/亩补偿，1.3209 亩合计补偿金额：贰仟柒佰柒拾叁元捌角玖分（小写：2,773.89 元）。

土地补偿费和安置补助费按 55,200.00 元/亩补偿，1.3209 亩合计补偿金额：柒万贰仟玖佰壹拾叁元陆角捌分（小写：72,913.68

2

本协议一式捌份，甲、乙、丙三方各执壹份，其它交有关部门存档备案。

甲方签字：（盖章）：

乙方：
古塘村签字：（盖章）：

丙方签字：（盖章）：

2023 年 6 月 16 日

鄂州市 2023 年度第 16 批次城市建设用地

征收土地协议书

立协议方：
甲方：鄂州市临空经济区管理委员会
乙方：鄂州市临空经济区燕矶镇车湖村
丙方：鄂州市临空经济区燕矶镇人民政府

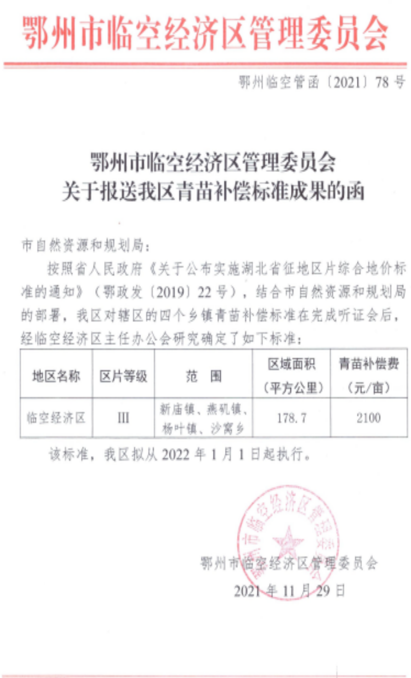
本协议一式捌份，甲、乙、丙三方各执壹份，其它交有关部门存档备案。

甲方签字：（盖章）：

乙方：
车湖村签字：（盖章）：

丙方签字：（盖章）：

Attached Figure 2: Compensation Standard Documents for Young Crops in Airport Economic Zone and District-based Comprehensive Land Price Standards for Land Acquisition in Hubei Province



鄂州市临空经济区管理委员会

鄂州临空管函〔2021〕78 号

鄂州市临空经济区管理委员会
关于报送我区青苗补偿标准成果的函

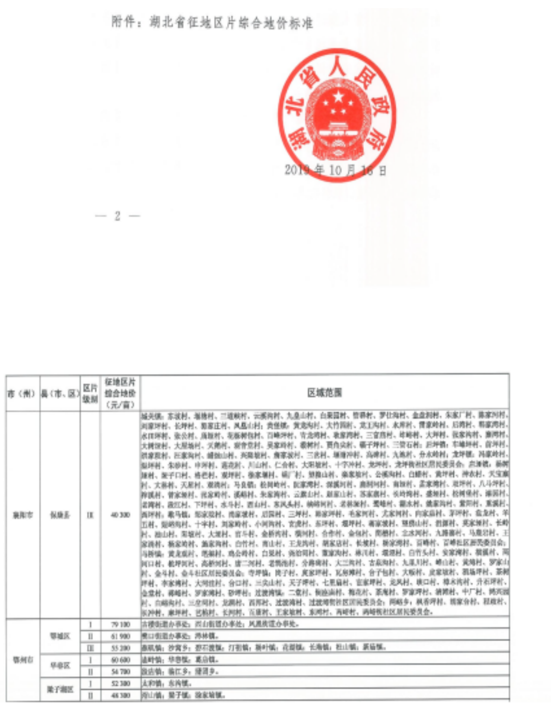
市自然资源和规划局：

按照省人民政府《关于公布实施湖北省征地区片综合地价标准的通知》（鄂政发〔2019〕22 号），结合市自然资源和规划局的部署，我区对辖区的四个乡镇青苗补偿标准在完成听证会后，经临空经济区主任办公会研究确定了如下标准：

地区名称	区片等级	范 围	区域面积（平方公里）	青苗补偿费（元/亩）
临空经济区	III	新庙镇、燕矶镇、杨叶镇、沙窝乡	178.7	2100

该标准，我区拟从 2022 年 1 月 1 日起执行。

鄂州市临空经济区管理委员会
2021 年 11 月 29 日



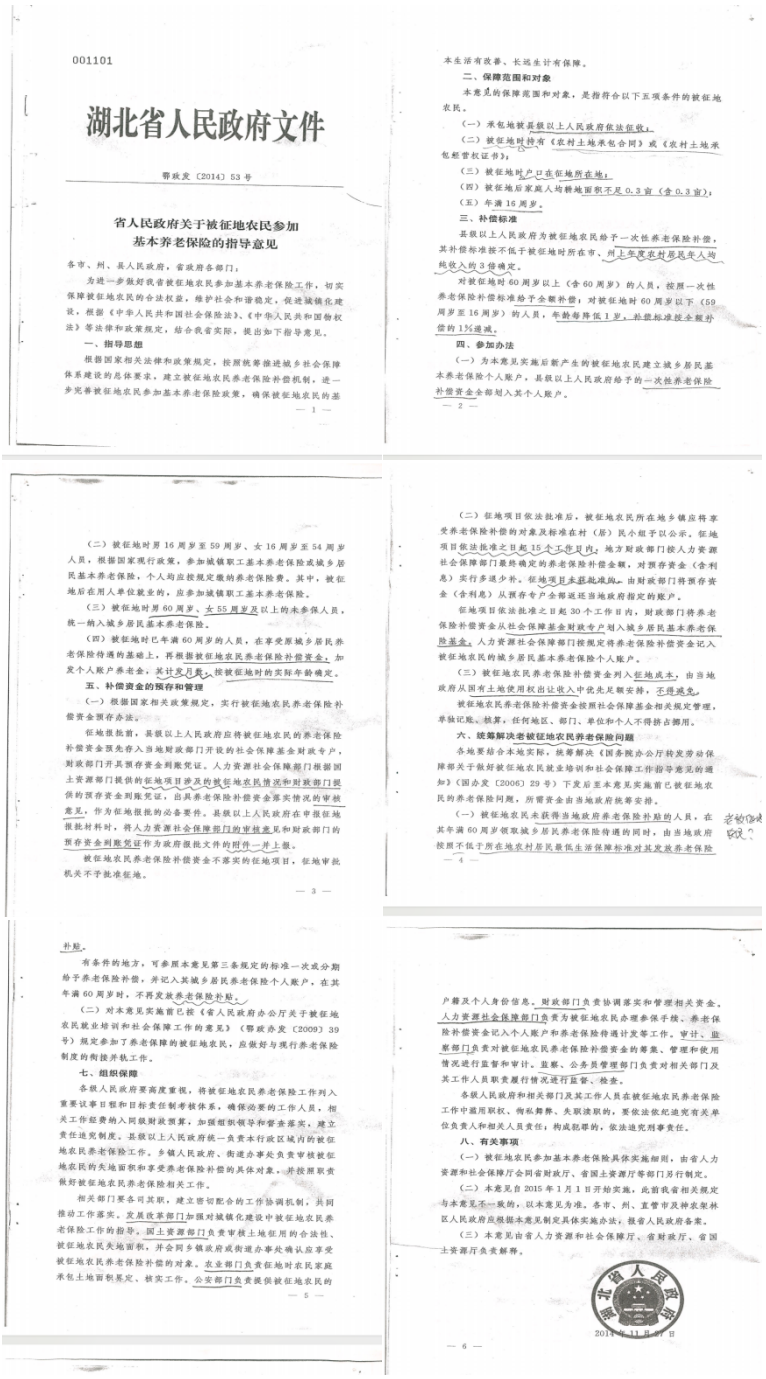
附件：湖北省征地区片综合地价标准

2019 年 10 月 18 日

— 2 —

市（州）	县（市、区）	区片级别	征地区片综合地价（元/亩）	区域范围
襄阳市	保康县	III	40 300	[illegible]
鄂州市	鄂城区	I	79 100	古楼街道办事处；西山街道办事处；凤凰街道办事处。
		II	61 900	樊口街道办事处；泽林镇。
		III	55 200	燕矶镇；沙窝乡；碧石渡镇；汀祖镇；杨叶镇；花湖镇；长港镇；杜山镇；新庙镇。
	华容区	I	60 600	葛店镇；华容镇；庙岭镇。
		II	54 700	段店镇；临江乡；蒲团乡。
	梁子湖区	I	52 300	太和镇；东沟镇。
		II	48 300	沼山镇；梁子镇；涂家垴镇。

Attached Figure 3: Compensation Policy for Pension Insurance of Land-expropriated Farmers



001101

湖北省人民政府文件

鄂政发〔2014〕53号

省人民政府关于被征地农民参加基本养老保险的指导意见

各市、州、县人民政府，省政府各部门：

为进一步做好我省被征地农民参加基本养老保险工作，切实保障被征地农民的合法权益，维护社会和谐稳定，促进城镇化建设，根据《中华人民共和国社会保险法》、《中华人民共和国物权法》等法律和政策规定，结合我省实际，提出如下指导意见。

一、指导思想

根据国家相关法律和政策规定，按照统筹推进城乡社会保障体系建设的总体要求，建立被征地农民养老保险补偿机制，进一步完善被征地农民参加基本养老保险政策，确保被征地农民的基本生活有效著、长远生计有保障。

二、保障范围和对象

本意见的保障范围和对象，是指符合以下五项条件的被征地农民。

（一）承包地被县级以上人民政府依法征收。

（二）被征地时持有《农村土地承包合同》或《农村土地承包经营权证书》；

（三）被征地时户口在征地所在地；

（四）被征地后家庭人均耕地面积不足0.3亩（含0.3亩）；

（五）年满16周岁。

三、补偿标准

县级以上人民政府为被征地农民给予一次性养老保险补偿，其补偿标准按不低于被征地时所在市、州上年度农村居民年人均纯收入的3倍确定。

对被征地时60周岁以上（含60周岁）的人员，按照一次性养老保险补偿标准给予全额补偿；对被征地时60周岁以下（59周岁至16周岁）的人员，年龄每降低1岁，补偿标准按全额补偿的1%递减。

四、参加办法

（一）为本意见实施后新产生的被征地农民建立城乡居民基本养老保险个人账户，县级以上人民政府给予的一次性养老保险补偿资金全部划入其个人账户。

（二）被征地时男16周岁至59周岁、女16周岁至54周岁人员，根据国家现行政策，参加城镇职工基本养老保险或城乡居民基本养老保险，个人均应按规定缴纳养老保险费。其中，被征地后在用人单位就业的，应参加城镇职工基本养老保险。

（三）被征地时男60周岁、女55周岁及以上的未参保人员，统一纳入城乡居民基本养老保险。

（四）被征地时已年满60周岁的人员，在享受原城乡居民养老保险待遇的基础上，再根据被征地农民养老保险补偿资金，加发个人账户养老金，关计发月数，按被征地时的实际年龄确定。

五、补偿资金的预存和管理

（一）根据国家相关政策规定，实行被征地农民养老保险补偿资金预存办法。

征地报批前，县级以上人民政府应将被征地农民的养老保险补偿资金预先存入当地财政部门开设的社会保障基金财政专户，财政部门开具预存资金到账凭证。人力资源社会保障部门根据国土资源部门提供的征地项目涉及的被征地农民情况和财政部门提供的预存资金到账凭证，出具养老保险补偿资金落实情况的审核意见，作为征地报批的必备要件。县级以上人民政府在申报征地报批材料时，将人力资源社会保障部门的审核意见和财政部门的预存资金到账凭证作为政府报批文件的附件一并上报。

被征地农民养老保险补偿资金不落实的征地项目，征地审批机关不予批准征地。

（二）征地项目依法批准后，被征地农民所在地乡镇应将享受养老保险补偿的对象及标准在村（居）民小组予以公示。征地项目依法批准之日起15个工作日内，地方财政部门按人力资源社会保障部门最终确定的养老保险补偿金额，对预存资金（含利息）实行多退少补。征地项目未获批准的，由财政部门将预存资金（含利息）从预存专户全部返还当地政府指定的账户。

征地项目依法批准之日起30个工作日内，财政部门将养老保险补偿资金从社会保障基金财政专户划入城乡居民基本养老保险基金。人力资源社会保障部门根据规定将养老保险补偿资金记入被征地农民的城乡居民基本养老保险个人账户。

（三）被征地农民养老保险补偿资金列入征地成本，由当地政府从国有土地使用权出让收入中优先足额安排，不得减免。

被征地农民养老保险补偿资金按照社会保障基金相关规定管理，单独记账、核算，任何地区、部门、单位和个人不得挤占挪用。

六、统筹解决老被征地农民养老保险问题

各地要结合本地实际，统筹解决《国务院办公厅转发劳动保障部关于做好被征地农民就业培训和社会保障工作指导意见的通知》（国办发〔2006〕29号）下发后至本意见实施前已被征地农民的养老保险问题，所需资金由当地政府统筹安排。

（一）被征地农民未获得当地政府养老保险补贴的人员，在其年满60周岁领取城乡居民养老保险待遇的同时，由当地政府按照不低于所在地农村居民最低生活保障标准对其发放养老保险补贴。

有条件的地方，可参照本意见第三条规定的标准一次或分期给予养老保险补偿，并记入其城乡居民养老保险个人账户，在其年满60周岁时，不再发放养老保险补贴。

（二）对本意见实施前已按《省人民政府办公厅关于被征地农民就业培训和社会保障工作的意见》（鄂政办发〔2009〕39号）规定参加了养老保障的被征地农民，应做好与现行养老保险制度的衔接并轨工作。

七、组织保障

各级人民政府要高度重视，将被征地农民养老保险工作列入重要议事日程和目标责任制考核体系，确保必要的工作人员，相关工作经费纳入同级财政预算，加强组织领导和督查落实，建立责任追究制度。县级以上人民政府统一负责本行政区域内的被征地农民养老保险工作。乡镇人民政府、街道办事处负责审核被征地农民的实地面积和享受养老保险补偿的具体对象，并按照职责做好被征地农民养老保险相关工作。

相关部门要各司其职，建立密切配合的工作协调机制，共同推动工作落实。发展改革部门加强对城镇化建设中被征地农民养老保险工作的指导。国土资源部门负责审核土地征用的合法性、被征地农民实地面积，并会同乡镇政府或街道办事处确认应享受被征地农民养老保险补偿的对象。农业部门负责征地时农民家庭承包土地面积基定、核实工作。公安部门负责提供被征地农民的户籍及个人身份信息。财政部门负责协调落实和管理相关资金。人力资源社会保障部门负责为被征地农民办理参保手续、养老保险补偿资金记入个人账户和养老保险待遇计发等工作。审计、监察部门负责对被征地农民养老保险补偿资金的筹集、管理和使用情况进行监督和审计。监察、公务员管理部门负责对相关部门及其工作人员职责履行情况进行监督、检查。

各级人民政府和相关部门及其工作人员在被征地农民养老保险工作中滥用职权、徇私舞弊、失职渎职的，要依法依纪追究有关单位负责人和相关人员责任；构成犯罪的，依法追究刑事责任。

八、有关事项

（一）被征地农民参加基本养老保险具体实施细则，由省人力资源和社会保障厅会同省财政厅、省国土资源厅等部门另行制定。

（二）本意见自2015年1月1日开始实施，此前我省相关规定与本意见不一致的，以本意见为准。各市、州、直管市及神农架林区人民政府应根据本意见制定具体实施办法，报省人民政府备案。

（三）本意见由省人力资源和社会保障厅、省财政厅、省国土资源厅负责解释。

湖北省人民政府

2014年11月27日

Attached Figure 4: Field Investigation on Satisfaction with Site Work and Livelihood Restoration

Appendix H: Noise Management Framework of Hubei Global Air Cargo Logistics Hub Project

Loan from Asian Infrastructure Investment Bank

Hubei Global Air Cargo Logistics Hub Project

Noise Management Framework

(Draft)

Presented to

Asian Infrastructure Investment Bank

Ezhou Linkong Group Co., Ltd.

May 2024

Letter of Commitment on Noise Management Framework of Hubei Global Air Cargo Logistics Hub Project

The People's Government of Hubei Province has applied for a loan from the Asian Infrastructure Investment Bank (hereinafter referred to as "AIIB") through the Ministry of Finance of the People's Republic of China to implement the Hubei Global Air Cargo Logistics Hub Project (hereinafter referred to as "the Project").

In accordance with AIIB's "Environmental and Social Policy" requirements, Ezhou Linkong Group Co., Ltd. has prepared the *Noise Management Framework* for the Project to better complete the implementation and monitoring of resettlement related to noise impacts proposed in the framework.

Ezhou Linkong Group Co., Ltd. and the Management Committee of Linkong Economic Zone commit to the following points.

I. Ezhou Linkong Group Co., Ltd. and the Management Committee of Ezhou Linkong Economic Zone have convened relevant units for thorough discussions and have confirmed and agreed on the contents of the *Noise Management Framework*, and will complete the implementation work within the specified timelines in accordance with the framework.

II. Ezhou Linkong Group Co., Ltd., as the executing agency for the Project, is responsible for the preparation, implementation and subsequent management of the Project, and assumes overall responsibility for the environmental and social management related to the Project. During the implementation of the Project, Ezhou Linkong Group Co., Ltd. will comply with the requirements of AIIB's environmental and social policies, accept AIIB's supervision and inspection, and submit relevant monitoring data, reports and other documentation as required by AIIB.

III. The Management Committee of Ezhou Linkong Economic Zone is responsible for the implementation of resettlement and other noise reduction measures within the scope affected by noise. During the implementation of the Project, the Committee will comply with the requirements of AIIB's environmental and social policies, provide relevant environmental and social documentation, and cooperate with AIIB and related environmental and social monitoring agencies in supervising and inspecting the environmental and social work.

Ezhou Linkong Group Co., Ltd. Linkong Economic Zone Management Committee

Signature (seal) Signature (seal)

Date Date

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1 Preparation Background and Purpose

In order to promote the construction of Ezhou Airport International Air Logistics Hub, improve the level of cross-border connectivity and collaborative innovation, help the development of "the Belt and Road" international logistics and trade system, and build an innovative and internationally competitive global air cargo logistics park, Ezhou Linkong Group Co., Ltd. plans to implement Hubei Global Air Cargo Logistics Hub Project. By 2030, the completion of the project will result in an international freight volume of 381,600 tons

The air freight of the Project fully relies on the cargo capacity of Hubei Ezhou Huahu Airport, and the ground transportation must be completed through the associated facility-WuChu Avenue. Therefore, the aircraft noise and ground noise impact in the operation period of the Project are directly related to the noise impact brought about by the construction of Hubei Ezhou Huahu Airport and the associated facility-WuChu Avenue. This *Noise Management Framework* is prepared to assess whether the Project will further increase the extent of regional noise impacts and, based on this assessment, develop appropriate mitigation, management and monitoring measures to reduce adverse impacts. The assessment and analysis in this *Noise Management Framework* is based on the acoustic environment management requirements of Hubei Province and Ezhou City for Huahu Airport and Wuchu Avenue.

1.1 Construction of Hubei Huahu Airport and Noise Management Requirements

Hubei Ezhou Huahu Airport (formerly known as Hubei Ezhou Civil Airport), whose construction planning was started in 2018, was put into operation in July 2022. According to the *Reply of the State Council and the Central Military Commission on Approving the Construction of Hubei Ezhou Civil Airport* (GH [2018] No. 26), Huahu Airport is designed for a passenger throughput of 1.5 million person-times and a cargo throughput of 3.3 million tons by 2030.

On September 20, 2019, the Department of Ecology and Environment of Hubei Province issued the *Reply of the Department of Ecology and Environment of Hubei Province on the Environmental Impact Report of Hubei Ezhou Civil Airport Project* (EHS [2019] No.259), which put forward clear requirements for ecological environmental protection measures during the construction and operation of Huahu Airport. The main measures for acoustic environment protection during the operation period of the airport include:

(I) During the operation period, for the acoustic environment sensitive points in the airport and its surrounding areas that may be affected, the Employer shall carry out

long-term tracking monitoring according to the monitoring plan proposed in the report, install a real-time aircraft noise monitoring system, strengthen the tracking monitoring of acoustic environment sensitive targets around the airport, and timely improve and strengthen environmental protection measures for sensitive targets according to the monitoring results;

(II) After the implementation of the Project, **for acoustic environment sensitive points such as villages/communities, schools and hospitals with a predicted value (Lwecpn) in the report exceeding 75 dB (covering sensitive points with maximum A-weighted sound level greater than 89 dB) and sensitive targets that cannot meet the corresponding acoustic environment function standards during commissioning**, environmental protection demolition measures shall be taken before the project is officially put into operation; for acoustic environment sensitive points such as schools (including kindergartens) and hospitals with a predicted value of 70-75 dB in the report, sound insulation measures shall be taken before the project is officially put into operation. The above measures must be implemented before the project is put into operation;

(III) Further optimize and adjust the flight procedures. On the premise of ensuring that more than 90% of freighters take off from south to north and land from north to south, increase the proportion of aircraft taking off and landing at the northern end to strive for more than 95%, thus effectively reducing the impact of aircraft noise on sensitive areas; at the same time, adopt continuous descent approach procedures as far as possible to reduce the noise impact of aircraft noise on surrounding areas.

1.2 Construction of WuChu Avenue (Associated Facility) and Noise Management Requirements

Wuchu Avenue is the east-west axis of Ezhou City. The section from the urban area of Ezhou to Yanhua Road has been completed and opened to traffic. The Bonded Zone ~ S203 Section of Wuchu Avenue is located within Ezhou Linkong Economic Zone, and serves as an east-west traffic artery in the park. It is currently under construction, connecting to Huama Lake Bridge in the west and extending to S203 (under construction) in the east. The road has a boundary line width of 55 m and features six lanes in both directions, with a total length of 1940 m and a design speed of 60 km/h. The construction of the road was commenced in June 2023 and completed at the end of June 2024.

The road has been incorporated into the Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone, and the *Letter of Approval Opinions on EIA Report Form for Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone* (EZHS [2023] No.55) was received from the Municipal

Bureau of Ecology and Environment in 2023. The following acoustic environment management requirements are put forward for the road operation period in this reply:

During the operation period, green belts shall be set on both sides of roads to strengthen traffic management and road operation maintenance. No-honking and speed limit signs shall be set at both ends of sections near important sensitive points. Noise reduction measures such as installing soundproof doors and windows, ventilation and noise elimination windows shall be taken for buildings in sensitive points with excessive noise prediction to reduce the impact of noise on surrounding sensitive points during the operation period.

2 Preparation Methods

This framework has been developed using the following methods:

(1) Data collection. Through consulting and collecting relevant technical documents of the Project, preliminarily identify the impact scope and degree of aircraft noise at Huahu Airport and traffic noise at Wuchu Avenue on which Hubei Global Air Cargo Logistics Hub Project depends. The technical documents reviewed mainly include:

① *Environmental Impact Report of Hubei Ezhou Civil Airport Project and its EIA reply*;

② *Environmental Impact Report of Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone*.

(2) Review of laws, regulations and standards. Review legal and regulatory documents and standards related to acoustic environment impacts at national and international levels, and determine the standard limits adopted in this noise management framework.

(3) Baseline survey. Monitor the aircraft noise within the aircraft noise impact scope at Huahu Airport, and then calibrate the aircraft noise model with the monitoring data obtained, and judge whether there are residential areas that need to be relocated due to the aircraft noise impact according to the monitoring results.

(4) Prediction and assessment of noise impact. The prediction includes the following scenarios:

① The noise generated by the cargo flights required for the operation of Hubei Global Air Cargo Logistics Hub Project, which is used to judge whether there are residential areas that need to be relocated within the noise impact scope of the Project;

② The cumulative noise of Ezhou Huahu Airport is, which is used to compare with the noise impact generated by cargo flights required for the Project, so as to determine whether there is new relocation;

③ The ground traffic noise of WuChu Avenue, an associated facility, which is used to clarify the superimposed impact of traffic noise from WuChu Avenue and aircraft noise of the Project;

(5) Development of a noise management framework. Based on the prediction results, determine the objects to be included in the noise management framework, and put

forward the conditions for subsequent relocation and the requirements of relocation procedures.

3 Preparation Basis

3.1 Laws, Regulations and Technical Documents

3.1.1 Laws and Regulations

(1) *Environmental Protection Law of the People's Republic of China* (implemented on January 1, 2015);

(2) *Law of the People's Republic of China on Environmental Impact Assessment* (implemented on December 29, 2018);

(3) *Law of the People's Republic of China on Prevention and Control of Noise Pollution* (implemented on June 5, 2022);

(4) *Regulations of Hubei Province on Environmental Protection* (revised for the second time at the 25th Meeting of the Standing Committee of the 12th People's Congress of Hubei Province, implemented on December 1, 2016);

(5) *Regulations of Hubei Province on the Management of Urban Environmental Noise* (revised at the 31st Meeting of the Standing Committee of the 12th People's Congress of Hubei Province, implemented on November 29, 2017);

3.1.2 Technical Guidelines

(1) *Technical Guidelines for Environmental Impact Assessment - Acoustic Environment* (HJ2.4-2021);

(2) *Technical Guidelines for Environmental Impact Assessment - Civil Airport Construction Project* (HJ 87-2023);

(3) *Technical Specifications for Regionalizing Environmental Noise Function* (GB/T 15190-2014);

3.2 Assessment Criteria

3.2.1 Ground Traffic Noise

According to China's *Environmental Quality Standard for Noise* (GB 3096-2008), the acoustic environment function areas are divided into 5 classes based on the functional

characteristics and environmental quality requirements in the region. Among them, Class 0 acoustic environment function area refers to rehabilitation and convalescence areas and other areas that need to be especially quiet; Class 1 acoustic environment function area refers to areas whose main functions are residential buildings, medical treatment and public health, culture and education, scientific research and design, and administrative office, which need to be kept quiet; Class 2 acoustic environment function area refers to areas whose main functions are commercial finance and market trade, or areas where residence, commerce and industry are mixed, which need to maintain the quiet of residences; Class 3 acoustic environment function area refers to industrial production, storage and logistics, where it is necessary to prevent industrial noise from seriously affecting the surrounding environment; Class 4 acoustic environment function zones refer to areas within a certain distance on both sides of traffic arteries, where it is necessary to prevent serious impact of traffic noise on the surrounding environment, including two types: Class 4a and Class 4b. Class 4a refers to expressways, Class I highways, Class II highways, urban expressways, urban trunk roads, urban secondary trunk roads, urban rail transit (ground section) and areas on both sides of inland waterway, and Category 4b refers to areas on both sides of the railway trunk line. **The area around the airport is affected by aircraft noise (**takeoff**, landing, and low-altitude flyover), so this standard is not applicable.**

The *Environmental Health and Safety Guidelines* of the World Bank Group classify noise level guideline values into two categories by receiver type, i.e. residential, office and cultural/educational as well as industrial and commercial facilities. The guidance values for noise levels in residential, office, and educational settings are the same as those in Class 1 areas according to China's *Environmental Quality Standard for Noise* (GB 3096-2008). However, for industrial areas and commercial facilities, domestic standards are more stringent compared to those of the World Bank Group.

Compared to the World Bank's standard classification, China's noise standards are more specific and are applicable to different acoustic environment functional zones. Acoustic environment functional zones are officially delineated by the local government based on a comprehensive consideration of land use purposes and the actual background conditions. Based on this zoning management model, noise standards apply to the entire zone rather than being tailored to individual receivers. The World Bank's standards only refer to receivers and do not take into account the background environment of the project. This makes them technically or financially unfeasible when applied to noise impact assessments for transportation projects such as railways or highways. Therefore, the environmental quality standard for ground noise of the Project is generally subject to domestic standards.

Hubei Global Air Cargo Logistics Hub Project is located in Ezhou Linkong Economic Zone, which is an industrial zone with industrial production, warehousing and logistics as the main functions. The standard limits of Class 3 area specified in *Environmental Quality Standard for Noise* (GB 3096-2008) (i.e. 65dB(A) in daytime and 55dB(A) at

nighttime) are implemented; for the area affected by traffic noise of WuChu Avenue (within 20m on both sides of the road), the standard limits for Class 4a zone (i.e. 70dB(A) in daytime and 55dB(A) at night) are implemented in this area according to China's *Environmental Quality Standard for Noise* (GB3096-2008).

3.2.2 Aircraft Noise

3.2.2.1 Environmental Standard of Aircraft Noise around Airport Adopted in China

Regarding the aircraft noise of the Project, the environmental quality standard for aircraft noise around the airport adopted by China is *Environment Standard of Aircraft Noise around Airport* (GB9660-88). This standard is applicable to the area around the airport affected by noise generated by aircraft passing. The weighted equivalent continuous perceived noise level in one day and night is taken as the assessment metric, expressed in Lwecpn. Lwecpn is the assessment indicator for aircraft noise recommended by the International Civil Aviation Organization (ICAO). In the calculation process of Lwecpn, the nighttime and evening flight volumes are properly weighted, and the pure tone correction of aircraft noise is considered, thus the results well reflect the characteristics of aircraft noise. The specific standard limits are as follows.

Table 3.2-1 Environmental Standard of Aircraft Noise around Airport

Area	Standard value (Lwecpn)
Class I area	≤70dB
Class II area	≤75dB

Class I area refers to special residential areas, residential areas, and cultural and educational areas. Class II area refers to the living areas other than Class I area. Generally, the standard limit for Class I area shall be implemented for facilities or buildings with special requirements for acoustic environment, such as schools, hospitals, kindergartens and nursing homes. The standard limit for Class II area shall be implemented for general residential areas in cities and towns.

However, the Lwecpn cannot be directly measured by instrument, and shall be calculated based on the monitored results after monitoring. The *Environment Standard of Aircraft Noise around Airport* (GB9660-88) divides the applicable areas into two categories. However, there are no supporting documents that specify the use of land at different noise impact levels, and guidance and restrictions on planning the use of land around airports. According to the *Notice on Implementing the Formulating and Revising Projects of National Environmental Protection Standards in 2008* (HBH [2008] No. 44), the Chinese Research Academy of Environmental Sciences takes the lead in organizing the revision of the *Environment Standard and Measurement of Aircraft Noise around Airport* (revision of GB 9660-88 and GB 9661-88). The

Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport (Second Draft for Comments) has not been officially released and is for reference only.

According to the *Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport* (Second Draft for Comments), the assessment of aircraft noise around airports in China primarily takes Ldn recommended by the FAA as the assessment indicator. The assessment value is obtained through mathematical conversion based on the existing Lwecpn standard limit. The table below shows different limits based on the two indicators:

Table 3.2-2 Comparison of Different Indicator Limits Before and After Proposed Adjustment

Area	Limits of Environment Standard of Aircraft Noise around Airport	
	Current standard (Lwecpn)	Proposed standard (YLdn)
Class I land: urban and rural land sensitive to aircraft noise, including the land for residential buildings, education and scientific research, health and medical institutions and other similar land.	≤70	≤57
Class II area: urban and rural land relatively sensitive to aircraft noise, including the land for administrative office, culture and art, financial business and other similar land.	≤75	≤62
Class III area: urban and rural land relatively insensitive to aircraft noise, including the land for industrial production, logistics and warehousing, sports and entertainment, parks, squares and other similar land.	/	≤67
Class IV area: urban and rural land not sensitive to aircraft noise, including the land for agricultural production, mining production, transport facilities, public facilities and other similar land.	/	/

Note: 1) YLdn: annual average day-night equivalent sound level; 2) The difference between LWECPN and Ldn depends on the division of time periods and the number of flights in each time period, generally ranging from 13 dB to 14 dB. The conversion method of LWECPN= Ldn+13 is adopted in the *Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport* (Second Draft for Comments).

When comparing the aircraft noise assessment indicators around domestic airports before and after the adjustment, it can be seen that the adjustment is aimed at facilitating the practical work process without compromising the control requirements for airport aircraft noise emissions.

3.2.2.2 Standard of Aircraft Noise around Airport Adopted Internationally

The current aircraft noise prediction indicators commonly used internationally include the following categories:

(1) L_{WECPN} (Weighted Equivalent Continuous Perceived Noise Level)

namely the weighted equivalent continuous perceived noise level (L_{WECPN}), which is the recommended aircraft noise assessment criteria by the International Civil Aviation

Organization (ICAO). In its calculation process, the nighttime and evening flight volumes are weighted. Moreover, the pure tone correction of aircraft noise is taken into account. Thus, the results can accurately reflect the characteristics of aircraft noise. However, it is not convenient to use existing instruments for direct measurement in practical applications.

(2) Ldn (Day Night Average Sound Level)

namely the day-night equivalent [continuous A-weighted] sound pressure level, which is a widely used aircraft noise assessment indicator. Most countries, including the United States, have adopted it as the assessment indicator of airport aircraft noise, and china is also working to replace the existing indicator with this new one.

(3) Ld, Ln (15-hour Day-average Equivalent Sound Level, 9-hour Night-average Equivalent Sound Level)

Namely daytime equivalent A sound level and nighttime equivalent A sound level, which are recommended indicators by the World Bank EHS Guidelines. The United Kingdom and Germany use Ld and Ln as aircraft noise assessment indicators, but the definition of nighttime period in the United Kingdom is slightly different.

(4) Lden (CNEL): (Community Noisee Equivalent Level)

Ldn additionally has evening as a period of assessment. This indicator is recommended by France, the EU and the WHO recommend for the assessment of aircraft noise in airports.

The internationally recognized indicators for aircraft noise assessment and their limits are as follows.

Table 3.2-3 International Aircraft Noise Prediction Indicators

S/N	Country	Indicator	Standard value (dB)		Management regulations
1	UK	Ld, Ln	Daytime	Nighttime	
			< 57	< 48	Unlimited
			57-66	48-57	Noise impact needs to be considered for land use, and appropriate noise protection is required if necessary
			66-72	57-66	Construction is generally not allowed, and adequate noise protection is required if construction is necessary
			> 72	> 66	Construction is not allowed
2	Germany	Ld	New international airport	Existing Airport	
			> 55	> 60	New noise-sensitive buildings (hospitals, schools, etc.) are not

S/N	Country	Indicator	Standard value (dB)		Management regulations
					allowed
			> 60	> 65	New noise-sensitive buildings (hospitals, schools, etc.) are not allowed, nor are new residential buildings allowed
		Ln	> 53	> 55	New noise-sensitive buildings (hospitals, schools, etc.) are not allowed, nor are new residential buildings allowed
			> 50		
3	The United States	Ldn	< 65		Unlimited
			65-75		New residential buildings are restricted, and soundproofing is required
			> 75		New residential buildings are not allowed
4	California, USA	Lden	< 62		Unlimited
			62-72		New residential buildings are restricted, and soundproofing is required
			> 72		New residential buildings are not allowed
5	France	Lden	50-55/57		Unlimited
			55/57-62/65		New residential buildings can be built if the limits are met, and the limits are determined by the local government
			62/65-70		New residential buildings are not allowed, and the limits are determined by the local government
			> 70		New residential buildings are not allowed
6	Japan	Lden	< 57		Exclusive residential areas
			< 62		Other living quarters
		L_{WECPN}	< 70		Exclusive residential areas
			< 75		Other living quarters
7	Canada	NEF	≤30		Unlimited
			30-40		New residential buildings shall be soundproofed
			> 40		New residential buildings are not allowed
8	Australia	ANEF	< 20		Unlimited
			20-25		New residential buildings shall be soundproofed
			> 25		New residential buildings are not allowed
9	China	L_{WECPN}	≤70		Special residential areas, residential, cultural and educational areas

S/N	Country	Indicator	Standard value (dB)	Management regulations
			≤75	Other living quarters

Note: Germany prohibits the construction of noise-sensitive buildings (such as hospitals and schools) and housing around airports built after 2011 with an Ln greater than 50 dB.

The World Bank Group has no aircraft noise environmental standards for the surrounding areas of airports. The General EHS Guidelines of the World Bank divides these areas into two categories based on receiver types. The Class I areas are residential, office, cultural and educational areas. The Class II areas are industrial and commercial facility areas. This is basically similar to the *Environment Standard of Aircraft Noise around Airport* (GB9660-88). The General EHS Guidelines of the World Bank uses the day-time equivalent sound level (Ld) and the night-time equivalent sound level (Ln) as the indicators.

Table 3.2-4 Noise Level Guiding Values Given by the Environmental, Health and Safety Standard of the World Bank Group

Receiver	dB (A)	
	Day-time 07:00-22:00	Night-time 22:00-07:00
Residence; office; culture and education	55	45
Industrial and commercial facilities	70	70

In addition to the standard limits listed in the above table, the World Bank's *General EHS Guidelines* requires that noise impacts should result in an increase in background noise at the closest receiving point outside the site by less than 3dB. The *General EHS Guidelines* of the World Bank use the same indicators as the United Kingdom and Germany, but the standard values are slightly different. In addition, the United Kingdom's definitions of Ld (16-hour) and Ln (8-hour) periods are slightly different from that specified in the General EHS Guidelines of the World Bank.

The *Environmental Noise Guidelines for the European Region* (2018) released by the WHO gives recommended values of Lden≤45 dB and Lnight≤40 dB for aircraft noise-impacted areas based on the results of the noise annoyance study.

The FAA of the United States sets a maximum limit of Ldn=65 dB (equivalent to LWECPN=78 dB) for residential areas, schools, and other building areas. This standard is more lenient than the current standard in China.

3.2.2.3 Determination of Standard System

Principles for determining the standard system:

(1) Meet the current assessment requirements for aircraft noise around airports in China;

(2) On the basis of meeting the above requirements, meet the assessment requirements for aircraft noise around airports of international organizations such as the WHO's and the World Bank's EHS guidelines;

(3) Meet the assessment requirements for aircraft noise around airports in international major economies;

(4) Ensure that the aircraft noise prevention and control measures corresponding to the freight volume of the Project can meet the airport aircraft noise management regulations of the above organizations and economies;

(5) Ensure that the planning of land use around the airport meets the management requirements for airport aircraft noise of the above organizations and economies.

Based on the works in this phase, the proposed standard system consists of the following parts:

(1) Environmental quality standards for different functional areas around the airport

(2) Noise pollution control measures (noise pollution prevention and control measures proposed in the original EIA of Ezhou Huahu Airport)

(3) Standard for sound insulation design of buildings

(4) Reference for land planning around the airport.

Based on the above analysis, three representative options are selected for the Project.

(1) Option I

Lwecpn: Adopt the current airport noise assessment indicator system in China, including the current Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport, and referring to the Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport (Draft for Comments), take Ldn as an auxiliary indicator for comparison.

The advantage of this option is that it allows us to use the mature airport noise assessment system in China, and it ensures that the environmental quality standard for noise, the standard for sound insulation design of buildings, and other noise prevention and control measures can be coordinated for consistency so that the noise assessment time can be reduced and timely completion of the Project can be ensured.

Lwecpn is the recommended aircraft noise assessment indicator by ICAO. And current standards for airport noise assessment in China are similar to international mainstream airport noise assessment indicators and are even more stringent. Furthermore, by

incorporating the Ldn as a subsidiary indicator in accordance with the Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport (Draft for Comments), the requirements of the international mainstream aircraft noise standards can be basically met.

(2) Option II

Ld and Ln: Adopt the aircraft noise standard limits for airports in the United Kingdom, and refer to the World Bank's General EHS Guidelines.

This option can ensure that the Project meets the requirements of the World Bank's EHS Guidelines, but the EHS Guidelines do not explicitly distinguish between the cases of new airport construction projects and airport reconstruction and expansion projects. For the completed airport projects, monitoring the current background noise can be challenging as sudden noise is hard to avoid. Thus, it may not be feasible to accurately determine the actual added values of Ld and Ln based on current background noise monitoring results. Therefore, the option cannot provide a solution for aircraft noise impact assessment that is specific to the Project. In addition, the periods of assessment for Ld (16-hour) and Ln (8-hour) in the United Kingdom differ from those in the EHS guidelines. This may limit the standard's referenceability, despite not having a significantly disruptive impact on the results.

(3) Option III

Lden and Lnight: Refer to the indicators and limits recommended by the EU and the WHO.

The recommended Lden and Lnight limits by the World Health Organization (WHO) are mainly based on the potential health risks associated with noise, and their standards are excessively stringent, making it challenging for most major transportation airports to comply. Lden, an aircraft noise assessment indicator recommended by France, Japan, and other countries, is similar to Ldn. The standard limit for Lden is almost equivalent to that specified in the Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport (Draft for Comments) in China. And it is included in Option I.

The composition of indicator systems of the options is shown in the table below.

Table 3.2-5 Noise Level Guiding Values Given by the Environmental, Health and Safety Standard of the World Bank Group

Option	Assessment Indicators	Environmental Quality Standards	Measures for Prevention and Control of Noise Pollution	Standards for Sound Insulation Design Of Buildings	References for Land Planning Around the Airport
Option I	L_{wecpn}/Ldn	*Environment Standard of Aircraft Noise around Airport* (GB 9660-88) and *Environmental Quality Standard for Aircraft Noise in the Surrounding Area of the Airport* (Draft for Comments)	Before the airport is put into operation, villages, schools and health centers with WECPNL exceeding 75 dB in the near-term target year (2030) shall be relocated throughout the village, and sound insulation measures shall be taken for schools/health centers between 70-75 dB. Villages will not be considered.	Refer to *Code for Design of Sound Insulation of Civil Buildings* (GB 50118-2010) for sound insulation of existing buildings; The sound insulation for new buildings shall be subject to the *General Code for Building Environment* (GB 55016-2021).	The short-term and long-term target years determined in the environmental impact report of the original Huahu Airport are 2030 and 2045 respectively. Since the land use planning is a long-term plan, the requirements for land planning around the airport are proposed with reference to the aircraft noise prediction results in the long-term target year. In the urban planning around the airport, it is not allowed to build new acoustic environment sensitive buildings in the area where the aircraft noise WECPNL of Ezhou Airport in 2045 is 70-75dB. The planned residential areas located within the range of WECPNL>75dB shall be adjusted to be outside the WECPNL70dB contour line in 2045.
Option II	Ld, Ln	*Environment, Health and Safety (EHS) Guidelines*	Further study is required to determine which specification is more reasonable		Further study is required to determine the required reference specification.
Option III	Lden, Lnight	Environmental Noise Guidelines for the European Region(2018)	Further study is required to determine which specification is more reasonable		Further study is required to determine the required reference specification.

From the above options and comparisons, it is evident that neither Option II nor Option III stands out in terms of protection of the aircraft noise receivers around the airport. Option I utilizes the current assessment system while being compatible with international mainstream indicators such as indicators recommended by FAA, Japan, and France, and can ensure that the assessment results meet the protection requirements for noise around airports of most economic organizations, while also taking into account the domestic trend of change of noise standards.

In order to more objectively and accurately assess the impact of the implementation of this global air cargo project on the surrounding noise, it is proposed to adopt Option I for the assessment standard. This option is based on the aircraft noise standard currently in use in China and refers to the *Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport* (Second Draft for Comments), that is, conducting the assessment according to a double-indicator system.

The work on noise prevention and control and airport surrounding land use planning is mainly based on the current noise standard system in China and the *Environmental Quality Standards for Aircraft Noise in the Surrounding Area of the Airport* (Second Draft for Comments). Meanwhile, the effectiveness of noise protection measures shall be verified according to the recommended aircraft noise protection limits by the WHO.

4 Acoustic Environment Baseline

4.1 Noise Impact Range and Sensitive Receivers

The noise impact range is defined as the total area that may be adversely affected by the project. Determination principles are as follows:

(1) Aircraft noise

According to the site visit and investigation, the area surrounded by sound level lines not less than 70dB of weighted equivalent continuous perceived noise level (LWECPN) is determined as the project impact area.

(2) Traffic noise from Wuchu Avenue

In order to prevent noise pollution during the operation period of WuChu Avenue, 200m on both sides of the road centerline is defined as the project impact area.

Sensitive receivers are defined as residential areas, schools, hospitals, etc. that may be affected by the project operation.

4.1.1 Impact Range and Sensitive Receivers of Huahu Airport

According to the environmental impact assessment document of Huahu Airport, the area affected by airport aircraft noise mainly involves 4 townships in Ezhou City: Yanji Town, Shawo Township, Yangye Town and Huahu Town. The main affected villages and groups in each township are as follows:

Table 4.1-1 Main Sensitive Receivers of Acoustic Environment in Aircraft Noise Area

Subordinate Township	Village/Street	Whether the land in this village is used for the Project	Relative location relationship with Huahu Airport
Yanji Town	Chehu Village	**Yes**	North
	Bajiao Village	**Yes**	West
	Duwan Village	**Yes**	North
	Lupai Village	No	North
Yangye Town	Gutang Village	**Yes**	North
	Pingshi Village	No	East
	Tuanshan Village	No	East
	Yangye Village	No	SE

Subordinate Township	Village/Street	Whether the land in this village is used for the Project	Relative location relationship with Huahu Airport
Shawo Township	Xinwan Village	No	Northwest China
	Jiajing Village	No	West
	Zouma Village	No	Land occupation for airport siting
	Huangshan Village	No	South
Huahu Town	Huahu Street	No	South
	Huashan Village	No	South
	Zhoushan Village	No	South

4.1.2 Impact Range and Sensitive Receivers of WuChu Avenue

According to the field investigation, residential areas within 200m on both sides of the centerline of WuChu Avenue have been demolished and there are no sensitive receivers. Therefore, the baseline situation will not be analyzed and presented again.

4.2 Aircraft Noise Baseline Situation

In order to understand the current aircraft noise situation of Huahu Airport, it is proposed to set up representative aircraft noise monitoring points within the noise impact range for monitoring. The aircraft noise model will be predicted according to the monitoring results to judge whether there are residents who need to be relocated due to aircraft noise in the current aircraft noise impact range; Based on the calibrated aircraft noise model, the aircraft noise impact of Huahu Airport in the near-term target year 2030 is predicted, and compared with the impact range in the original Huahu Airport EIA document to judge the consistency of the prediction results.

4.2.1 Monitoring Scheme for Current Situation of Aircraft Noise

4.2.1.1 Monitoring Points

According to the *Technical Guidelines for Environmental Impact Assessment-Acoustic Environment* (HJ2.4-2021) and the *Technical Guidelines for Environmental Impact Assessment-Civil Airport Construction Project* (HJ 87-2023), 9 - 14 noise measuring points can be arranged in the airport with existing two runways for reconstruction and expansion of the airport.

Huahu Airport has two runways at present. This time, a total of 14 monitoring points are arranged around Huahu Airport, which are mainly set within 3km-5km on both ends and 2km on both sides of the runway. The priority will be given to the acoustic

environmental protection targets below the flight path, and these monitoring points will be arranged on the side where the sensitive site is close to the main route and the airport runway, in order to obtain the maximum value of WECPNL at the sensitive site affected by aircraft noise. See Figure 4.2-1 and Table 4.2-1 for specific arrangement.

Table 4.2-1 Arrangement of Current Situation Monitoring Points

No. of Monitoring Point	Description	Administrative village	Nature	Latitude and longitude coordinates	Location of Monitoring Point
1	Shaojiadawan	Chehu Village	Residential area	g115.04316330,30.37779944	Roof of residential building (two floors)
2	Zhoujialiang	Chehu Village	Residential area	g115.06102792,30.36584053	Roof of residential building (two floors)
3	Wangjiazui	Jiajing Village	Residential area	g115.03107842,30.34218075	Roof of residential building (two floors)
4	Yanjiazui	Xinwan Village	Residential area	g115.02858281,30.32701780	Roof of residential building (two floors)
5	Huangshan Village	Huangshan Village	Residential area	g115.02560227,30.30856044	Roof of residential building (two floors)
6	Banbianshan	Huashan Village	Residential area	g115.04412658,30.28983018	Roof of residential building (two floors)
7	Lupai Village	Lupai Village	Residential area	g115.03453732,30.38414876	Roof of residential building (two floors)
8	Wangjiazui	Chehu Village	Residential area	g115.05746484,30.36359990	Roof of residential building (two floors)
9	Bajiao Village	Bajiao Village	Residential area	g115.03446757,30.35272609	Roof of residential building (two floors)
10	Banziqiao	Pingshi Village	Residential area	g115.07112265,30.33669473	Roof of residential building (two floors)
11	Zhaojiazhou	Yangye Village	Residential area	g115.05734687,30.30854855	Roof of residential building (two floors)
12	Yanjiadun	Huangshan Village	Residential area	g115.02632840,30.29746084	Roof of residential building (two floors)
13	Huashan Primary School	Huashan Village	School	g115.02640908,30.27734446	Roof of teaching building (four floors)
14	Xinxinran Community	Huahu Town	Community	g115.03897905,30.25858531	Roof of residential building (five floors)

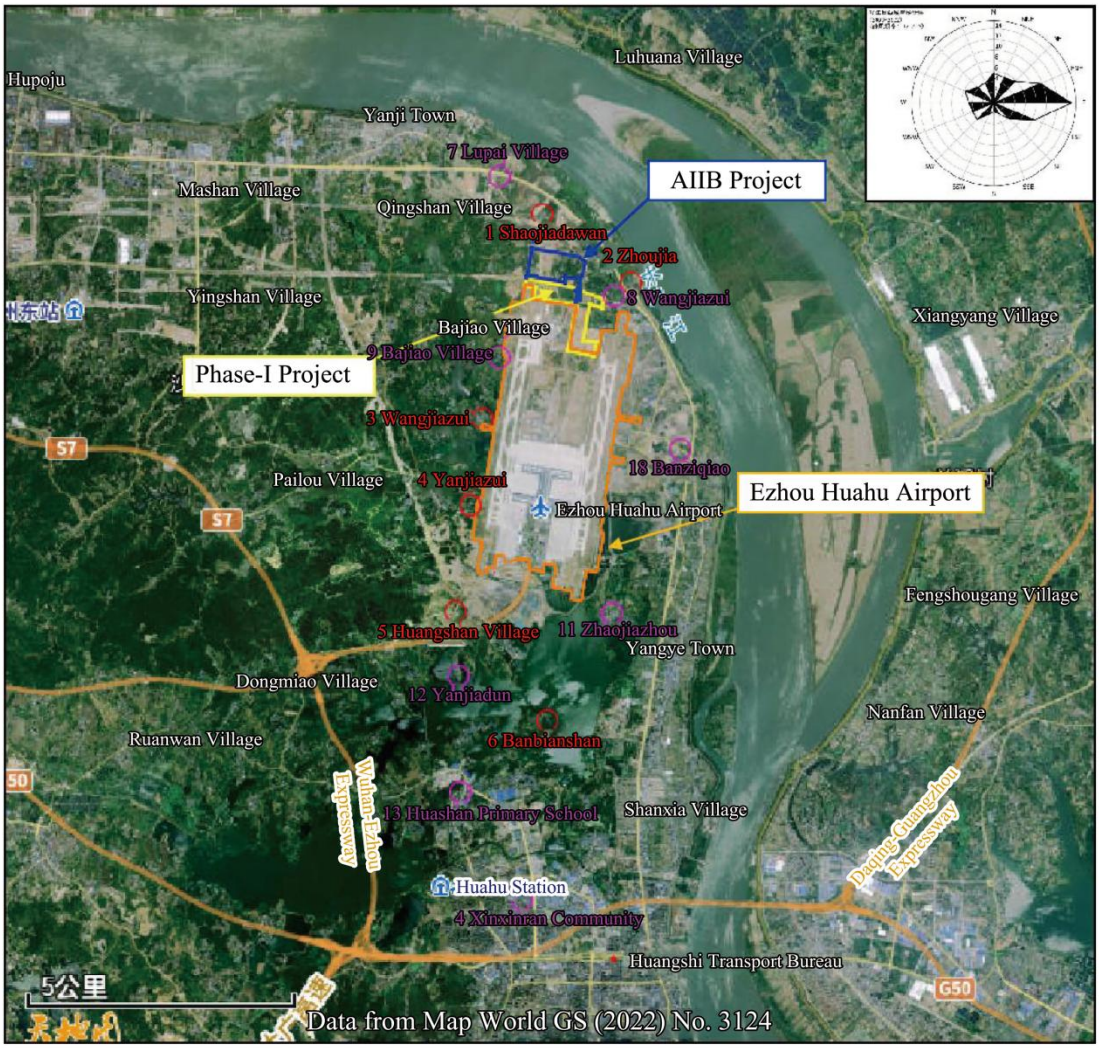

Figure 4.2-1 Layout of Monitoring Points for Current Situation of Aircraft Noise

4.2.1.2 Monitoring Time

The 14 monitoring points are completed in two times, and each point is measured for 7 days. Due to the weather, No. 1-6 measuring points are completed in two periods. See Table 4.2-2 for specific monitoring time and period.

Table 4.2-2 Schedule of Monitoring Time and Periods

No. of Monitoring Point	Monitoring date	Monitoring Period
No. 1-6 measuring points	31 October - 3 November 2023	0:00-24:00
	November 10, 2023 - November 12, 2023	0:00-24:00
No. 7-14 measuring points	November 15 - November 21, 2023	0:00-24:00

4.2.1.3 Monitoring Items and Methods

The simple measurement method in the *Measurement of Aircraft Noise around Airport* (GB9661-88) is adopted for this measurement to determine the maximum A-weighted

sound level (LAmax) and duration Td of each flight event, calculate the effective perceived noise level LEPN of each flight event, and then according to the energy average value LEPN of the effective perceived noise level in each day and the number of flights during day-time, evening and night-time, calculate the weighted equivalent continuous perceived noise level, LWECPN.

Background noise monitoring must be performed at each point. During monitoring, the meteorological parameters shall be recorded synchronously, and the flight (take-off and landing) time of each flight incident shall be recorded. The test shall not be carried out when the background noise interference is large as far as possible.

4.2.1.4 Monitoring Instrument

INV6210 sound level meter is adopted for all measuring points, and AWA6221A calibration instrument is used to calibrate the sound level meter before and after measurement.

4.2.1.5 Calculation Method

According to the *Environmental Standard of Aircraft Noise around Airport* (GB9660-88) and *Measurement of Aircraft Noise around Airport* (GB9661-88), the maximum A-weighted sound level (L_{Amax}) and duration (T_d) when the aircraft flies over the measuring point are measured this time, and then the LEPN of each aircraft is calculated.

The WECPNL is calculated from the EPNL of each aircraft flying over the measurement point as follows.

$$L_{WECPN} = \overline{L}_{EPN} + 10\log(N_1 + 3N_2 + 10N_3) - 39.4 \qquad (dB)$$

$$\overline{L}_{EPN} = 10\log\left[1/(N_1 + N_2 + N_3)\sum_i\sum_j 10^{L_{EPNij}/10}\right]$$

Wherein: $L_{EPN} = L_{A\max} + 10\lg(Td/20) + 13$

N1: Day-time (7:00-19:00); N2: Evening (19:00-22:00); N3: Night-time (22:00-7:00).

4.2.2 Monitoring Results for Current Situation of Aircraft Noise

(1) Aircraft operation

The aircraft operation monitored at each monitoring point during the three periods from October 31 to November 3, November 10 to November 12, and November 15 to November 21, 2023 are shown in Tables 4.2-3 - 4.2-5.

Table 4.2-3 Number of Flights Monitored at Each Monitoring Point from October 31 to November 3

Monitoring point No.	Description	Take-off			Landing		
		Daytime	Evening	Nighttime	Daytime	Evening	Nighttime
1	Shaojiadawan	9	4	104	7	8	93
2	Zhoujialiang	7	0	64	8	0	74
3	Wangjiazui						
4	Yanjiazui						
5	Huangshan Village	3	4	1	2	6	6
6	Banbianshan	7	0	1	0	0	0

Table 4.2-4 Number of Flights Monitored at Each Monitoring Point from November 10 to November 12

Monitoring point No.	Description	Take-off			Landing		
		Daytime	Evening	Nighttime	Daytime	Evening	Nighttime
1	Shaojiadawan	15	8	69	0	0	0
2	Zhoujialiang	3	0	50	0	0	0
3	Wangjiazui						
4	Yanjiazui						
5	Huangshan Village	0	0	0	12	13	66
6	Banbianshan	0	0	0	2	0	52

Table 4.2-5 Number of Flights Monitored at Each Monitoring Point from November 15 to November 21

Monitoring point No.	Description	Take-off			Landing		
		Daytime	Evening	Nighttime	Daytime	Evening	Nighttime
7	Lupai Village						
8	Wangjiazui	16	0	86	6	0	82
9	Bajiao Village	22	12	186	13	17	122
10	Banziqiao						
11	Zhaojiazhou	4	0	0	6	0	18
12	Yanjiadun	7	4	3	14	7	33
13	Huashan Primary School	7	4	3	14	7	33
14	Xinxinran Community	0	0	0	8	0	18

See Table 4.2-6 for the number of flights of different aircraft types on the day of airport monitoring.

Table 4.2-6 Number of Flights of Different Aircraft Types on the Day of Airport Monitoring

Model	Take-off (number of flight)	Landing (number of flight)
A320	6	6
Total	6	6

See Table 4.2-7 for the proportion of day-time, evening and night-time aircraft movements during monitoring.

Table 4.2-7 Proportion of Day-time, Evening and Night-time Aircraft Movements during Monitoring

Flight status	Daytime (7:00-19:00)	Evening (19:00-22:00)	Nighttime (22:00-7:00)
Take-off proportion (%)	50	50	0
Landing proportion (%)	66.67	33.33	0

See Table 4.2-8 for the taking-off and landing directions during monitoring.

Table 4.2-8 Taking-off and Landing Directions during Monitoring

Runway No.	Proportion in total take-offs and landings	Flight status	Relative proportion
06	91.67%	Take-off	54.55%
		Landing	45.45%
24	8.33%	Take-off	0
		Landing	100%

(2) $\overline{EPNL}$ and WECPNL of each measuring point

The $\overline{EPNL}$ and WECPNL values of each measuring point are listed in Table 4.2-9-Table 4.2-11, and LAmax, Td and LEPN of each measuring point are also listed in the table.

Table 4.2-9 LAmax, Td, LEPN and LWECPN dB at Each Measuring Point from October 31 to November 3

S/N	Name of monitoring point	LAmax	LEPN	Td(s)	$\overline{EPNL}$	Four days WECPNL	Daily average WECPNL
1	Shaojiadawan	69.8~99.4	84.6~108.1	6.9~30.3	95.1	88.8	82.8
2	Zhoujialiang	75.2~95.7	88.5~103.9	5.9~22.4	97.9	90.0	84.0
3	Wangjiazui	82.7~84.0	91.8~94.5	8.2~11.2	95.9	67.7	
4	Yanjiazui	58.7~69.3	70.4~77.2	6.3~14.8	74.5	48.6	
5	Huangshan Village	70.4~81.8	82.5~93.9	15.5~25.8	89.1	69.5	63.5
6	Banbianshan	72.2~81.3	87.0~94.2	18.7~31.4	97.2	62.5	56.4

Table 4.2-10 LAmax, Td, LEPN and LWECPN dB at Each Measuring Point from November 10 to November 12

S/N	Name of monitoring	LAmax	LEPN	Td(s)	$\overline{EPNL}$	Three days WECPNL	Daily average

	point						WECPNL
1	Shaojiadawan	70.0~96.7	85.8~107.3	10.0~38.7	95.6	84.9	80.1
2	Zhoujialiang	68.1~84.8	78.4~96.7	10.7~30.1	92.5	80.1	75.3
3	Wangjiazui	82.7~84.0	91.8~94.5	8.2~11.2	95.9	67.7	
4	Yanjiazui	58.7~69.3	70.4~77.2	6.3~14.8	74.5	48.6	
5	Huangshan Village	69.9~84.2	83.6~96.4	13.6~28.1	89.3	78.4	73.7
6	Banbianshan	80.7~90.2	92.3~101.2	10.8~19.6	97.3	85.1	80.3

Table 4.2-11 LAmax, Td, LEPN and LWECPN dB at Each Measuring Point from November 15 to November 21

S/N	Name of monitoring point	LAmax	LEPN	Td(s)	$\overline{EPNL}$	Seven days WECPNL	Daily average WECPNL
7	Lupai Village	70.0~96.7	85.8~107.3	10.0~38.7	95.6	84.9	80.1
8	Wangjiazui	79.8~99.0	86.9~109.3	10.6~28.9	95.2	88.1	79.7
9	Bajiao Village	62.8~93.4	76.2~102.6	3.9~44.1	95.8	91.5	83.0
10	Banziqiao	58.7~69.3	70.4~77.2	6.3~14.8	74.5	48.6	
11	Zhaojiazhou	60.2~78.9	70.8~91.8	11.0~43.5	83.2	66.5	61.8
12	Yanjiadun	66.8~90.9	81.6~101.6	8.0~30.1	94.8	81.5	73.1
13	Huashan Primary School	63.5~82.2	76.7~95.3	14.7~52.1	91.4	78.1	69.7
14	Xinxinran Community	63.2~81.1	68.6~93.9	3.5~28.3	90.5	73.8	65.4

(3) Comparison of calculated and measured results

In combination with the actual flight of aircraft during noise measurement, INM7.0d is used to calculate the $\overline{EPNL}$ values at each measuring point. The comparisons between calculated values and measured values are listed in Table 4.2-12-4.2-14. The comparison results show that the difference between the calculated and measured results of each monitoring point is within ±3dB, and the results are quite consistent.

Table 4.2-12 Comparison between Calculated Value and Measured Value of Daily Average WECPNL at Each Measuring Point from October 31 to November 3

S/N	Name of monitoring point	Calculated value	Measured value	Calculated-Measured	Reason for difference
1	Shaojiadawan	84.1	82.8	1.3	/
2	Zhoujialiang	85.4	84.0	1.4	/
3	Wangjiazui	96.1	95.9	0.2	/
4	Yanjiazui	76.8	74.5	2.3	/
5	Huangshan Village	66.7	63.5	3.2	/

6	Banbianshan	57.9	56.4	1.5	/

Table 4.2-13 Comparison between Calculated Value and Measured Value of Daily Average WECPNL at Each Measuring Point from November 10 to November 12

S/N	Name of monitoring point	Calculated value	Measured value	Calculated-Measured	Reason for difference
1	Shaojiadawan	77.2	80.1	-2.9	/
2	Zhoujialiang	77.4	75.3	2.1	/
3	Wangjiazui	96.1	95.9	0.2	/
4	Yanjiazui	76.8	74.5	2.3	/
5	Huangshan Village	76.5	73.7	2.8	/
6	Banbianshan	80.0	80.3	-0.3	/

Table 4.2-14 Comparison between Calculated Value and Measured Value of Daily Average WECPNL at Each Measuring Point from November 15 to November 21

S/N	Name of monitoring point	Calculated value	Measured value	Calculated-Measured	Reason for difference
7	Lupai Village	69.0	66.4	2.6	/
8	Wangjiazui	78.3	79.7	-1.4	/
9	Bajiao Village	83.7	83.0	0.7	/
10	Banziqiao	76.8	74.5	2.3	/
11	Zhaojiazhou	63.4	61.8	1.6	/
12	Yanjiadun	75.6	73.1	2.5	/
13	Huashan Primary School	67.0	69.7	-2.7	/
14	Xinxinran Community	65.5	65.4	0.1	/

(4) Meteorological conditions during monitoring

The meteorological data during monitoring are shown in Table 4.2-15.

Table 4.2-15 Meteorological Data during Monitoring

Monitoring date	Weather	Wind direction	Wind speed (m/s)	Air temperature (°C)	Air pressure (hPa)	Relative humidity (%)
October 31	Sunny	SE	2	21.1	1020.2	69
November 1	Sunny	SE	3	22.7	1016.4	56
November 2	Sunny	SE	2	22.1	1013.6	65
November 3	Cloudy to light rain	West	2	22.5	1013.9	61
November 10	Light rain to cloudy	SE	3	14.8	1024.3	85

November 11	Cloudy day to light rain	West	4	10.8	1028.3	83
November 12	Light rain to cloudy day	Northwest China	3	9.0	1034.0	82
November 15	Cloudy to light rain	SW	2	9.2	1027.9	82
November 16	Light rain to sunny	West	2	10.4	1032.5	73
November 17	Sunny	South	1	10.2	1028.8	72
November 18	Sunny	SE	2	11.6	1026.9	67
November 19	Cloudy	SE	2	13.7	1022.0	67
November 20	Sunny	SE	2	14.1	1021.3	69

4.2.3 Software Used for Simulation

The software used in this simulation is INM7.0d aircraft noise prediction system software recommended by the United States Federal Aviation Administration, which has been applied in more than 50 countries around the world. This software is mostly used for airport noise prediction in China. INM software description believes that INM software is designed for calculating long-term average sound level, which will be different from the measured results due to the influence of meteorological conditions and other factors.

4.2.4 Analysis of Error Sources between Calculated and Measured Aircraft Noise

4.2.4.1 Analysis of Relevant Models and Monitoring Accuracy

(1) Foreign analysis of model prediction accuracy

The difference between the calculated results and the measured aircraft noise mainly comes from the accuracy of prediction model, the accuracy of calculation software, the errors of monitoring instruments and the differences in conditions used for monitoring and calculation.

① Accuracy of aircraft noise calculation model

According to the Prediction Method for Lateral Attenuation of Aircraft Noise (2006) issued by AIR5662, the error of lateral attenuation formula is ±2dB.

② Allowable range of sound level calculated by calculation model

ECAC.CEAC Doc.29, "*Recommended Method for Calculating Noise Contours around Airport*", issued by the European Civil Aviation Conference on 3 July 1997, in Annex A gives the permissible range of typical single-aircraft 24-hour equivalent sound levels under different conditions and with different calculation procedures when using the recommended method to calculate level contours.

Figure 4.2-2 shows the location of the flight path and calculation point, and Table 4.2-16 shows the coordinates of the calculation points.

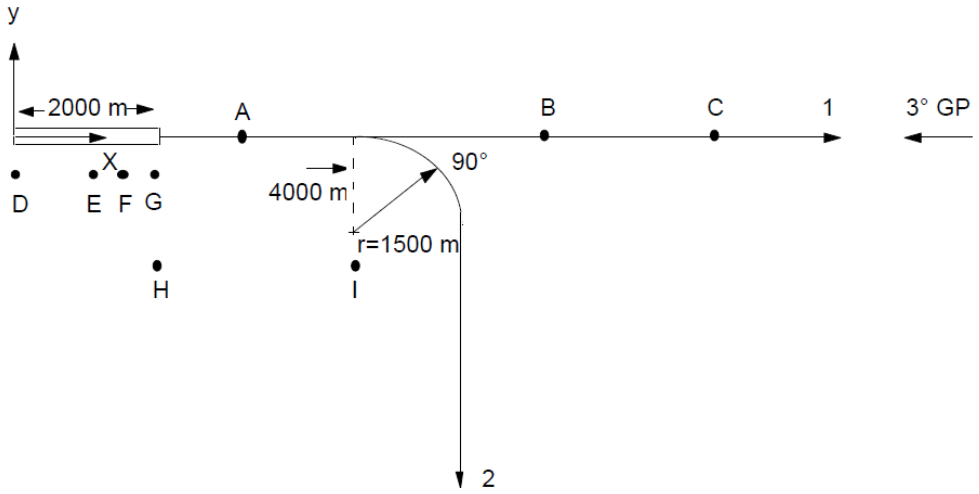

Figure 4.2-2 Location of Flight Path and Calculation Point

Table 4.2-16 Coordinates of Calculation Points

Location of calculation point	Xm	Ym
A	3000	0
B	6000	0
C	10000	0
D	-500	-500
E	1000	-500
F	1500	-500
G	2000	-500
H	2000	-2000
J	4000	-2000

The acceptable range of the calculated values is shown in Table 4.2-17.

Table 4.2-17 Acceptable Range of Calculated Value dB

Model	Flight	Calculation	Calculated value LAeq (24 hours)

	status	point	DANSIM	Acceptable range	INM
B767-300 /PW4060	Landing	A	49.8	48.8-51.0	50.0
		B	41.8	40.8-43.0	42.0
		C	36.4	35.2-37.4	36.2
		D	11.7	10.7-12.7	11.7
		E	28.9	26.0-29.9	27.0
		F	29.4	28.4-30.4	29.4
		G	26.4	25.4-28.1	27.1
		H	9.8	8.8-12.2	11.2
		J	11.5	10.5-13.5	12.5
B767-300 PW 4060	Take-off	A	44.8	43.8-46.9	45.9
		B	38.8	37.5-39.8	38.5
		C	33.0	31.8-34.0	32.8
		D	41.3	40.3-43.1	42.1
		E	45.8	40.6-46.8	41.6
		F	47.0	44.9-48.0	45.9
		G	46.1	45.1-47.4	46.4
		H	28.3	27.3-29.4	28.4
		J	25.9	24.9-26.9	25.9

It can be seen from the table that the allowable range of sound level calculated by the calculation software is inconsistent at different points. Except for a few points, it should be between 2.2-3.1dB.

③ INM software description believes that INM software is designed for calculating long-term average sound level, which will be different from the measured results due to the influence of meteorological conditions and other factors. In the United States Federal Aviation Administration Advisory Circular (AC 150/5020-1), it is considered that the accuracy of the INM computer noise prediction model in estimating annual mean Ldn values is estimated to be ±3 decibels on the 75 dB contour and ±5 decibels on the 65 dB contour, with average errors tending towards zero at points along the contour.

(2) Precision of monitoring instruments

Electroacoustics-Sound Level Meters-Part 1: Specification (GB/T3785.1-2010) stipulates that the allowable error (excluding measurement uncertainty) of Class 1 sound level meter at 1 kHz is ±0.7 dB, and the linear error plus the expanded uncertainty of measurement shall not exceed ±1.1 dB.

4.2.4.2 Comparison between INM Calculation Results and Measured Data of Existing Airports in China

(1) Comparison of Measured and Calculated Results of Beijing Capital International Airport

Refer to Table 5.7-3 for the difference between measured results and calculated monitoring results of Beijing Capital International Airport. The column "February 1, 2010" in the table is the difference between the measured data of the automatic noise monitoring system of Beijing Capital International Airport and the calculation result by INM software based on actual number of flights on that day; the column "the whole year of 2010" is the difference between the result calculated by INM using the average daily number of flights in the whole year of 2010 and the annual average value of the automatic monitoring system results in 2010; the data in the column "acceptance monitoring" is the difference between the manual monitoring results of Beijing Capital International Airport accepted by China National Environmental Monitoring Center in 2012 and the 2015 results predicted by environmental impact assessment in 2005 (the average aircraft movements during the monitoring period in 2011 was 1,490, and the predicted aircraft movements in 2015 was 1,460, which were comparable). The comparison results show that the differences between the three measured and calculated results are basically within 3dB.

Table 4.2-18 Comparison between Calculated and Measured INM Aircraft Noise (WECPNL dB)

S/N	Station	2010 February 1 Comparison	2010 Annual Comparison	Acceptance		
				Monitoring point	EIA Prediction-Acceptance monitoring	Remarks
1	Xiaxianying	-2.8	-0.1	Nanbanbidian Primary School	-1.7	
2	Zhangxi Village	-1.6	2.8	Banbidian Health Service Station	1	Refer to Nanbanbidian
3	Dongmage Village	-2.5	2.0	Fields outside Yanming Mountain Villa (Yinghuayuan District II)	2.3	Refer to Yinghuayuan
5	Xidulan	0.7	-2.0	Playground of Nanfaxin Middle School	-3.6	

S/N	Station	2010 February 1 Comparison	2010 Annual Comparison	Acceptance		
				Monitoring point	EIA Prediction-Acceptance monitoring	Remarks
6	Beifaxin	-0.2	3.0	Nanfaxin Hospital	0.2	
7	Touerying	-2.1	2.8	Nanfaxin Town Government	-0.7	Refer to China-Australia Epilepsy Hospital
8	Gequ	-1.5	-2.7			
9	Pi Village	-0.4	-0.8			
10	Yinghuayuan	2.8	0.3			
11	Guantou	-0.5	-2.8			
13	Qianweigou	2.7	1.4			
14	Kongganghuayuan	1.2	2.3			
16	Shunyi District Government	-2.7	-0.9			

(2) Comparison between Measured Results and Calculation Results of New Baiyun Airport

See Table 4.2-19 for the difference between the measured results and calculated results of the new Baiyun Airport, in which the acceptance monitoring results are those obtained by China National Environmental Monitoring Center in 2005 and the EIA monitoring results are those obtained in 2008. It can be seen from the results that among the 33 points of acceptance monitoring, the differences of 8 points are greater than 3dB, and the differences of the remaining 25 points are all less than 3dB. Among the 16 points in EIA, the differences are all less than 3dB.

Table 4.2-19 Comparison of Acceptance Results and Calculation Results

Acceptance monitoring point	Monitoring-calculation difference	Name of EIA measuring point	Measured value-Calculated value
A1	2.7	Aigang Village	1.9
A2	0.4	Lianhuatang Subvillage 3	0.1
A3	-1.7	Mingxing Village	0.4
A4	0	No. 73 Middle School	-0.6
B1	-0.4	Renhe No.3 Middle School	-0.2
B2	2	Renhe No.7 Primary	2.9

		School	
B3	-0.2	No. 72 Middle School	2.3
B4	1.1	Xiushui Village	2
B5	1.4	Jiuyi Primary School	-2.3
B6	-2.7	People's Government of Huadong Town	3
B7	2.1	Zhuhu Village	1.9
B8	-2.3	Dongfang Village, Huashan Town	-1.3
B9	1.6	Shanxia Village	1.3
B10	-1	Donghu Village	2.3
C1	-2.8	Hengshazhuang, Gaoxi Village	2.7
C2	1.8	Xiutang Village	1.3
C3	0.1		
C4	1		
C5	3.4		
C6	3.8		
C7	-5.5		
C8	-5.5		
C9	1.7		
C10	4.2		
C11	-2.2		
D1	2		
D2	3.4		
D3	1.2		
D4	-2.5		
D5	2.8		
K1	-3.6		
K2	0.3		
K3	3.4		

(3) Statistical Results of Comparison between Measured and Calculated Results of Other Airports

Table 4.2-20 shows the comparison between current situation monitoring results and calculation results during environmental impact assessment of 10 airports in recent years, with a difference within 3dB. The mean absolute deviation of the difference is 0.82-1.73dB, and the average result of 10 airports is 1.30dB.

Table 4.2-20 Summary of Comparisons between Measured and Calculated Results at Other Airports dB

Airport Name	Number of monitoring points	Monitor-calculation difference range	Mean absolute deviation
Haikou Meilan International Airport	14	-2.4~2.5	1.34
Shenzhen Airport	7	0.2~-2.5	0.98
Shijiazhuang Airport	7	-1.4-1.8	1.17
Ningbo Airport	7	-1.7~1.25	1.00
Yancheng Airport	7	-1.09~3.01	1.51
Xianyang Airport	7	-2.7~0.8	1.14
Dalian Airport	9	-4.7~1.7	1.6
Chifeng Airport	6	-1.2~1.4	0.82
Zhengzhou Xinzheng International Airport,	8	-2.8~2.1	1.73
Guangzhou Baiyun International Airport	16	-2.3~2.9	1.66
Total	88	-4.7~3.01	1.30

It can be seen from the above analysis results that under reasonable input parameters, the difference between the aircraft noise predicted by INM software and the measured result is generally within 3dB.

To sum up, the difference between the aircraft noise predicted by INM software and the measured result can be within ±3dB, which is an acceptable error. The noise prediction results obtained by this model do not need further adjustment.

4.2.5 Analysis of Current Situation Monitoring Results

According to the requirements for ecological environmental protection measures during the construction and operation of Huahu Airport in the *Reply of the Department of Ecology and Environment of Hubei Province on the Environmental Impact Report of Hubei Ezhou Civil Airport Project* (EHS [2019] No. 259) issued by the Department of Ecology and Environment of Hubei Province on September 20, 2019: "Further optimize and adjust the flight procedures. On the premise of ensuring that more than 90% of freighters take off from south to north and land from north to south, increase the proportion of aircraft taking off and landing at the northern end, and strive to reach more than 95%, so as to effectively reduce the impact of aircraft noise on sensitive areas."

This current situation monitoring is actually divided into three time periods due to weather reasons. The take-off and landing modes of aircraft in the two monitoring periods of "October 31 to November 3" and "November 15 to November 21" are mainly "taking off from south to north and landing from north to south". The aircraft movements and noise range in the monitoring period of "November 15 to November 21" are larger than those in the monitoring period of "October 31 to November 3". Therefore, the current noise isoline of "November 15 to November 21" in this current situation monitoring is used to sort out the residential areas where LWECPN exceeds 75dB, as shown in the following figure.

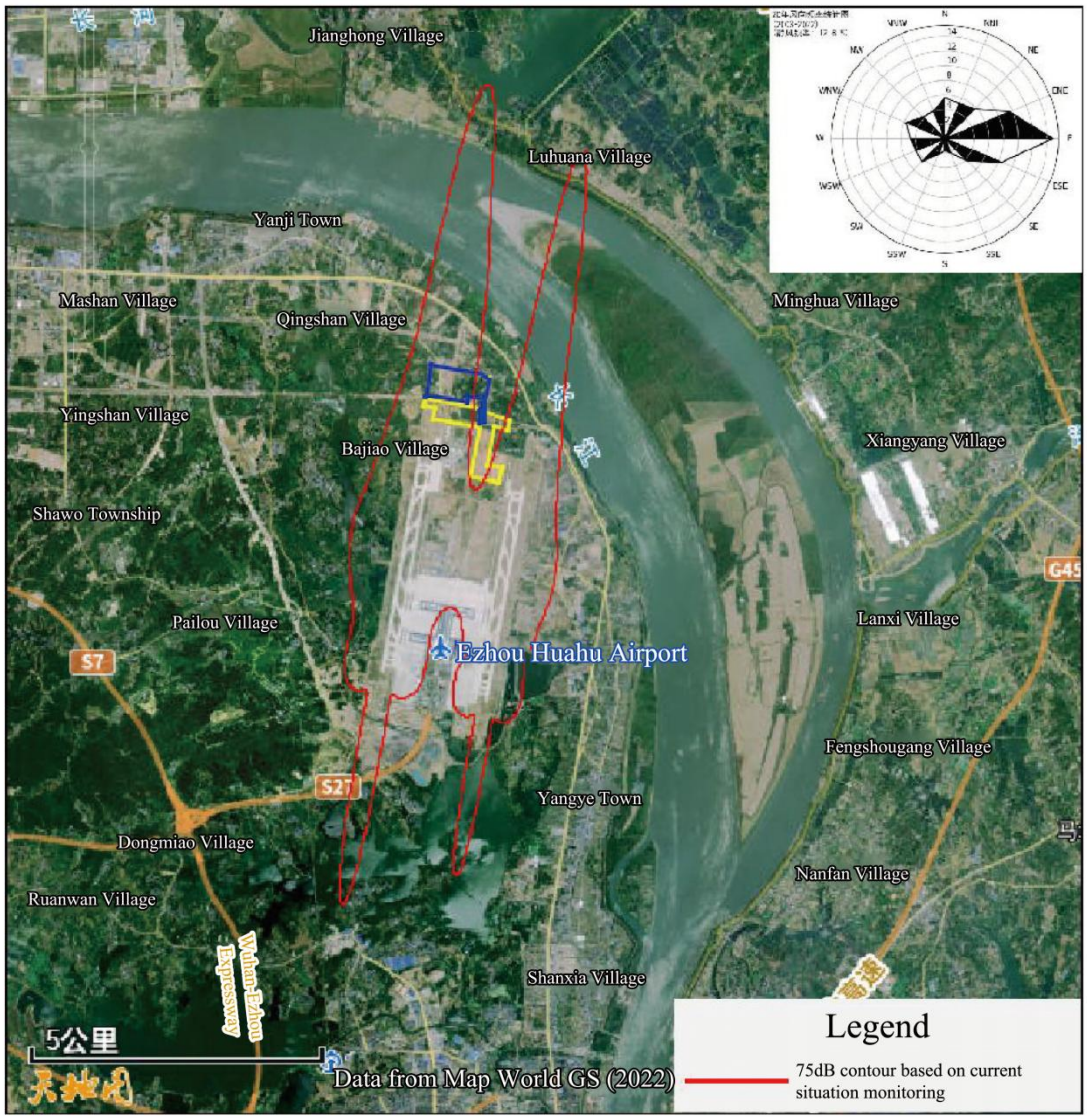

Figure 4.2-3 Lwecpn 75dB Contour for this Current Status Monitoring

Results show that:

In the area where Lwecpn exceeds 75dB drawn after fitting by using this aircraft noise prediction model and the current monitoring results, **some residents in Duwan Village, Chehu Village and Bajiao Village have not yet been demolished, but the above residential areas are located within the relocation scope determined by Huahu Airport EIA and its approval. As the Project has not yet been constructed and put into operation, the aircraft noise impact on the above areas at this stage is irrelevant to the Project.**

5 Prediction and Assessment of Noise Impact

5.1 Aircraft Noise Prediction

5.1.1 Prediction Model and Related Parameters

5.1.1.1 Prediction Model

INM 7.0d (Integrated Noise Model) aircraft noise prediction system software is used for this noise prediction, which is developed by the FAA Office of Environment and Energy, Noise Division (AEE-100). The INM core calculation model, based on the standards of SAE Aviation Noise Committee (A-21), is compatible with multiple international standards, including ECAC Document 29 and ICAO Circular 205 and is widely used in noise impact assessment of civil aviation airports.

INM can be used to calculate multiple aircraft noise assessment indicators, such as Ldn, Lden (CNEL), LAmax, Lwecpn, Ld (15-hour) and Ln (9-hour), and assess the impact of airport noise from multiple perspectives, such as short-term and long-term average.

5.1.1.2 Forecasting Procedure

According to *Technical Guidelines for Environmental Impact Assessment-Civil Airport Construction Project* (HJ87-2023), the aircraft noise prediction procedure chart of Ezhou Airport is shown in Figure 5.1-1.

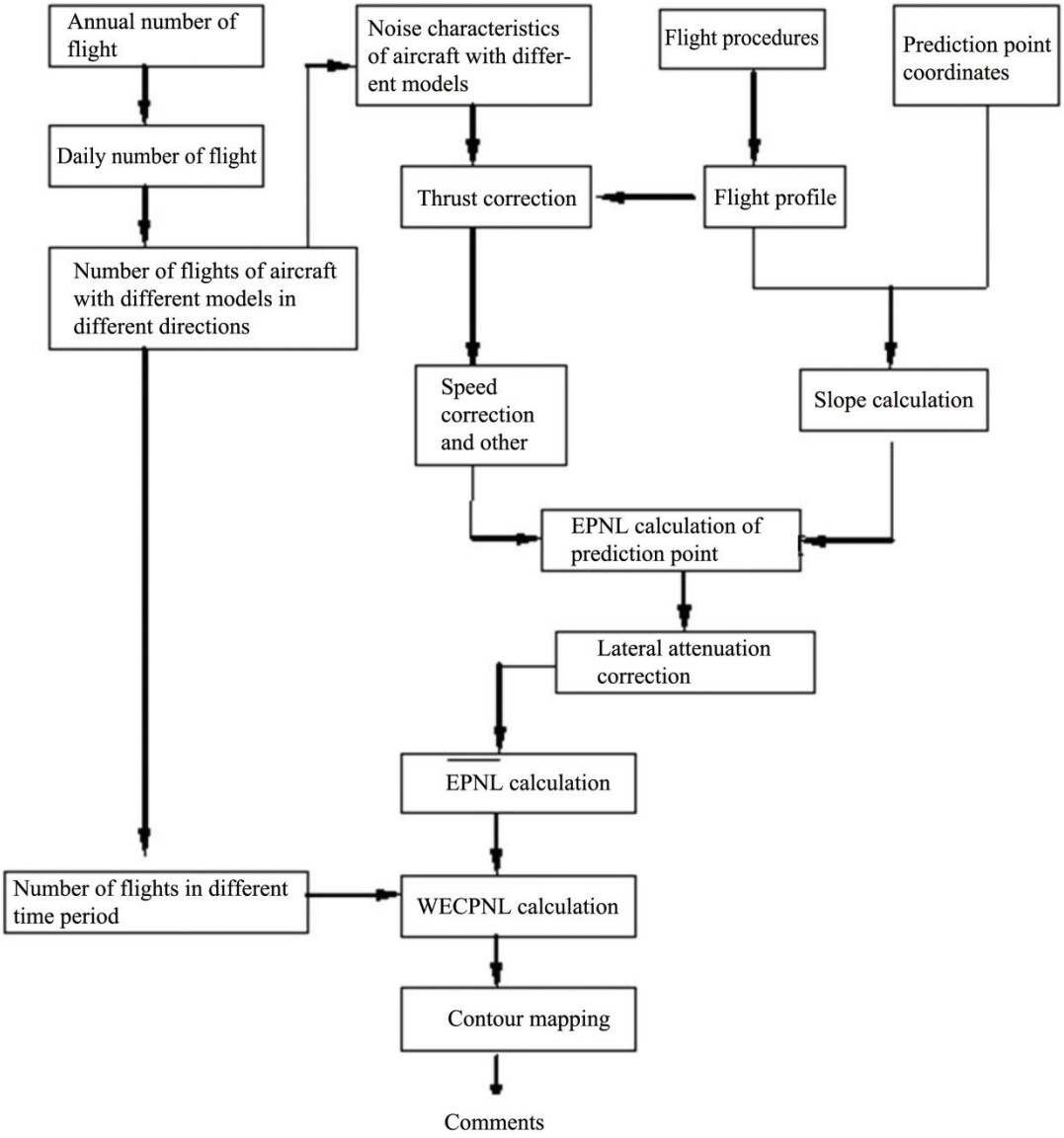

Figure 5.1-1 Diagram of Aircraft Noise Prediction Procedure

In the aircraft noise prediction procedure, the following elements play a key role:

(1) Noise distance characteristic curve or noise-distance-power data of a single aircraft: The data in INM7.0d is used for this assessment, and appropriate adjustments are made when necessary.

(2) Take-off and landing tracks of aircraft: This assessment has obtained the help of relevant departments of Ezhou Airport, which provides basic information on flight tracks for aircraft noise prediction at Ezhou Airport;

(3) Prediction of airport aircraft types and number of flights: In this assessment, the aircraft types used in this prediction and the number of flights in different headings are given based on the aircraft operation type and expected number of flights provided by the Employer.

(4) Flight procedures: In this assessment, predictions are made based on the flight procedures provided by the Employer.

5.1.1.3 Prediction Scenario

This prediction is divided into the following two scenarios:

(1) The aircraft noise impact prediction is carried out based on the flight volume required for cargo volume of the Project;

(2) The accumulative noise prediction of Huahu Airport is carried out in combination with the monitoring results of the current situation and the actual aircraft types.

5.1.1.4 Prediction Period

In view of the fact that the feasibility study and EIA approval of Huahu Airport both take 2030 as the near-term target year for planning, and the noise prediction results in 2030 are used as the basis for demolition and resettlement; and the Project will enter the stable operation stage in 2030, so the forecast time period of the two scenarios is 2030.

5.1.1.5 Main Parameters for Prediction

(1) Scenario 1: According to the Feasibility Study Report on Implementing Hubei Global Air Cargo Logistics Hub Project by Utilizing AIIB Loans, by 2030, the international freight volume of the Project is planned to reach 381,600 tons/year, and the corresponding aircraft movements are 3,816, all 747 model, and all operating at night.

The heading ratio is 50% for the east and west runways respectively, and the take-off and landing proportion from south to north is 10%:90%.

It should be noted that the freight volume of 381,600 tons/year corresponding to this project is included in the annual cargo and mail throughput of Huahu Airport in 2030. In other words, the operation of this project will not cause the increase of cargo sorties and aircraft flight frequency of Huahu Airport.

(2) Scenario 2: According to the *Reply of the Department of Ecology and Environment of Hubei Province on the Environmental Impact Report of Hubei Ezhou Civil Airport Project* (EHS [2019] No. 159), by 2030, the annual cargo throughput will reach 3.3 million tons, the passenger throughput will reach 1.5 million person-times, and the aircraft movements will be 90,000 sorties (46 sorties at peak hours).

Parameters such as the proportion of day-time, evening and night-time sorties and the proportion of different headings are as follows:

① Proportion of day-time, evening and night-time sorties

According to the data provided by Huahu Airport, the proportions of day-time and night-time sorties of passenger aircrafts, SF freighters and non-SF freighters are shown in Table 5.1-1~5.1-4 respectively.

Table 5.1-1 Proportion of Day-time and Night-time Sorties of Passenger Aircrafts

Year	Time period	Daytime (7:00-19:00)	Evening (19:00-22:00)	Nighttime (22:00-7:00)
2030	Take-off	80%	20%	0%
	Landing	80%	20%	0%

Table 5.1-2 Proportion of Day-time and Night-time Sorties of SF Domestic Cargo Aircraft

Year	Time period	Daytime (7:00-19:00)	Evening (19:00-22:00)	Nighttime (22:00-7:00)
2030	Take-off	0%	30%	70%
	Landing	0%	30%	70%

Table 5.1-3 Proportion of Day-time and Night-time Sorties of SF International Cargo Aircraft

Year	Time period	Daytime (7:00-19:00)	Evening (19:00-22:00)	Nighttime (22:00-7:00)
2030	Take-off	38%	0%	62%
	Landing	38%	0%	62%

Table 5.1-4 Proportion of Day-time and Night-time Sorties of Non-SF Cargo Aircraft

Year	Time period	Daytime (7:00-19:00)	Evening (19:00-22:00)	Nighttime (22:00-7:00)
2030	Take-off	60%	0%	40%
	Landing	60%	0%	40%

② Proportion of different headings

According to the data provided by Ezhou Airport, the take-off and landing proportions of different runways and headings at Ezhou Airport are shown in Table 5.1-5.

Table 5.1-5 Proportions of Take-off and Landing in Different Headings on Different Runways

Take-off and landing direction	Relative proportion	Runway No.	Flight status	Proportion %	Heading name	Heading ratio %
From south to north	50	01L	Take-off	45	GUGAM (to Huangpi)	5
					Longkou (to Huangpi)	5

					GUGAM (To Caidian)	5
					Longkou (to Caidian)	5
					ESDOS	20
					MIDOX	30
					TULMU	20
					P36	10
			Landing	5	——	
		01R	Take-off	45	GUGAM (to Huangpi)	5
					Longkou (to Huangpi)	5
					GUGAM (To Caidian)	5
					Longkou (to Caidian)	5
					ESDOS	20
					MIDOX	30
					TULMU	20
					P36	10
			Landing	5	——	
From north to south	50	19L	Take-off	5	GUGAM (to Huangpi)	5
					Longkou (to Huangpi)	5
					GUGAM (To Caidian)	5
					Longkou (to Caidian)	5
					ESDOS	20
					MIDOX	30
					TULMU	20
					P36	10
			Landing	45	——	
		19R	Take-off	5	GUGAM (to Huangpi)	5
					Longkou (to Huangpi)	5

					GUGAM (To Caidian)	5
					Longkou (to Caidian)	5
					ESDOS	20
					MIDOX	30
					TULMU	20
					P36	10
			Landing	45	——	

5.1.1.6 Flight Procedures

The ratio of PBN flight procedures to traditional flight procedures is 99%: 1%.

5.1.1.7 Meteorological Parameters

The center point of the west runway is used as the airport reference point, and its coordinates are N30°20′34.28″ and E115°01′46.60″. The elevation of east-west runway is 22.5m at the south end and 26m at the north end. The annual average temperature is 17.6°C, the annual average barometric pressure is about 1015.3hpa, the annual average relative humidity is 56%, and the annual average wind speed is 1.9m/s.

5.1.2 Prediction Results and Analysis of Aircraft Noise

5.1.2.1 Noise Impact Prediction of Cargo Flights Corresponding to the Project

Based on the above prediction parameters, the Lwecpn contour of aircraft noise generated by cargo flights corresponding to the Project is shown in Figure 5.1-2.

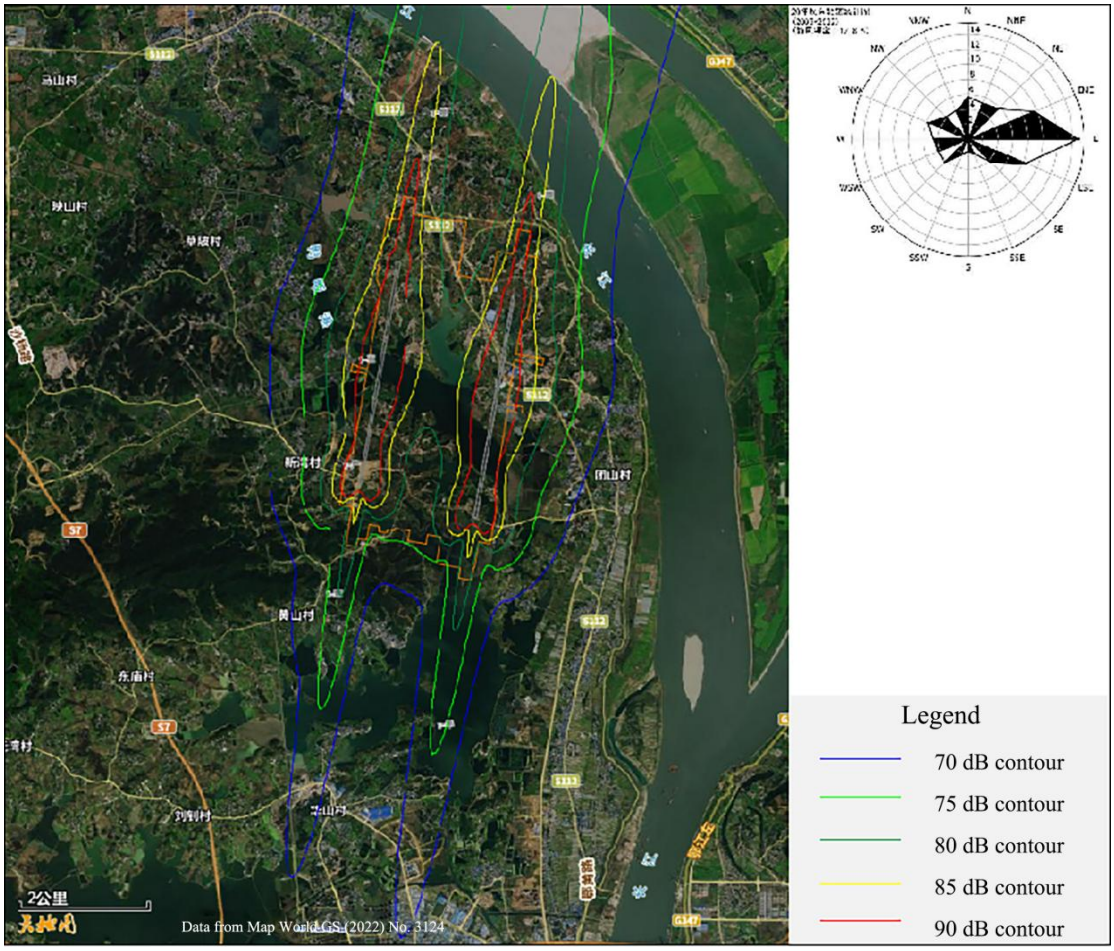

Figure 5.1-2 Contour Map of Annual Average Lwecpn Generated by Cargo Flights in the Project

According to the prediction results, in the area where the aircraft noise Lwecpn generated by cargo flights of the Project exceeds 75dB, there are still 4 villages (Xinwan Village, Jiazheng Village, Duwan Village, and Chehu Village) with 826 households not relocated.

5.1.2.2 Accumulative Noise Impact Prediction of Huahu Airport

Based on the above prediction parameters, the accumulative WECPNL contour of aircraft noise at Huahu Airport is shown in Figure 5.1-3.

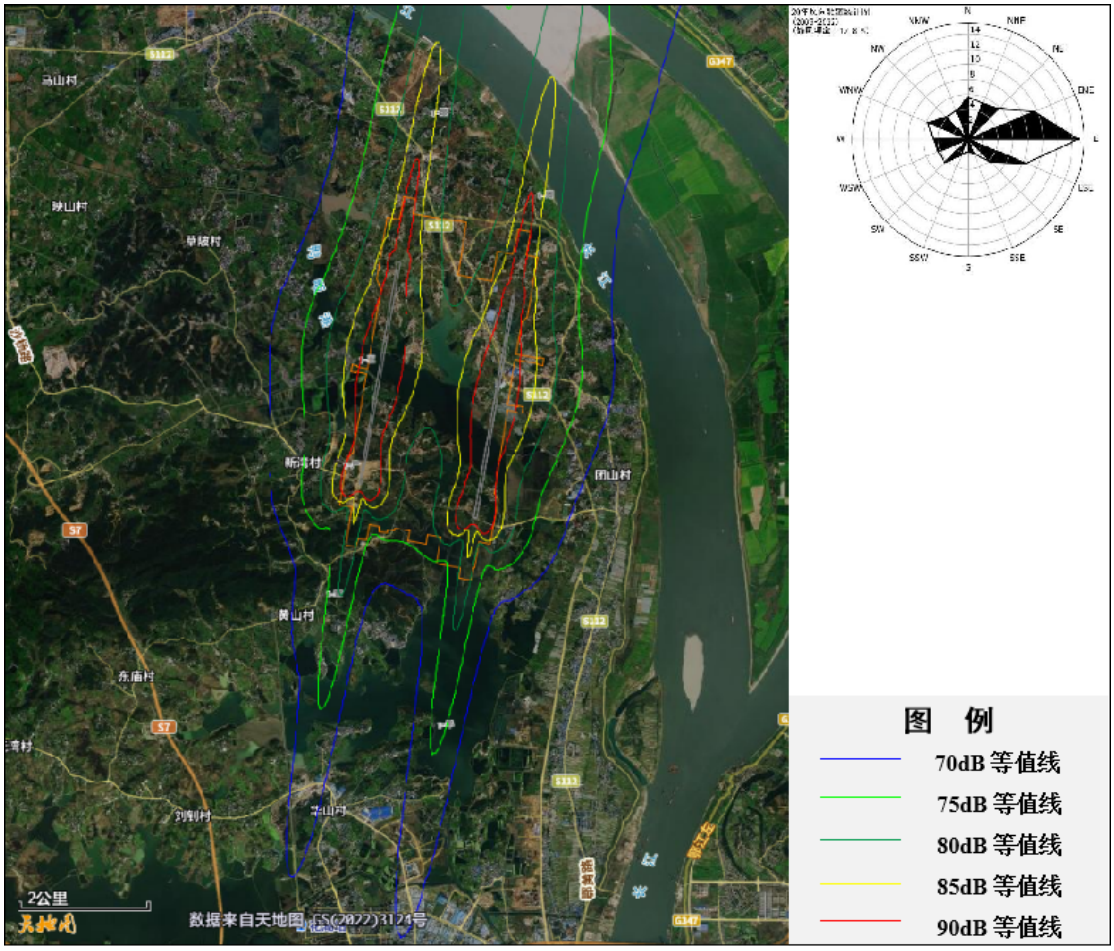

Figure 5.1-3 Contour Map of Annual Average Lwecpn of Accumulative Aircraft Noise at Huahu Airport

The areas where the accumulative aircraft noise Lwecpn of Huahu Airport exceeds 75dB are compared with the areas where the aircraft noise Lwecpn generated by cargo flights of the Project exceeds 75dB, as shown in the following figure.

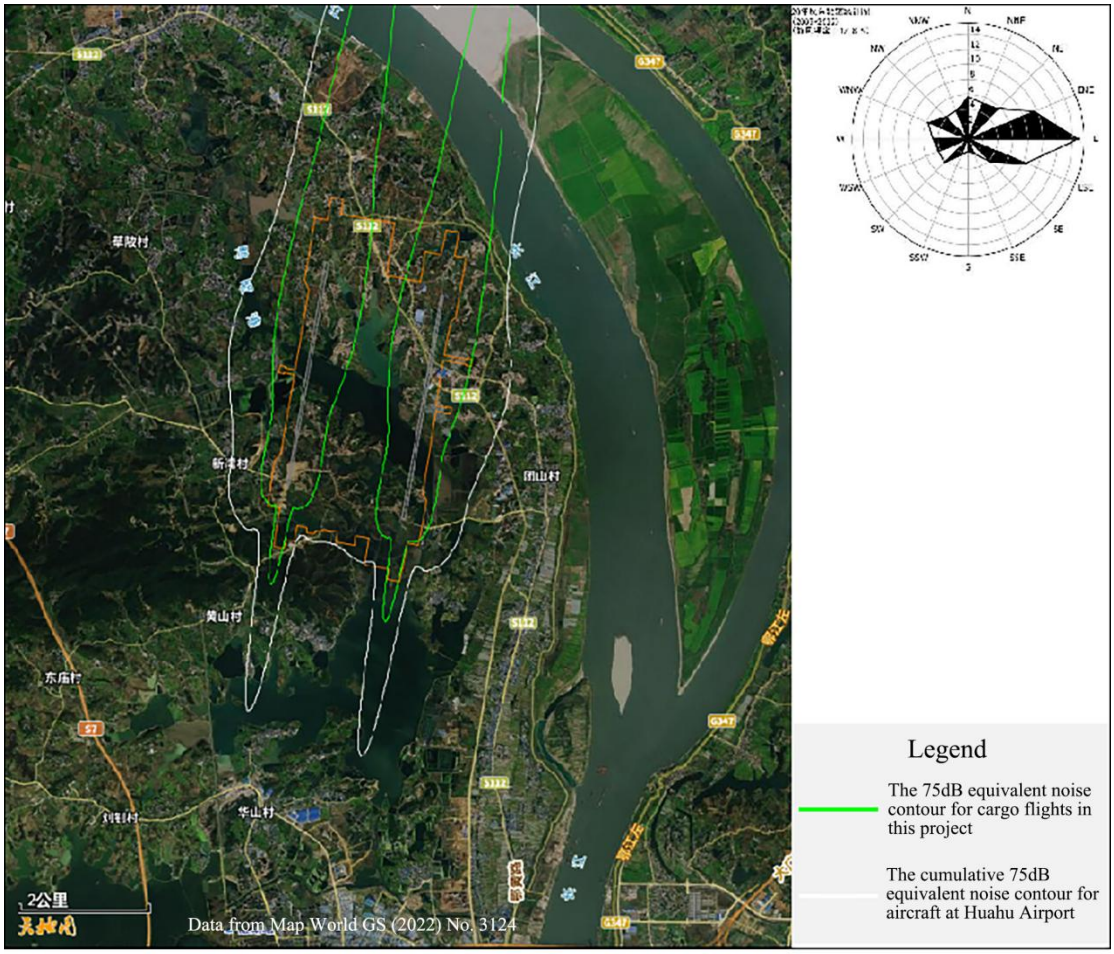

Figure 5.1-4 Comparison of Areas with Accumulative Aircraft Noise Lwecpn Exceeding 75dB between Cargo Flights of the Project and Huahu Airport

It can be seen from the above figure that the areas where the aircraft noise Lwecpn generated by cargo flights of the Project exceeds 75dB are included in the area where the accumulative aircraft noise Lwecpn of Huahu Airport exceeds 75dB. The impact area of aircraft noise of the Huahu Airport will not be increased due to the operation of the Project, and accordingly, residential areas demolished due to environmental protection issues will not be increased due to the operation of the Project.

5.2 Analysis of Superimposed Impact of Aircraft Noise and Ground Traffic Noise

Due to the different assessment systems of ground traffic noise and aircraft noise, direct superimposition cannot be realized between them. When considering the superimposed impact of the aircraft noise of freight flights required by Hubei Global Air Cargo Logistics Hub Project and Wuchu Avenue (associated facility), the noise impact range is mainly superposed geographically, as shown in the figure below.

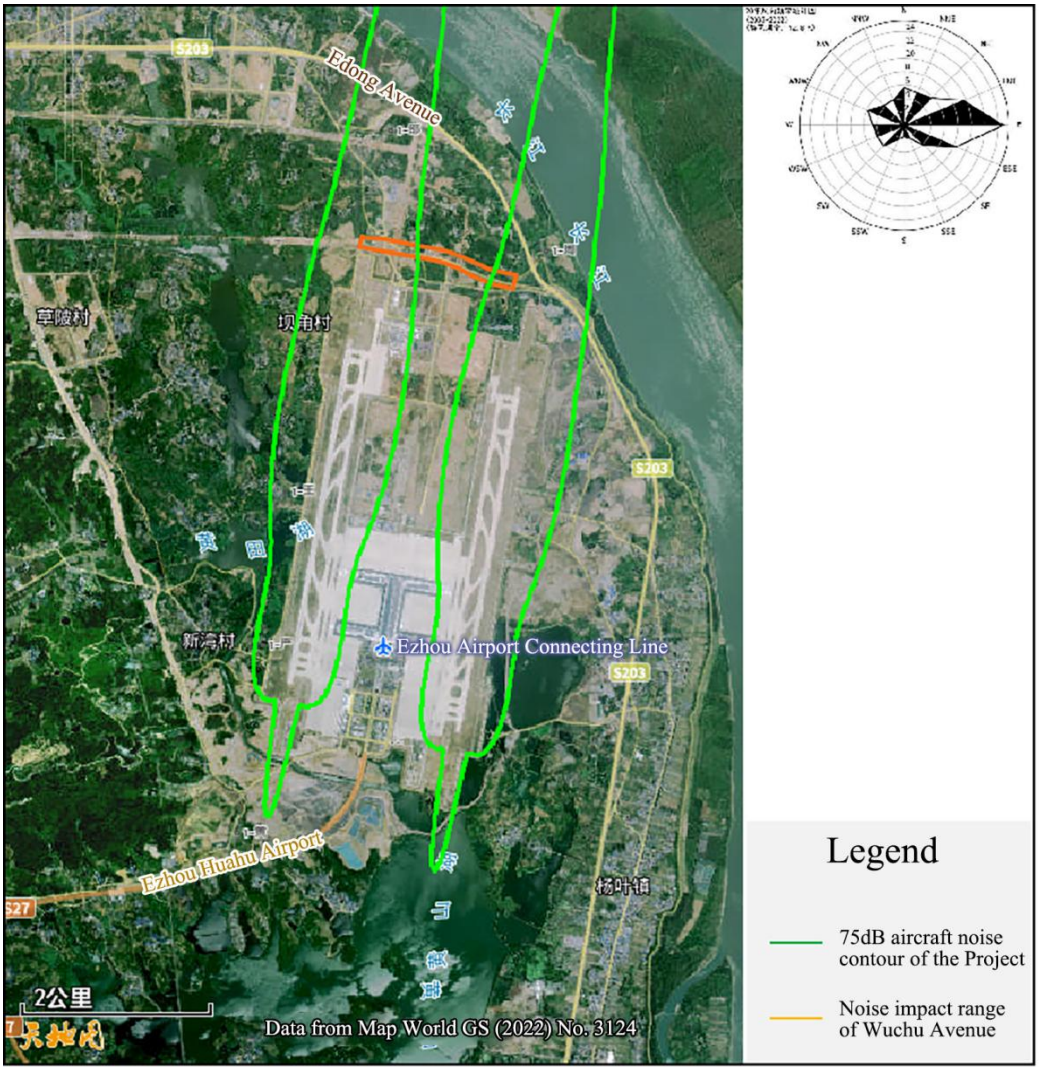

Figure 5.2-1 Superimposed Impact of Aircraft Noise and Ground Traffic Noise of the Project

According to the *Environmental Impact Report on Connection Works of Northern Backbone Road Network in Ezhou Linkong Economic Zone*, the noise prediction results for the associated facility, Wuchu Avenue, indicate that the impact range of ground traffic noise extends within 200 m on both sides from the centerline of Wuchu Avenue. All residential areas within this impact range fall within the relocation scope due to aircraft noise from Ezhou Huahu International Airport. As of now, all these residential areas have been relocated. Therefore, there are no sensitive receivers within the overlapping impact area of ground traffic noise and aircraft noise. If new sensitive receivers are planned within the impact area of ground traffic noise on both sides of the road, it is necessary to conduct a predictive analysis of the combined impact of ground traffic noise and aircraft noise, and implement appropriate mitigation measures.

6 Noise Impact Management Framework

6.1 Purpose of the Noise Management Framework

This noise impact management framework is prepared in accordance with relevant national and local laws and regulations of the People's Republic of China, as well as the Environmental and Social Framework (ESF) - ESS2 Land Acquisition and Involuntary Resettlement of the Asian Infrastructure Investment Bank (AIIB). This document is prepared to guide the involuntary resettlement activities caused by the Hubei Global Air Cargo Logistics Hub Project supported by AIIB loan and determine the corresponding principles and guidelines of resettlement, legal and policy frameworks, income and restoration measures, resettlement organization and implementation process, public participation and information disclosure, grievances and complaints, and monitoring and evaluation requirements, so as to ensure that population affected by noise induced relocation are properly resettled.

6.2 Basis of Formulation

The basis of formulation of this document is the requirements of AIIB's Environmental and Social Framework and investigation memorandum. The Department of Ecology and Environment of Hubei Province has clarified the protection requirements for sensitive targets in the noise area of Huahu Airport in the *Reply of the Department of Ecology and Environment of Hubei Province on the Environmental Impact Report of Hubei Ezhou Civil Airport Project* (EHS [2019] No. 259), that is, **all villages and communities in areas where L_{WECPN} of aircraft noise at Huahu Airport exceeds 75dB will be relocated in 2030, while there are no regulations for villages and communities in areas where LWECPN is 75dB or below.** As the current traffic volume of Huahu Airport has not reached the planned traffic volume in 2030, the time of noise induced relocation is unclear, and the actual noise impact range has not yet reached the maximum impact, the relocation work will be implemented by stages in combination with the actual impact of Huahu Airport. The noise induced relocation will be implemented as per the relevant plan in the *Noise Management Framework*.

The Project needs to rely on the air cargo capacity of Huahu Airport. Therefore, a noise impact management framework will be formulated to ensure that the environmental and social rights and interests of the affected people within the aircraft noise impact scope caused by the air cargo demand after the Project is put into operation are protected.

6.3 Scope of Application

This Noise Impact Management Framework applies to all noise induced relocation that is or may be caused by the Hubei Global Air Cargo Logistics Hub Project. According to the determined management requirements of Hubei Province, this management framework mainly takes "The area where the LWECPN value of aircraft noise generated by cargo flights in the Project exceeds 75dB needs to be relocated" (hereinafter referred to as "noise area of the Project") as the basic requirement, and puts forward mitigation measures for acoustic environmental impact on sensitive receivers and conditions and implementation procedures for necessary relocation.

When the noise impact caused by the operation of the Project meets the starting conditions of resettlement, the PMO shall prepare a noise-affected population relocation plan according to the policies and procedures in this framework to ensure that the population affected by the project construction can be reasonably resettled and compensated, so as to maintain or improve their original living standards.

6.4 Objects that May be Affected by Excessive Noise during Airport Operation Period

(1) Determination and analysis of affected people in noise-induced relocation

In addition to the land occupation and demolition area of the Project, according to the assessment and prediction results, there are 5 administrative village residential areas (Xinwan Village, Jiazheng Village, Duwan Village, Chehu Village and Bajiao Village) and 10 natural villages with 826 households in this acoustic environmental protection target, which are within 75dB of the aircraft noise contour. There is no other acoustic environment sensitive receiver such as schools and hospitals. According to the principle of environmental protection relocation measures, it is proposed to take relocation measures for 826 households with noise level exceeding 75dB this time, involving a house demolition area of about 210630m^2.

(Remarks: A total of 933 mu of land required for the Hubei Global Air Cargo Logistics Hub Project Phase II supported by AIIB loan has not yet been expropriated, but 49348.75 m^2 of houses are involved in this scope, affecting a total of 883 people from 192 households. Due to the noise impact of Ezhou Huahu Airport, house demolition will be completed during 2021-2023. The demolition activities will be implemented in accordance with the reply of Department of Ecology and Environment of Hubei Province on the environmental impact report of Hubei Ezhou Civil Airport Project. They are not caused by the AIIB loan project. See the Resettlement Due Diligence Report (DDR) attached to ESIA for details.

(2) Demolition standard

The compensation standard for noise induced relocation shall be implemented according to the relevant regulations issued by the local government, and the compensation standard for house demolition by noise induced relocation shall be made with reference to the replacement cost standards of RMB 1,895/㎡ for general rural residential houses assessed in the local market. The cost includes compensation for rural house demolition, decoration, temporary resettlement and transition, relocation and incentive fees.

(3) Investment cost for environmental protection relocation

This management framework lists the above-mentioned 826 households that have not yet been relocated as the implementation objects. The specific conditions of residential areas and the estimation of environmental protection demolition costs are shown in the following table:

Table 6.4-1 List of Investment Estimation for Environmental Protection Relocation Measures

Administrative village	Group	Number of households	Floor area (m^2)	Unit price (RMB/m^2)	Resettlement budget (RMB)
Duwan Village	Shangquanziwan	42	10710	1895	20295450
	Yannongpuwan	80	20400	1895	38658000
Chehu Village	Guanyinggang	120	30600	1895	57987000
	Dang'erwan	72	18360	1895	34792200
	Shaojiadawan	191	48705	1895	92295975
	Shaojiaxiwan	51	13005	1895	24644475
Jiajing Village	Wangjiazui	198	50490	1895	95678550
Xinwan Village	Wangjiawan	60	15300	1895	28993500
	Tanjiagang	7	1785	1895	3382575
	Jiuwan	5	1275	1895	2416125

Total	826	210630	1895	399143850

(4) Source of funds

4 villages and 10 natural villages are newly included in the environmental protection relocation. The Management Committee of Linkong Economic Zone is responsible for the relocation and resettlement expenses, with a cost budget of RMB 399,143,850.

6.5 Implementation Procedures

6.5.1 Implementation Procedures for Noise Induced Relocation

According to AIIB's *Environmental and Social Framework* - ESS2 Land Acquisition and Involuntary Resettlement, the implementation procedures are as follows:

- Identify the resettlement impact of the Project
- According to the results of noise impact identification and specific implementation schedule, propose to prepare a noise-affected population relocation plan
- Prepare a noise-affected population relocation plan, and submit it to the Management Committee of Linkong Economic Zone for review and publicity
- Conduct monitoring and evaluation

According to AIIB's Environmental and Social Framework - ESS2 Land Acquisition and Involuntary Resettlement, a RAP shall be prepared for involuntary resettlement activities triggered by the Project when conditions are mature.

The noise-affected population relocation plan shall include:

- General description of the Project;
- Identification of potential impacts of the Project
- Objectives (main objectives of the resettlement plan)
- Socio-economic characteristics
- Policy and legal framework
- Qualification. Determine criteria for migrants, as well as decide

whether they qualify as migrants for compensation and other resettlement assistance

- Valuation of losses and compensation
- Resettlement and recovery measures
- Selection, site preparation and relocation of resettlement sites
- Public participation, consultation, and information disclosure, with resettlement and relevant communities included
- Grievance and complaint procedure
- Organization and responsibilities
- Implementation Schedule
- Fund Budget Sheet
- Monitoring and evaluation

➢ Based on the requirements of the above-mentioned relevant laws and policies of AIIB and China, as well as the schedule of project implementation, the implementation plan for this noise-affected population relocation plan is determined. The specific implementation time may be adjusted according to the project implementation progress. .Since the commencement date of noise relocation is uncertain for the time being, it shall be implemented according to the relevant plan of *Noise Management Framework*. However, before starting noise induced relocation, the Project Implementation Unit shall prepare RAP and submit it to the Management Committee of Linkong Economic Zone for review in accordance with the protection requirements for sensitive targets in the noise area of Huahu Airport that have been clearly defined by Department of Ecology and Environment of Hubei Province in *Reply on Environmental Impact Report of Hubei Ezhou Civil Airport Project by Provincial Department of Ecology and Environment* (EHS [2019] No.259).

Table 6.5-1 Implementation Schedule of this Noise Management Framework

No.	Resettlement activities	Schedule	Progress
1	Preparation stage of noise management framework		

No.	Resettlement activities	Schedule	Progress
1.1	Establishment of resettlement office	May 2024	Completed
1.2	Entrustment of noise management plan preparation organization	May 2024	Completed
1.3	Detailed socio-economic survey	May 2024	Completed
1.4	Preparation of noise management framework	June 2024	Completed
2	Information disclosure and public participation		
2.1	Consultation with relevant departments and affected residents	April-May 2024	Completed
2.2	Disclosure of draft noise management framework to resettlers	June 2024	To be completed
2.3	Announcement of noise management framework	July 2024	To be completed
3	Approval of noise management framework	July 2024	To be completed
4	Identification of noise-affected population	December 2026	To be completed
4.1	Preparation of noise-affected population relocation plan	June 2027	To be completed
4.2	Approval of noise-affected population relocation plan	September 2027	To be completed
5	Implementation of resettlement		To be completed
5.1	Signing of resettlement agreement and payment of compensation funds	September 2027 ~ June 2028	To be completed
5.2	House demolition	September 2027 ~ June 2028	To be completed
6	Monitoring and evaluation		
6.1	Baseline survey	December 2027	To be completed
6.2	Internal monitoring	December 2027 ~ December 2030	To be completed
6.3	External monitoring	December 2027 ~ December 2030	To be completed

6.5.2 Compensation and Resettlement Measures for the Population Affected by Noise Induced Relocation

The Management Committee of Linkong Economic Zone is responsible for the specific implementation of the noise-affected population relocation plan and resettlement of the Project, such as the implementation of the *Noise Management Framework*, fundraising, etc. Ezhou Linkong Group Co., Ltd. is responsible for the preparation, implementation and follow-up management of the Project, and assumes the overall responsibility for environmental and social management related to the Project, such as the preparation of the *Noise Management Framework* and noise-affected population survey.

In accordance with the requirements of AIIB's Environmental and Social Framework - ESS2 Land Acquisition and Involuntary Resettlement, a consultation shall be made with resettlers on their rights in the resettlement process, resettlement options, and any further engagement processes. **On the basis of complying with relevant laws and policies of AIIB and China, the following rights and interests and restoration measures are proposed after full consultation and discussion with the affected people.**

Compensation, resettlement and restoration measures are applicable to the population to be relocated due to noise

Individuals affected by residential house demolition (mainly in rural areas) will be entitled to the following types of compensation and resettlement measures:

- **Residential houses in rural areas:** For rural homestead houses with legal property rights on collective land acquired, monetary compensation based on replacement price shall be made. After monetary compensation, the people whose houses have been acquired may purchase resettlement houses in Yanji Town Resettlement Community or other resettlement communities voluntarily. Phase II of Yanji Town Resettlement Community is under construction, and about 1,000 sets are used for the resettlement of the population to be relocated due to noise (to be completed by the end of December 2024). 4,980 sets of resettlement houses will be built for the resettlement of the population to be relocated due to noise in Phase III of Yanji Town Resettlement Community (to be completed by the end of December 2026), which is sufficient to

accommodate the population to be relocated due to noise (including 261 sets of unselected houses left before). The selection of resettlement houses shall be determined through the full consultation of house acquisition unit with the people whose houses have been acquired. The price of purchasing resettlement houses shall be implemented according to the compensation price for demolition of rural houses (houses built on homestead). The part of the construction cost of resettlement houses exceeding the demolition compensation price shall be borne by the project developer and included in the demolition cost. **All populations to be relocated due to noise will be entitled to compensation for rural house demolition, decoration, temporary resettlement and transition, relocation and incentive fees.**

According to the relevant policies and regulations of the Linkong Economic Zone, house valuation will be based on market price and cost estimation method. The appraised value will not be lower than the complete replacement price of the real estate similar to the house that has been acquired on the date when the house acquisition decision is announced. At the same time, the people whose houses have been acquired may voluntarily choose to purchase resettlement houses. The part of the construction cost of resettlement houses exceeding the demolition compensation price shall be borne by the project developer and included in the demolition cost. Thus, the compensation for the demolition of residential houses in rural areas allows for the replacement of houses, and the compensation received by the people to be relocated as a result of noise impact is sufficient for the purchase or construction of houses that meet the minimum acceptable community standards of quality and safety.

- **Compensation for value of residential houses in rural areas: For rural houses, the policy of one set per household is strictly enforced, and only one site or building per household can be**

recognized as the main house. If the population to be relocated due to noise chooses one-time monetary compensation, the monetary demolition compensation for rural houses (houses built on the homestead) shall be calculated according to the policy that the floor area of each rural house does not exceed 150 ㎡ and the number of floors does not exceed four. If the floor area exceeds 150 m2, it shall be calculated as 150 m2; if the floor area is less than 150 m2, it shall be calculated according to the actual area.

Table 6.5-2 List of Compensation Standards for Value of Residential Houses in Rural Areas

Type	Frame structure RMB/m2	Brick-concrete structure (RMB/m2)	Observations
Compensation standard for main house of single building within 150 m2	1700	RMB 1,400	Applicable to houses occupying an area of not more than 150 m2 and built on less than four floors (inclusive)
Compensation standard for main house of single building beyond 150 m2	1400	1200	Applicable to houses occupying an area of more than 150 m2 and built on more than four floors.

(Note: For houses occupying an area of not more than 150 m^2 and built on less than four floors (inclusive), the unbuilt part of four floors or less will be uniformly compensated based on the building area of the ground floor at the rate of RMB 1,400/m^2 deducting the construction cost of houses of brick-concrete structure.)

- **Compensation for decoration of residential houses in rural areas:** ① If tiles or granitic plasters are pasted on the outer wall, wooden wall surface or wooden wainscot is used for the inner wall, granite, marble, floor tiles above 600*600, wood floor, wooden ceiling or gypsum molding ceiling are paved on the ground, and aluminum alloy or solid steel windows are used as doors and windows, compensation shall be made as per RMB 300/m^2; ② If mosaic tiles are pasted on the outer wall, heavy calcium carbonate emulsion paint or wallpaper is used for the inner wall, aluminum-plastic panel ceiling is used for the top surface,

floor tiles are paved on the ground, solid wood doors are equipped with door pockets, and steel windows and security cages are provided, compensation shall be made as per RMB 200/m^2; ③ If the outer wall is dry wall, and the inner wall is scraped (painted) white or adopts painted wainscot, along with terrazzo floor, gypsum internal corner line, wooden door and iron window, compensation shall be made as per RMB 100/m^2; ④ If the above standards are exceeded or new materials are used for decoration, the compensation price shall be determined by replacement price evaluation.

- **Relocation fee for residential houses in rural areas:** RMB 10/m^2 (calculated according to the agreed compensation area of the main house, excluding the area of the compensatory space).
- **Temporary resettlement and transition fee for residential houses in rural areas:** RMB 15/m^2/month (calculated according to the resettlement area). ① For households who choose monetary compensation, if they signed the demolition (acquisition) compensation and resettlement agreement within the specified time and vacated their old houses on schedule, they will be given one-time temporary resettlement and transition fees for 3 months at a rate of 300m^2/household. ② For people who have purchased resettlement houses, if they signed the demolition (acquisition) compensation and resettlement agreement within the specified time and vacated their old houses on schedule, they will be given temporary resettlement and transition fees quarterly; if the resettlement houses still cannot be delivered upon expiration of 30-month period, the transition fees shall be calculated and paid at twice the original standards from the next month upon expiration to 3 months.
- **Incentive fee for relocation for residential houses in rural areas:** For people whose houses are demolished (acquired), if they signed the

demolition (acquisition) compensation and resettlement agreement within the specified time and vacated their old houses on schedule, they will be given one-time incentive fees in stages.

- Stage 1 (within 30 days upon the issuance of project demolition notice): RMB 10,000/person
- Stage 2 (within 30 days from the end of stage 1): RMB 6,000/person
- Stage 3 (within 60 days from the end of stage 2): RMB 3,000/person

For those who have signed the demolition compensation and resettlement agreement but fail to vacate their old houses on schedule, an amount of RMB 1000 will be deducted from one-time incentive fee for relocation for each day overdue until all are deducted.

For the demolition of the residential houses above, about 1,000 sets (to be completed by the end of December 2024) and 4,980 sets (to be completed by the end of December 2026) of resettlement communities in Yanji Resettlement Area Phase II and Phase III are available for the affected households who choose property right exchange or purchase resettlement houses. At least 5,500 sets of houses can be provided for the population to be relocated due to noise, which is sufficient to accommodate those people (including 261 sets of unselected houses left before). The above resettlement communities have been surrounded by well-equipped public and commercial services, and are located as close as 5 kilometers and as far as 8 kilometers from the original villages. The selection of resettlement communities will be finally determined by the Management Committee of Linkong Economic Zone in consultation with the affected households.

Figure 6.5-1 Current Situation of Yanji Resettlement Area

Procedures for resettlement of population to be relocated due to noise:

- Noise level monitoring and publicity. Conduct regular noise monitoring in accordance with the ESMP, and identify and publish affected villages/communities within the airport noise contour of ≥75%.
- Consultation and participation. Collect the willingness to relocate, resettlement needs, suggestions and opinions of the noise-affected population through interviews and discussions, questionnaires and survey opinion forms. Consultation should be continuous throughout the determination of the population to be relocated due to noise, physical indicator survey, formulation of resettlement scheme, implementation of house vacation and subsequent livelihood restoration. Detailed consultation and public participation should be consistent with the SEP prepared for the Project.
- Identify the population to be relocated due to noise. In combination with the collected intentions of noise induced relocation and according to the relocation requirements formulated by the Provincial Department of Ecology and Environment and Huahu Airport, determine the population to be relocated due to noise and publicize the information. The affected residents shall independently decide whether to relocate.
- Preparation and review of the RAP for the population to be relocated due to noise. According to the requirements of AIIB, prepare a RAP for the population to be relocated due to noise and submit it to the Management Committee of Linkong Economic Zone for review.
- Publicity and implementation of the RAP for the population to be relocated due to noise. After review by the Management Committee of Linkong Economic Zone, publicity shall be carried out to ensure that accurate information is obtained for the population to be relocated due to noise. If there is no objection to the publicity, the Management Committee of Linkong Economic Zone shall be responsible for implementing the RAP for people to be relocated as a result of noise impact.
- Compensation and resettlement. The compensation and resettlement plan shall be fully negotiated with the population to be relocated due to noise, and their resettlement needs and opinions shall be obtained through symposiums, questionnaire surveys and other forms. The population to be relocated due to noise can voluntarily choose monetary compensation or property right exchange, or

monetary compensation plus property right exchange. If monetary compensation is selected, the amount of compensation shall be determined after evaluation by a third-party evaluation agency with reference to the above legal and policy framework for noise induced relocation. The value of the evacuated house will be calculated according to market price and replacement cost estimation method, and the assessed value will not be lower than the complete replacement price of similar real estate on the date when the housing expropriation decision is announced. For those choosing property right exchange, the method of property right exchange and the location of resettlement houses have been determined with reference to DDR. At the same time, the selection of resettlement houses shall be fully negotiated with the population to be relocated due to noise.

- Housing evaluation and publicity. The Management Committee of Linkong Economic Zone shall assist the population to be relocated due to noise in selecting a third-party assessment agency to assess their houses, and the assessment results shall be publicized and reviewed and confirmed by the population to be relocated due to noise.
- Signing of the compensation and resettlement agreement. The Management Committee of Linkong Economic Zone shall sign a compensation and resettlement agreement with the population to be relocated due to noise through full consultation after both parties reach an agreement.
- Payment of compensation funds. The Management Committee of Linkong Economic Zone shall pay compensation funds or provide resettlement houses to the population to be relocated due to noise on time according to the provisions of the compensation and resettlement agreement.
- Implement house vacation. After completion of the compensation, the house vacation for the population to be relocated due to noise will be completed on schedule and the property rights will be handed over.
- Ownership of property rights. After completion of the noise induced relocation, the ownership of vacated houses shall belong to the Management Committee of Linkong Economic Zone, and the remaining homestead after house vacation shall still belong to the original village collective.
- Monitoring and evaluation. Employ an independent third-party external monitoring agency to monitor and evaluate the noise induced relocation. After the deadline, the noise management plan will continue to be developed, implemented,

monitored semi-annually and reported to relevant stakeholders until actions under the noise management plan are completed.

- Special support. Special support measures shall be taken for the population to be relocated due to noise such as households without houses and households with housing difficulties.

6.6 Resettlement Policy, Implementation Unit and Grievance Handling

6.6.1 Resettlement Policies

The resettlement policy framework of the Project is shown in Table 6.5-1. If new compensation standards are issued by Hubei Province, Ezhou City and Linkong Economic Zone when relocation is started, the new standards shall prevail.

Table 6.6-1 Policy Framework for Relocation of the Noise-affected Population

Dept.	Policy documents	Effective time
National and Central Ministries and Commissions	Regulations on the Expropriation of Houses on State-owned Land and Compensation Therefor (Decree No.590 of the State Council)	January 21, 2011
Hubei Province	Implementation Measures for the Expropriation and Compensation of Houses on State-owned Land in Hubei Province (Order No. 380 of the People's Government of Hubei Province)	September 1, 2015
Ezhou City	Measures for the Compensation and Resettlement of Houses on Expropriated Collective Land in Ezhou City (Revised) (EZZG [2020] No.9)	October 19, 2020
	Notice of the Comprehensive Office of the Party and Government of the Linkong Economic Zone on Issuing the Compensation and Resettlement Plan for House Expropriation, the Compensation Plan for Enterprise House Expropriation, and the Work Procedures and Responsibility Division for House Expropriation Compensation and Resettlement in the Linkong Economic Zone (EZLKBF [2020] No.4)	April 27, 2020
Asian Infrastructure Investment Bank	AIIB's Environmental and Social Framework, ESS2 Involuntary Resettlement	February 2019

Key differences between AIIB policies and Chinese laws

Overall, the AIIB's involuntary resettlement policy and China's demolition policies are highly similar, as reflected in the following aspects:

(1) In the project planning and design process, efforts should be made to avoid or minimize resettlement impacts;

(2) Efforts should be made to restore and improve the living standards of the affected population as quickly as possible;

(3) Resettlement policies shall be open and transparent;

(4) The resettlement process should emphasize public awareness and participation;

(5) The formulation and implementation of compensation standards for resettlement shall be determined and executed in accordance with the law.

However, there are certain differences between China's demolition policies and the AIIB's involuntary resettlement policies, primarily reflected in the following aspects:

(1) Consultation and publication

Difference: AIIB policies require that affected individuals be fully informed and consulted as early as possible. China's regulations have improved the transparency of notification and compensation. However, the role of affected individuals in project decision-making is limited, and the public notice period is often too short.

Solution: Consultations have already begun at an early stage (before and during technical assistance). The Ezhou AIIB PMO and Ezhou Linkong Group Co., Ltd. have both agreed to disclose the noise management plan to the affected individuals in accordance with AIIB requirements.

(2) Lack of legal rights

Difference: AIIB policies require that all demolished structures, whether legal or illegal, be compensated according to the same standards. According to Chinese law, individuals without local household registration may not have the same compensation rights as local residents. In addition, current Chinese law does not provide compensation for the expropriation of land and houses owned illegally.

Solution: For AIIB-financed projects, all affected individuals, whether their rights are legal or illegal and regardless of whether they hold ownership or usage rights, will be protected. As required by the AIIB, compensation will be provided according to the same standards. The Project is not expected to encounter such issues.

(3) Resettlement monitoring, evaluation, and reporting

Difference: AIIB requires internal and external resettlement monitoring. However, Chinese law does not mandate such requirements except for reservoir and hydropower projects.

Solution: All AIIB-financed projects have established internal and external monitoring systems for resettlement, which are documented in the noise management plan. The specific requirements for internal and external reporting are detailed in the noise management plan.

6.6.2 Resettlement Implementation Management Agencies

To ensure the smooth progress and expected outcomes of the resettlement work, a comprehensive organizational structure must be established from top to bottom during the project implementation. This structure will facilitate the planning, implementation, coordination, and monitoring of resettlement activities. Since resettlement is a broad-ranging task that requires the assistance and cooperation of various departments, the government responsible for resettlement should ensure the smooth preparation and implementation of the project and resettlement activities through the establishment and capacity strengthening of organizational structures.

To effectively manage all tasks during the implementation phase of the international financial organization loan project, the Ezhou Municipal Government has established the Ezhou City AIIB Loan Project Leading Group. This leading group serves as the highest decision-making, leadership, and coordination body for the Project. The Leading Group is chaired by the Mayor of Ezhou, with the Executive Vice Mayor serving as the Executive Deputy Leader, and the Deputy Mayor in charge as the Deputy Leader. Members include representatives from the municipal government, the Municipal Development and Reform Commission, the Municipal Housing and Urban-Rural Development Bureau, the Ezhou Municipal Department of Finance, the Municipal Natural Resources and Planning Bureau, the Municipal Science and Technology Bureau, the Municipal Ecology and Environment Bureau, and the Municipal Transportation Bureau. The Project Leading Group is responsible for decision-making and coordination of major issues during the preliminary and implementation phases of the project. It will periodically receive reports from the PMO and, as needed, the Leader or Deputy Leader will convene coordination meetings with member departments of the Leading Group to ensure the smooth implementation of the project and the achievement of its anticipated goals. The agency is also responsible for the noise-affected population relocation plan (the same below). The organizational management framework of the project is illustrated in Figure 6.6-1.

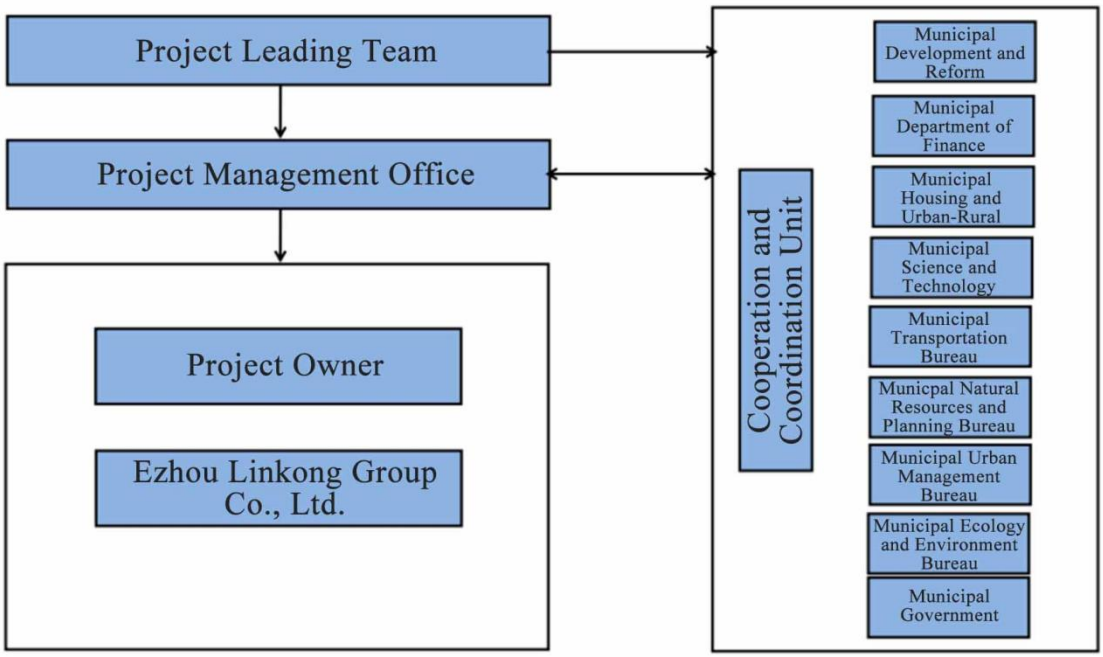

Figure 0.6-1 Organizational Management Framework of the Project

To ensure the smooth implementation of the project, the Project Leading Group has established a Project Management Office (PMO) as the specific execution agency for the project. The PMO consists of the General Affairs Group, Finance Group, Procurement Group, Environment and Social Group, and Engineering Management Group. These groups are responsible for coordination among relevant agencies and operational mechanisms to facilitate project implementation.

The resettlement work involves multiple departments, and the relevant agencies are shown in Figure 6.6-2.

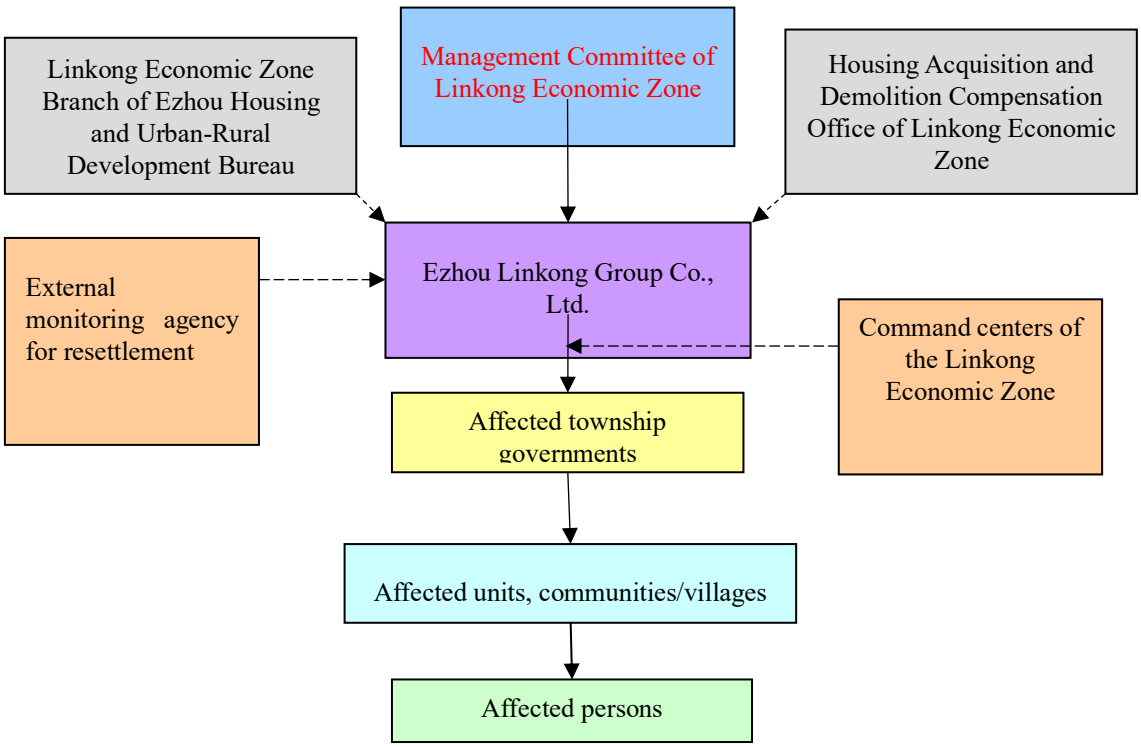

Figure 0.6-2 Project Resettlement Management Organizational System

The relevant units and their responsibilities for resettlement management are listed below:

- *Management Committee of Linkong Economic Zone*
- *Ezhou Linkong Group Co., Ltd.*
- *Linkong Economic Zone Branch of Ezhou Natural Resources and Planning Bureau*
- *Housing Acquisition and Demolition Compensation Office of Linkong Economic Zone*
- *Command centers of the Linkong Economic Zone*
- *Affected township governments*
- *Affected units, communities/villages/sub-village*
- *Project designer*
- *External independent monitoring and evaluation agency*

➢ ***Management Committee of Linkong Economic Zone***

Responsible for the comprehensive coordination of the loan project, guidance on bidding and procurement, financial statistics, and supervision of project implementation.

➢ ***Ezhou Linkong Group Co., Ltd.***

Ezhou Linkong Group Co., Ltd. is the implementing agency for the Project, responsible for its specific execution. Under the guidance of the Ezhou AIIB PMO, Ezhou Linkong Group Co., Ltd. is responsible for:

(1) Implementing and executing major decisions made by the Leading Group regarding the project;

(2) The specific organization, management, coordination, supervision, and guidance of the project;

(3) Liaising with relevant national, provincial, and municipal departments, and under the coordination and organization of the Management Committee of Linkong Economic Zone, responsible for coordination with the AIIB and consulting firms;

(4) Ensuring the implementation of the project legal documents signed, and regularly reporting project progress to the Management Committee of Linkong Economic Zone;

(5) Commissioning a resettlement consulting agency to carry out the preparation of the RAP;

(6) Coordinating the consulting firm and other agencies during the project preparation phase;

(7) Coordinating the progress of project construction and resettlement implementation;

(8) Submitting the resettlement fund plan;

(9) Coordinating the work of agencies related to resettlement activities;

(10) Raising funds for the project resettlement activities;

(11) Disbursing the resettlement funds;

(12) Implementing the project's resettlement activities;

(13) Tracking and ensuring the timely disbursement of resettlement funds for the Project;

(14) Handling grievances and complaints from resettlers during the resettlement process;

(15) Cooperating with the external monitoring agency for resettlement activities;

(16) Collecting and sorting various materials required for the internal monitoring reports of the Project;

(17) Managing the resettlement archives of the Project.

- ***Linkong Economic Zone Branch of Ezhou Housing and Urban-Rural Development Bureau, Housing Acquisition and Demolition Compensation Office of Linkong Economic Zone***

(1) Coordinate relevant departments to formulate various policies for the noise-affected population relocation plan;

(2) Fully responsible for matters related to demolition (including pension insurance for land-expropriated farmers);

(3) Participate in the survey of project resettlement impacts;

(4) Supervise the implementation of resettlement activities.

- ***Relevant Township Governments and Headquarters***

(1) Participate in the physical quantity survey;

(2) Participate in calculating compensation funds for affected households;

(3) Participate in the disbursement of compensation funds to affected individuals;

(4) Handle grievances and complaints from resettlers during the resettlement process;

(5) Be responsible for implementing employment measures for affected individuals.

- ***Project designer***

(1) Minimize the impact of resettlement through optimized design;

(2) Determine the scope of noise-affected population relocation.

- ***External independent monitoring and evaluation agency***

Ezhou Linkong Group Co., Ltd. will hire an independent external monitoring agency with extensive experience in international financial organization loan projects. This agency will be responsible for external monitoring of the resettlement work during the planning and implementation phases, providing progress reports and supervision reports on resettlement activities to the Management Committee of Linkong Economic Zone. The monitoring and evaluation agency commissioned by Ezhou

Linkong Group Co., Ltd. will serve as the external monitoring and evaluation unit for resettlement. Its main responsibilities include the following:

(1) As an independent monitoring and evaluation agency, after the initiation of the RAP, observe all aspects of the planning and implementation of resettlement, monitor and evaluate the resettlement work, its effectiveness, and the social adaptability of the resettlers. Provide resettlement monitoring and evaluation reports to the Management Committee of Linkong Economic Zone through Ezhou Linkong Group Co., Ltd..

(2) Provide technical consultation to Ezhou Linkong Group Co., Ltd. on data surveys and resettlement activities.

6.6.3 Staffing and Facility Allocation

(1) Personnel allocation

To ensure the smooth progress of the resettlement work, the resettlement organizations at all levels of the Project should be equipped with special staff to form a smooth information transmission channel. The resettlement agencies at all levels are mainly composed of administrative management personnel and professional technical personnel, with personnel ranging from 1 to 6, all of whom have certain professional level and management quality, and have considerable experience in demolition and resettlement. See Table 6.6-2 for the staffing of resettlement agencies in the Project.

Table 0.6-2 Personnel Allocation of Resettlement Institutions

Name of institution	Staffing (person)	Staff composition
Ezhou AIIB PMO	1	Staffs
Ezhou Linkong Group Co., Ltd.	3	Staffs
Relevant Special Task Command Centers in Linkong Economic Zone	4	Staffs
Linkong Economic Zone Branch of Ezhou Housing and Urban-Rural Development Bureau, Housing Acquisition and Demolition Compensation Office of Linkong Economic Zone	4	Staffs
Affected towns	6-8	Staffs
External monitoring agency	Several	Resettlement experts

(2) Facility allocation

Resettlement agencies at all levels of the Project are allocated with existing resources, and have been equipped with basic office equipment, transportation equipment and

communication equipment, including office desks and chairs, computers, printers, telephones, fax machines, vehicles and other equipment resources.

In addition, the following measures are taken to improve the capacity of resettlement agencies:

- Clarify the responsibilities and scope of duties of each resettlement agency, and strengthen supervision and management;
- Gradually strengthen the strength of each resettlement agency, especially the professional and technical force. All staff must possess professional level and management quality to some extent, and familiar with technical equipment such as computers, monitoring equipment and vehicles;
- Strictly select staff, strengthen professional and technical training, and train managers and technicians in various resettlement agencies to improve their professional ability and management level;
- Appropriately allocate female cadres and give full play to the role of women in the resettlement process;
- Establish a database and strengthen information feedback, so that the information can be smoothly communicated from top to bottom and from bottom to top. Major issues are decided and solved by the project leading group;
- Strengthen the reporting system and internal monitoring, and solve problems promptly;
- Establish an external monitoring and evaluation mechanism and an early warning system.

(3) Implementation progress

According to the project implementation schedule, the environmental protection relocation due to excessive noise will be carried out according to the actual measured noise impact results after the construction and operation of the Project. The noise-affected population relocation plan of the Project is expected to start at the end of December 2026 and be completed by December 2030.

6.6.4 Complaints and Grievances Handling Procedures

During the preparation and implementation of the noise management framework, the public participation is encouraged, so there will be no any great controversy. However, there will be some unforeseen problems in the whole process. In order to effectively solve problems and ensure the successful implementation of project construction and resettlement, a transparent and effective grievance redress mechanism was established for this Project. The basic processing procedures are as follows:

- Stage 1 (5 days): If some one is not satisfied with any aspect of the resettlement, he or she may make an oral or written complaint to the local village/neighborhood committee. If the grievance is made orally, the village/neighborhood committee shall document it in writing. The village/neighborhood committee will: (1) Immediately require the complained subject to stop the related activities after confirming the issue; (2) Ensure that the complained subject does not resume the related activities until the complaint is resolved; (3) Immediately inform Linkong Group of the complaint content and the proposed solution; (4) Provide a clear response to the affected person within two days; (5) Resolve the issue as much as possible within five days of receiving the complaint.
- Stage 2 (15 days): If the complainant is not satisfied with the resolution provided by the village/neighborhood committee, they can lodge a grievance orally, by phone, or in writing with the local township government or Linkong Group after receiving the resolution. The township government or Linkong Group will: (1) Retrieve the original grievance records and organize a meeting with key stakeholders (including the subject of the complaint and the complainant) within five days to work out a plan acceptable to all parties, including the key steps to solve the problem; (2) The subject of the complaint shall immediately implement the resolution and resolve the issue within 15 days. All measures and outcomes shall be documented.
- ➢ Stage 3 (15 days): If the complainant is not satisfied with the

resolution provided by the township government or Linkong Group, they can lodge a grievance orally, by phone, or in writing with the PMO after receiving the resolution. The PMO will organize a stakeholder consultation meeting within two weeks (including the complainant, the subject of the complaint, and relevant functional departments such as the Housing and Urban-Rural Development Bureau and the Resettlement Office). The meeting shall establish a resolution acceptable to all parties, including clear steps for implementation. The subject of the complaint shall immediately implement the agreed-upon resolution and completely resolve the issue within 15 working days. The actions and results of all these stages will be documented. At the end of Stage 3, the PMO will inform the AIIB of the results.

- Stage 4: If the complainant is still not satisfied with the above decisions, they may file a lawsuit with a local court in accordance with the *Administrative Procedure Law of the People's Republic of China* after receiving the decision.

At any stage, the complainant may directly bring a lawsuit to a local court in accordance with the *Administrative Procedure Law of the People's Republic of China*.

(1) Record, follow-up, and feedback of complaints and grievances

During the implementation of the noise management framework, all relevant resettlement agencies shall register and manage complaints and grievances as well as solutions, and report them to Ezhou Linkong Group Co., Ltd. in writing once a month. Ezhou Linkong Group Co., Ltd. will regularly check the registration of complaint handling. Grievances and complaints from affected individuals will be accepted free of charge by institutions at all levels, and reasonable costs incurred will be covered by the Project's contingency funds.

To fully document the grievances of the affected population and the handling of related issues, the Project Implementation Unit has developed a Grievance and Complaint Registration Form for the affected population. The format of the form is shown in Table 6.6-3.

Table 6.6-3 Registration Form of Resettlement Complaints and Grievances

Name of complainant	Time and place	Feedback from the complaint-receiving unit	Ezhou Linkong Group	Suggestions of external monitoring unit	Progress in the resolution of grievances	Comments of AIIB
Reason for grievances						
Requested resolution						
Proposed resolution						
Actual handling situation						
Responsible person (signature)						
Note: 1) The recorder shall truthfully record the grievance issues and demands of the complainant. 2) The grievance process should not be interfered with or hindered by anything. 3) The proposed resolution shall be communicated to the complainant within the specified time frame.						

(2) Contact information for handling complaints and grievances

All relevant resettlement organizations of the Project will arrange special persons to be responsible for receiving and handling complaints and grievances from affected people. For the name, office address and telephone of the director, see table 6.6-4.

Table 6.6-4 Information on Organizations and Personnel Handling Grievances and Complaints from Affected Population

Unit name	Contact	Address	Tel.
Project Office	Zhou Qing	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18971999902
Housing Acquisition and Demolition Compensation Office of Linkong Economic Zone	Zhou Xiaolin	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18972958040
Social Affairs Bureau of Linkong Economic Zone	Liu Du	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	13972957838
Organization and Human Resources Bureau of Linkong Economic Zone	Wang Jun	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18771881690
Economic Development Bureau of Linkong Economic	Li Chaoming	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	18808685918

Unit name	Contact	Address	Tel.
Zone			
Financial Bureau of Linkong Economic Zone	Zhu Degao	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	13971995419
Women's Federation of Linkong Economic Zone	Xiao Mengyao	Investment Promotion and Exhibition Center of Ezhou Linkong Economic Zone	15090987052
Yanji Town	Lv Siqi	Party-Mass Service Center of Yanji Resettlement Area	15926001011
Chehu Village	Shao Xuyong	Chehu Village Committee	13995829670
Bajiao Village	Zhang Yucai	Bajiao Village Committee	13908682570
Duwan Village	Zhou Hua	Duwan Village Committee	13657115050
Yangye Town	Wang Binghua	Party-Mass Service Center of Yangye Resettlement Area	18908683811
Gutang Village	Pan Longzhen	Gutang Village Committee	18972965772
Shawo Township	Zhou Bo	Shawo Township Government	18571100606
Zouma Village	Li Haibing	Zouma Village Committee	13995814016

The Project-affected People's Mechanism (PPM) has been established by the AIIB to provide an opportunity for affected individuals to submit feedback for independent and impartial review. This mechanism is intended for situations where affected individuals believe that the AIIB project has not implemented its resettlement policy or Environmental and Social Policy (ESP), which has or may negatively impact them, and their concerns cannot be resolved through the Grievance Redress Mechanism (GRM) or the AIIB management mechanism. For more information, please visit:

https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html.

6.7Source of Funds

The funds for resettlement of the people affected by noise involved in the noise management framework and regular monitoring are all from Ezhou Linkong Economic Zone's own funds-"Special Bond for Noise Area Demolition in Port Operation Area Project in Ezhou Airport Comprehensive Bonded Zone". The total fund of the special

bond is about RMB 1.2 billion. RMB 435 million has been paid for surrounding noise relocation and resettlement of the Project, and the remaining funds are expected to be in place in September 2024, which can meet the subsequent relocation and resettlement needs of noise areas of the Project.

6.8 Technical Requirements for Monitoring and Evaluation

In order to ensure the smooth implementation of environmental relocation involving excessive noise and achieve the goal of proper resettlement, the PIU will regularly monitor and evaluate the implementation of resettlement activities for people affected by noise in accordance with the resettlement policies in the *Environmental and Social Framework*-ESS2 *Involuntary Resettlement* prepared by the Asian Infrastructure Investment Bank. There is internal monitoring and external monitoring.

As a top-down monitoring activity of the resettlement implementation process within the resettlement system, internal monitoring requires Ezhou Linkong Group Co., Ltd. and relevant resettlement implementation agencies to establish a standardized, smooth and bottom-up information management system for resettlement implementation to track and reflect the progress of resettlement for the people affected by noise, including information on progress, funds and results of resettlement implementation; sort out and analyze the above information. In the first year of implementation of relocation of the noise-affected population (key periods such as resettlement compensation and relocation), it shall be reported once every six months. As an independent document and a part of the project implementation report, an internal monitoring progress report on resettlement implementation in Stage I will be provided to the Management Committee of Ezhou Linkong Economic Zone every six months.

According to the relevant requirements of the *Environmental and Social Framework-ESS2 Involuntary Resettlement* of the Asian Infrastructure Investment Bank, Ezhou Linkong Group Co., Ltd. will employ a qualified and independent external resettlement monitoring agency with rich experience in projects with loans from foreign financial institutions such as AIIB as an independent resettlement monitoring agency. The external monitoring and evaluation agency regularly tracks and evaluates the implementation of noise-affected population relocation and monitors the progress, quality and funds of the noise-affected population relocation, so as to keep the

noise management framework consistent with AIIB policies and put forward advisory opinions. The agency also tracks and monitors the production and living standards of resettled people, and submits monitoring and evaluation reports to the Management Committee of Ezhou Linkong Economic Zone.

6.9 Other Noise Management Requirements

In the assessment and prediction results, the noise areas of the Project are all planned as industrial and logistics lands, and no land for sensitive targets such as residential buildings, hospitals and schools is planned. The current situation meets the construction requirements of the Project. During the subsequent construction and operation, the Management Committee of Linkong Economic Zone and the PMO shall ensure the implementation of the following acoustic environment management requirements:

(1) The development shall be carried out according to the land use function and nature determined by the territorial space planning, and no new residential buildings, hospitals, schools and other acoustic environment sensitive receivers shall be planned in the noise area of the Project determined by this assessment;

(2) For buildings in the noise area of the Project, full consideration shall be given to building functions when sound insulation measures are taken. After sound insulation measures are taken for office buildings, indoor noise shall meet the limit requirements of Ld (07:00-22:00) 55 dBA during the day and Ln 45 dBA at night specified in the World Bank EHS Guidelines;

(3) To carry out project construction within the noise impact scope of the Project, it is necessary to demonstrate the impact of aircraft noise on it and obtain the consent of the Project Implementation Unit. If the Project is incompatible with the aircraft noise where it is located, and the Employer is still willing to build the project, the Employer shall bear all consequences and legal responsibilities arising therefrom.