

Social Safeguard Due Diligence Report

Project number: 52230-001
April 2020

PRC: Xiangtan Low-Carbon Transformation Sector Development Program

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ENDORSEMENT LETTER

To: MsNa Won Kim
Senior Environment Specialist and the ADB Mission Leader
Sustainable Infrastructure Division, East Asia Department
Asian Development Bank

From: Xiangtan Municipal Government (XMG)

Subject: PRC 52230-001: People's Republic of China: Xiangtan Low-Carbon Transformation Sector Development Program- Social Safeguards Due Diligence Report Disclosure

Dear Ms Kim,

This Social Safeguard Due Diligence Report (DDR) for the proposed project investment loan under the Xiangtan Low-Carbon Transformation Sector Development Program has been prepared and confirms that there are no involuntary resettlement impacts nor impacts on any specific ethnic minority communities that would trigger ADB's Social Safeguard Policy requirements.

This DDR is based on the feasibility study report and site works during project preparation. If due to unforeseen circumstances, the project involves any such impacts during project implementation, the Xiangtan municipal government will ensure that the Project will comply with the applicable laws and regulations of China and ADB's Safeguard Policy Statement.

We appreciate your support and help for our project processing.

Sincerely yours,



Mr Chen, Wei Wen
Secretary General
Xiangtan Municipal Government

CURRENCY EQUIVALENTS

(As of 6 April 2020)

Currency unit	–	yuan (CNY)
CNY 1.00	–	\$0.1410
\$1.00	–	CNY 7.0916

ABBREVIATIONS

ADB	-	Asian Development Bank
AH	-	Affected Household
AP	-	Affected Person
LAR	-	Land Acquisition and Resettlement
AAOV	-	Average Annual Output Value
DMS	-	Detailed Measurement Survey
LA	-	Land Acquisition
XMG	-	Xiangtan Municipal Government
PMO	-	Project Management Office
PRC	-	People's Republic of China
FSR	-	Feasibility Study Report

NOTE

In this report, "\$" refers to US dollars.

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I. PROJECT BACKGROUND

1. The expected impact of Xiangtan Low-Carbon Transformation Sector Development Program (Xiangtan LCT SDP) in Xiangtan City, Hunan Province, in the People's Republic of China (PRC), will be carbon emissions peak achieved in Xiangtan by 2028. The expected outcome will be the use of low-carbon enabling systems in Xiangtan increased.

2. Xiangtan LCT SDP is the first holistic and integrated multi-sectoral approach in promoting low-carbon transformation of a municipality in the PRC. The program is comprised of (i) a project loan to invest in priority infrastructure, and (ii) a policy-based loan to support necessary policy reforms of the municipal government to enable a successful low-carbon transformation.¹ The program will have four outputs: (i) low-carbon and resilient infrastructure transformation demonstrated; (ii) information and knowledge platforms established for informed decision making and behavioral changes; (iii) low-carbon transformation policy reforms adopted; and, (iv) capacity building and program management enhanced. Outputs (i), (ii), and (iv) will be under the project loan, while output (iii) will be supported by the policy-based loan.

3. Under output (i), the project will develop a priority bus system with deployment of 100 electric buses and the installation of 778 e-charging piles at 30 locations, integrated with improved bicycle network and pedestrian facilities; school zone transformation for children's road safety at five primary schools; and street transformation for climate resilient and multi-purposed street for people. It will also promote low-carbon buildings through energy and resource efficiency measures and certifications, and ecosystem-based adaptation (EbA) measures at two demonstration sites – the construction of the first "EDGE-certified" hospital building in the PRC, and the retro-fit of a semi-abandoned government building.² Other infrastructure transformation includes improvement of public facilities and other urban infrastructure at 20 urban communities showing practical ways to build a low-carbon, resilient, and livable Xiangtan.

4. Under output (ii), the project will reprogramming the existing intelligent transport system (ITS), developing a smart bus information platform and a building energy management system to monitor and improve energy efficiency of 200 public buildings. Developing a community-scale energy and utility management system to optimize operational efficiency of over 1,300 companies in JiuHua ; (v) integrated urban catchment management plans for key flood prone areas in Xiangtan; (vi) an early flood warning system to monitor and analyze potential risks caused by fluvial and pluvial floods; and (vii) an environmental monitoring and assessment system. These platforms will enable better decision making and foster behavior changes towards LCT. A multi-energy and utility management system (MEMS) at JiuHua Industrial Development Zone will be developed and one 110 KV substation will be built with one input 10 KV transmission lines with total length of 2.7 km from another existed 220 KV substation and six output 10 KV transmission lines with total length of 7.3 km.

5. The XMG is the executing and implementing agencies. A project management office (PMO) was established under the XMG for the project coordination, led by Secretary-General of

¹ Low-Carbon Development is defined as 'sustainable development' that is grounded in systems-thinking, encourages integrated city planning, collaborative and coherent sector development, resilience improvement by taking preventive approach, and active governance through engaging and activating all stakeholders by providing the right incentives. Low-carbon development progress can be measured by quantifiable indicators including GHG emissions reduction.

² Ecosystem-based adaptation measures using urban water (blue) infrastructure with green assets and ecosystem services are effective measures for flood control, drought mitigation, heat stress reduction, and carbon sink, and also provide co-benefits like aesthetic quality, recreational and restorative capacity, improved local air quality, and health benefits.

the XMG and comprise of representatives from various bureaus, including development and reforms commission (DRC), finance bureau, transport bureau, housing and urban-rural construction bureau, Jaofa Group Co.Ltd., Chengfa Group (Jiaofa Group) and Low carbon center. A project leadership group was established in XMG to support the PMO for the promotion of project preparation, the members of the group included water conservation bureau, ecology and environment bureau, health commission, Xiangtan big data center, and the Management Committee of Jiuhua Economic and Technological Development Zone.

II. PROJECT SCOPE AND DESCRIPTION

6. All the subprojects will be conducted in the urban area of Xiangtan City. Site selection process for the Project has been carried out by the PMO, TA consultants together with project companies of each subproject. Efforts were made by the team to avoid land acquisition and resettlement (LAR) impacts during site selection.

7. The project is classified category C for involuntary resettlement and indigenous peoples since it does not entail permanent or temporary physical or economic displacement. Among the 17 subprojects in the 4 outputs, 6 are information system development or concept design which will not have civil works, 8 subprojects will demonstrate low-carbon and resilient infrastructure transformation on the current municipal roads, public buildings and residential communities, or install charging piles on the parking spaces in parking lots of current bus stations, railway stations, government bureaus, public parks and squares etc, which don't require land acquisition.

8. 88.33 mu (5.89ha) land is required for the construction of Xiangtan First Traditional Chinese Medicine Hospital (Subproject 9, 80.03 mu) and 110KV Liwei Substation (Subproject 14, 8.3mu). All of the land have been acquired by the local government before which was not anticipation of ADB financing. The associated facility identified by PPTA team is 220 KV Jiuhuabei Substation with total land area of 13.16 mu (0.88 ha) which is also acquired by the local government before. No newly land acquisition and house demolition will be induced by this project. The project is not expected to have adverse impact on ethnic minorities as the project site is not close to any ethnic minority towns or villages.

9. Please find the project scope and LAR impacts identification in table 1.

Table 1: Project Description and LAR Impacts Screening

Subprojects	Civil works description	Land use situation	Footprint area(mu)	LAR impacts
1. Urban Street Transformation for Bus Priority Lanes, Sidewalks and Cycling Ways	<ul style="list-style-type: none"> priority median bus lanes³ on 31.3 km of main trunk roads and peak-hour (07:00-10:00; and 17:00-19:00) curb-side bus priority lane in 31.5 km of the remaining bus routes in Yuetang and Yuhu districts. a total of 104 pairs of bi- 	<ul style="list-style-type: none"> priority median bus lanes will be built in the middle of current trunk road and curb-side bus priority lanes only need painting and signboard of peak hours bus priority. 	N/A	<ul style="list-style-type: none"> None.

³ There are four basic types of bus lanes: curbside, median, sub-curbside and reverse. A curbside bus lane is located in the outmost lane. A median bus lane is located in the innermost lane. A sub-curbside bus lane can be set on the lane next to the outmost lane when the road is one-way three or more lanes. A reverse bus lane is set on one-way road to allow busses to pass in the opposite direction.

	<p>directional smart accessible bus stops will be established, including 56 new bi-directional smart bus stops every 500 m along the median bus priority lanes, and upgrading of 48 existing bi-directional road side bus stops.</p> <ul style="list-style-type: none"> ● 48 safe islands⁴ in trunk roads. ● 69 km of current pedestrian walkways upgrading including removal of access barrier and paved with absorbent bricks. 	<ul style="list-style-type: none"> ● All bus stops will be built or upgraded on current municipal roads. ● Safe islands will be built on major intersection crossings of trunk roads to allow for safe pedestrian access and use. ● Upgrading on current pedestrian walkways. 		
2. School safety road assessment	<ul style="list-style-type: none"> ● Utilizing the iRAP Star Ratings for Schools (SR4S) methodology will be undertaken for five elementary schools. 	<ul style="list-style-type: none"> ● including visible road marking, signboard on speed zone, cycling lanes, elevated pedestrian crossing, curb extension for safe walking, e-motorbike parking at 150 m school zone border, colorful painting, marking, etc. 	N/A	<ul style="list-style-type: none"> ● None.
3. Enhancement of Multi-Modal Station	<ul style="list-style-type: none"> ● Two demonstration inner-city multi-mode passenger transport stations in Xiangtan Railway Station and Bantang Intercity Railway Station. ● The program will support the development of the station through improvements to the transport access, including: i)relocating the bus drop-off area to near the station entrance; ii) moving the taxi and private cars drop-off area further to 	<ul style="list-style-type: none"> ● The subproject will not change anything at the railway stations, just optimization space outside the railway stations such as the squares in front of the station, public parking lots, internal roads, passengers' pick-up and drop-off areas for better space use to help easy mode-shift among public 	N/A	<ul style="list-style-type: none"> ● None. The Xiangtan Railway Station (including the related outside space) was built in 1958, and a reconstruction and expansion project was completed in 2012. The LA of Bantang Intercity

⁴ A Safe Island is a small protected area where pedestrians can stop before finishing crossing a road. They are typically used on streets so wide that pedestrian crossing can be too long for some individuals to cross in one traffic light cycle.

	the west to avoid interference with busses and improve safety; iii) rerouting bus travel to the bus terminal station to be established to the west of the train station; and iv) establishing a covered shelter at the bus station.	transport modes.		Railway Station was completed in 2011 and started operation in 2016.
4. Clean energy transportation	<ul style="list-style-type: none"> ● Installing 778 charging piles in 30 locations. 	<ul style="list-style-type: none"> ● All of the locations are in current bus stations and municipal and public parking lots, except one bus hub which is still under construction. The subproject will only install the charging piles in the parking lots without land occupation directly and no land acquisition will be required. 	N/A	<ul style="list-style-type: none"> ● None.
5. Human-optimized Intelligent Transport System Enhancement	<ul style="list-style-type: none"> ● include a combination of exclusive traffic signals for busses with priority signal programming optimized for increasing bus speeds in the median bus lanes as well as for the busses in mixed traffic. 	<ul style="list-style-type: none"> ● No civil works and land occupation. 	N/A	None.
6. Low-Carbon and Resilient, Multi-Functional Fuxing Middle Road	<ul style="list-style-type: none"> ● an iRAP road safety assessment; ● road layout improvements for safety, bus stops, bike lanes and pedestrian walkways; ● ecosystem-based adaptation (EbA) measures to treat stormwater, alleviate drainage and runoff pollution, improve flood resilience and enhance the amenity value of the street; ● and drainage improvements. 	<ul style="list-style-type: none"> ● The current road from middle to side are main road, trees, sidewalk, landscape and sidewalk. The total width of the right of way (ROW) is 60m. The road layout improvements will be conducted on sidewalks and landscapes within ROW. ● EbA will measures will be conducted on sidewalks 	N/A	None.

		which also within ROW.		
7. Modernization of Early Flood Warning System	<ul style="list-style-type: none"> System (Model-building, flood assessment, and early warning platform) 	<ul style="list-style-type: none"> No civil works and land occupation. 	N/A	None.
8. Integrated Urban Catchment Management Plan and Design Development for the Railway Station Block and Yangmaizhou Island	<ul style="list-style-type: none"> Conception design, development guideline, flood hazards assessment, integrated catchment management study. 	<ul style="list-style-type: none"> No civil works and land occupation. 	N/A	None.
9. Low-carbon and resilient 'Xiangtan First Traditional Chinese Medicine Hospital'	<ul style="list-style-type: none"> Support the construction of a green, resilient, low-carbon Xiangtan First Traditional Chinese Medicine Hospital through EDGE certification resulting from energy and other conservation design modifications, and the reduction of flood threats through the application of EbA measures. 	<ul style="list-style-type: none"> The total land area of the hospital is 80.03 mu and land acquisition has been completed by the local government in January 2017. The state-owned land use right certificate was obtained in 2019. 	80.03	None. Please find details in LAR DDR of the subproject in appendix 1.
10. Public building retrofitting for Low-carbon demonstration (can be used for Asia-Pacific low-carbon development training center)	<ul style="list-style-type: none"> The Project will retrofit a semi-abandoned government-owned office building to showcase green and low-carbon building techniques. The total floor area to be retrofitted is approximately 6,000 m². 	<ul style="list-style-type: none"> The building was originally built in 2003, belonged to Xiangtan Municipal Authority Affairs Bureau and was used as government offices. Currently only the 4th floor is still in use as a government's training center which will relocate to their new building, and the rest of the building has been abandoned. 	N/A	None.
11. Low-carbon communities' improvement	<ul style="list-style-type: none"> Small-scale low carbon renovations and retrofitting will be undertaken in 20 	<ul style="list-style-type: none"> The subproject will be undertaken in existed urban communities, and 	N/A	None.

	<p>Xiangtan low-income urban communities in Yuhu District and Yuetang District.</p> <ul style="list-style-type: none"> The subproject including building insulation improvements, conversion from coal to natural gas cooking for low income households, installation of roof top solar hot water systems and solar PV panels, LED street lighting, EbA measures in community parks, and installation of electric vehicle and bike charging stations. 	no building demolition will be required.		
12. Smart Xiangtan ICT Platform	<ul style="list-style-type: none"> Smart city operation system development. 	<ul style="list-style-type: none"> No civil works and land occupation. 	N/A	None.
13. Building Energy Management System Expansion and Integration	<ul style="list-style-type: none"> BEMS program upgrade and sensors at 200 existed buildings 	<ul style="list-style-type: none"> No civil works and land occupation. 	N/A	None.
14. Muti-Energy System (at Jiuhoa industrial zone)	<ul style="list-style-type: none"> Power transmission system expansion: i) a 110 kv substation named Liwei Substation will be newly built in the subproject, with 2.7 km length cable including 1.9 km underground and 0.8 km overhead laying along trunk roads. The cable is started from existed 220 kv Jiuhuabei Substation; ii) 7.3 km of 10 kv power distribution lines will be installed in a pilot area within the Jiuhoa Economic and Technological Development Zone, all of them will started from newly built Liwei substation. 45 transformers will be installed in the buildings of enterprises who will apply for electricity in the future. Multi-energy system and 	<ul style="list-style-type: none"> The land area of Liwei Substation is 8.3 mu and has been acquired by the local government in 2013. Associated Jjiuhuabei Substation was started operation in Oct 2019, LA has been completed by 2018 by the local government. 2.7 km cables and 7.3 km will be built along the West Jinpeng road (under construction), Shimatou road (existed), Fazhan road (under construction) and a planning road with in the ROW of these roads and 	8.3	None. Please find details in LAR DDR of the project in appendix 2.

	sensors	<ul style="list-style-type: none"> no need for additional LAR. The 45 transformers will be installed in the reserved space in the building of enterprises who will apply for electricity in the future without land occupation. 		
15. Environmental Monitoring and Assessment System	<ul style="list-style-type: none"> An EMAS will be developed to acquire data from sub-systems including air, surface water, and ground water monitoring networks. 	<ul style="list-style-type: none"> No civil works and land occupation. 	N/A	None.
16. Program Management Enhancement		<ul style="list-style-type: none"> No civil works and land occupation. 	N/A	None.
Total			88.33	

Source: FSR.

III. DUE DILIGENCE ACTIVITIES

10. Due diligence aims to review the land acquisition and resettlement (LAR) work of the Project, evaluate if such work complies with the applicable state, provincial and local regulations and policies, identify outstanding issues, and propose feasible suggestions accordingly. Due diligence covers LA policies and compensation rates, fund disbursement, resettlement and satisfaction, information disclosure, grievance redress, outstanding issue evaluation, and supplementary actions. Among 17 subprojects, one hospital and one 110 KV substation will be newly constructed under subproject 9 and subproject 14 (please find in table II-1), one 220KV substation was identified as associated facility of the 110 KV substation, the land of project sites and associated facility have been acquired by local government before. The SPS requires a resettlement due diligence of such facilities. The other project activities will be conducted on current municipal roads, government buildings, parking lots and urban residential communities, etc, without newly land acquisition and house demolition impacts. All property owners and residents living in the communities will benefit from low-carbon and resilient infrastructure transformation of the city through the Project without adverse impact. Please find the detailed description in section IV.

11. From July 2019 to February 2020, site visiting, meetings with project companies, concerned officers from the land acquisition and house demolition offices and village leaders were conducted by resettlement consultant. Official documents were also obtained to supplement the due diligence findings. Two LAR due diligence report were prepared for subproject 9 and subproject 14 and attached to this report, please find in Appendix 1 and Appendix 2. The due diligence for other subproject were described in section IV. Please find the name list of people met during due diligence in Appendix 3, related land approval documents of the Project in Appendix 4.

IV. DETAILED LAND ACQUISITION AND RESETTLEMENT IMPACTS SCREENING FOR THE PROGRAM

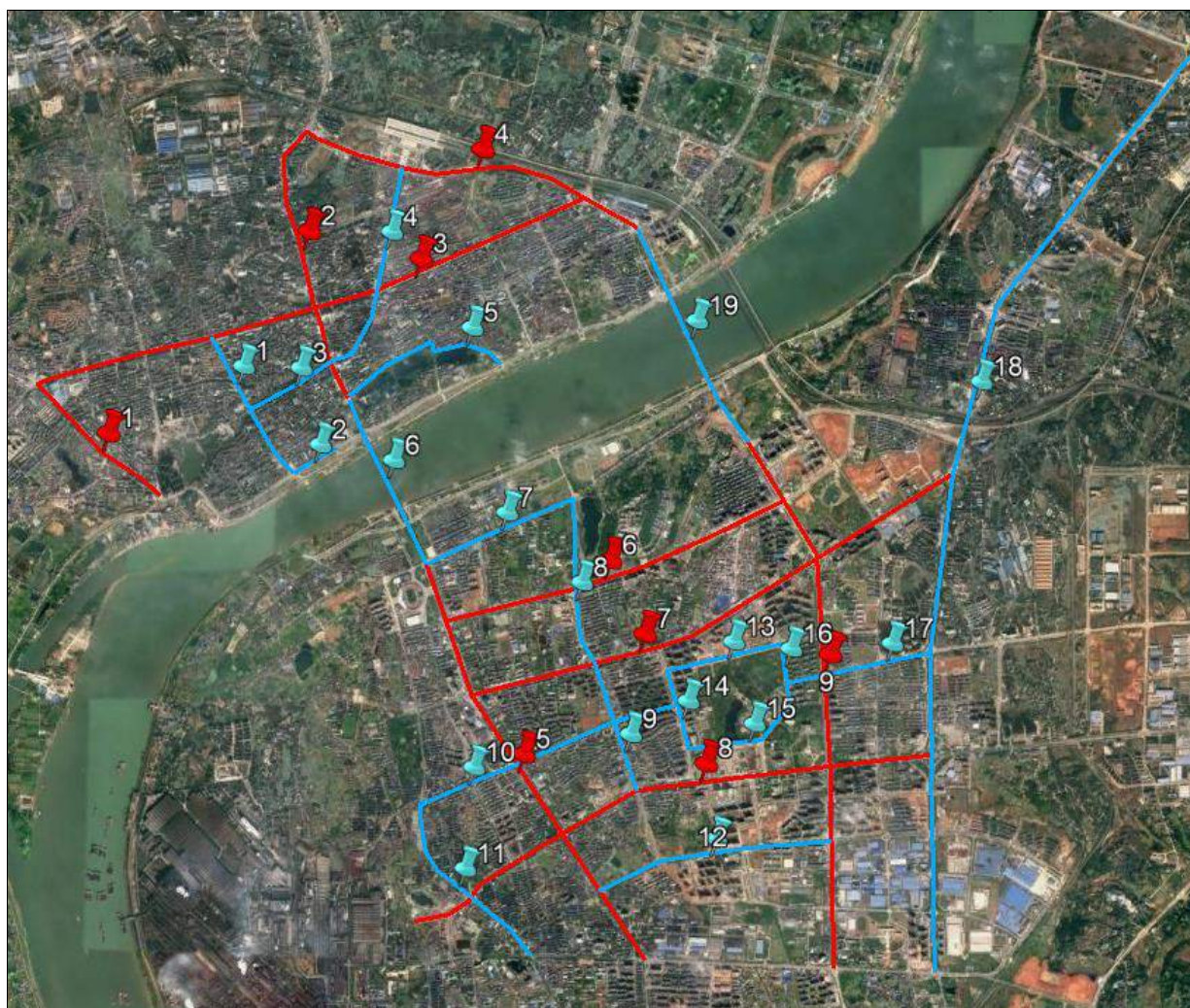
A. Urban Street Transformation for Bus Priority Lanes, Sidewalks and Cycling Ways

12. The program will establishing a priority bus system through (a) lane modification to 31.3 km of main trunk roads in the Yuetang and Yuhu urban districts to establish priority median bus lanes; (b) lane modification to 31.5 km of other trunk roads to establish peak hour priority curbside bus lanes; (c) traffic light reprogramming to improve bus traffic flows; and (iv) establishing 104 pairs of bi-directional smart accessible bus stops, including 56 new bi-directional smart bus stops every 500 m along the median bus priority lanes, and upgrading of 48 existing bi-directional road side bus stops.

13. The program will also upgrading the non-motorized transport systems by (a) improving 63.4 km of bike paths; (b) upgrading of 69 km of pedestrian walkways; (c) installing 48 safe crossing islands at major intersections for safe use and inclusive access; and (d) providing accessible and safer pedestrian crossing by adding screens with countdown red timers and synchronized sound buzzers at 3,000 pedestrian crossings across Xiangtan.

14. Priority median bus lanes will be built in the middle of current trunk road and curb-side bus priority lanes only need painting and signboard of peak hours bus priority. All bus stops will be built or upgraded on current municipal roads. Safe islands will be built on major intersection crossings of trunk roads to allow for safe pedestrian access and use. Upgrading on current pedestrian walkways. All the roads are current urban roads. Please find the map of the urban roads of the project in figure 1. No LAR will be required in this subproject.

Figure 1: Xiangtan urban trunk roads to receive lane modifications to establish priority median bus lanes (red) and peak hour priority curbside bus lanes (blue).



No	Priority Median Bus Lanes Road Name (Road Section)	Road Type	Length (km)	Situation
1	Baoqing Road (XinMa Road - Lushan West Road)	Structural Trunk	1.4	Current road
2	Jianshe North Road (One Bridge North Approach Bridge - Wenxingmen Road)	Structural Trunk	2.7	Current road
3	Shaoshan Road (Baoqing Road – Wenxingmen Road)	Structural Trunk	4.7	Current road
4	Wenxingmen Road (Building North Road - Sanqiao North Approach Bridge)	Trunk	2.4	Current road
5	Jianshe South Road (One Bridge South Approach Bridge - Shuyuan West Road)	Structural Trunk	4.1	Current road
6	Fuxing Middle Road (Fuxing Middle Road)	Trunk	2.9	Current road
7	Hedong Avenue (Jiannan South Road - Qiangtang Station)	Structural Trunk	4.6	Current road

8	Xiangtan Avenue (Tie Niu Road - Furong Avenue)	Structural Trunk	4.1	Current road
9	Shuangyong Road (Sanqiao South Approach Bridge - Shuyuan Middle Road)	Structural Trunk	4.4	Current road
	Total		31.3	
No.	Priority Curbside Bus Lanes Road Name (Road Section)	Road Type	Length (km)	Situation
1	Bai Ma Hu Road	Structural Trunk Road	1.2	Current road
2	Zhong Shan Road	Structural Trunk Road	0.4	Current road
3	Min Zhu Road	Trunk Road	0.9	Current road
4	Che Zhan Road	Trunk Road	1.6	Current road
5	Yu Hu Road	Structural Trunk Road	1.5	Current road
6	Jian She Middle Road	Trunk Road	1.4	Current road
7	Dong Hu East Road	Structural Trunk Road	1.3	Current road
8	Bao Ta North Road	Trunk Road	1	Current road
9	Bao Ta Middle Road	Trunk Road	1.4	Current road
10	Xia Guang Road	Trunk Road	2.2	Current road
11	Yue Tang Road	Trunk Road	3.7	Current road
12	Xiao Tang Middle Road	Trunk Road	1.9	Current road
13	Hu Xiang North Road	Structural Trunk Road	0.9	Current road
14	Hu Xiang West Road	Structural Trunk Road	0.6	Current road
15	Hu Xiang South Road	Structural Trunk Road	1	Current road
16	Hu Xiang East Road	Structural Trunk Road	0.5	Current road
17	Gao Xin Road	Structural Trunk Road	1.2	Current road
18	Fu Rong Avenue	Structural Trunk Road	6.9	Current road
19	Xiang Tan 3rd Bridge	Trunk Road	1.9	Current road
	Total		31.5	

Source: ADB PPTA consultant, 2019.

B. School Safety Road Assessment

15. The program will undertake a road infrastructure safety assessment at five elementary schools utilizing the iRAP Star Ratings for Schools (SR4S) methodology at two to three select points at each school. The five schools have been selected by the Xiangtan DRC, and are among the largest elementary schools in Xiangtan (Table 2). As an example, Figure 2 shows Xiangji Primary School, located on Yunhe Road. The road is narrow and roadside parking causes problems during the school rush hour. A preliminary recommendation is to make Yunhe Road one way, and strengthen the management and enforcement of roadside parking, including visible road marking, signboard on speed zone, cycling lanes, elevated pedestrian crossing, curb extension for safe walking e-motorbike parking at 150 m school zone border, colorful painting, marking, etc.

Table 2: Elementary schools to undergo the iRAP Star Ratings for Schools assessment.

No	School Name	Relevant Roads	Situation
1	Heping Primary School	Yuhu Road, Wenhua Street	Current school
2	Jinting Primary School	Baimahu Road, Jinting Street	Current school
3	Huoju Primary School	Huoju Zhong Road	Current school
4	No. 3 Primary School	Sanxiao Street	Current school
5	Xiangji Primary School	Yunhe Road	Current school

Source: ADB PPTA consultant, 2019.

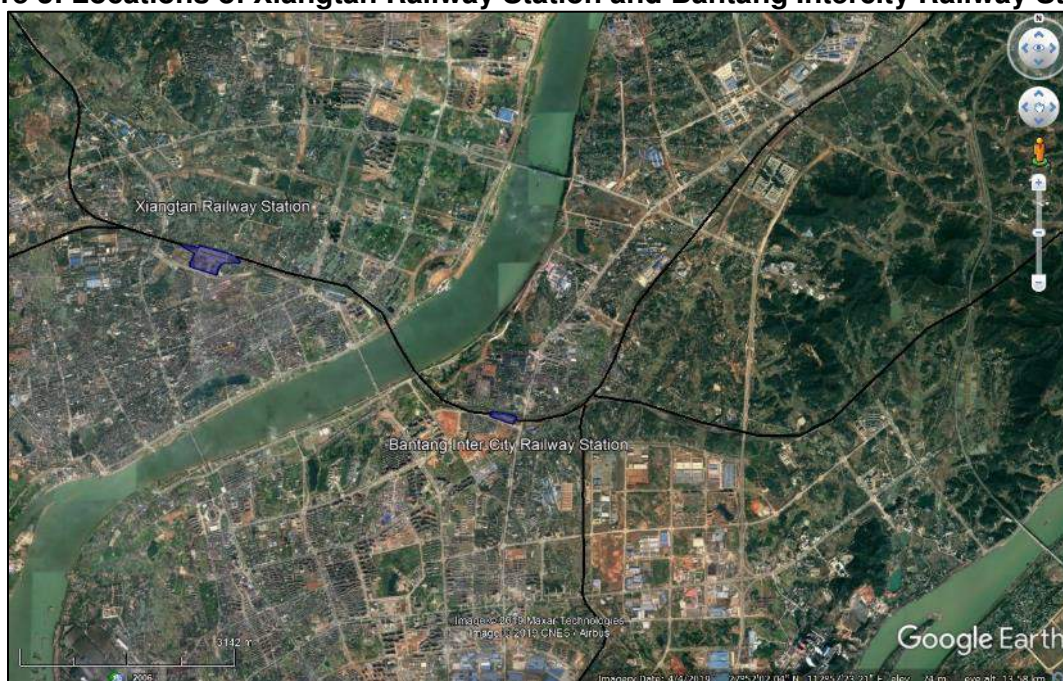
Figure 2: Yunhe Road at Xiangji Elementary School.

Source: ADB PPTA consultant, 2019.

C. Enhancement of Multi-Modal Station

16. The program will support the development of two demonstration inner-city multi-mode passenger transport stations, Xiangtan Railway Station and Bantang Intercity Railway Station (Figure 3). By modify layouts, improvements will optimize bus access to the stations over taxis and private cars, establish bus stops with shelters, and establish safe taxi and passenger pick-up and drop-off areas.

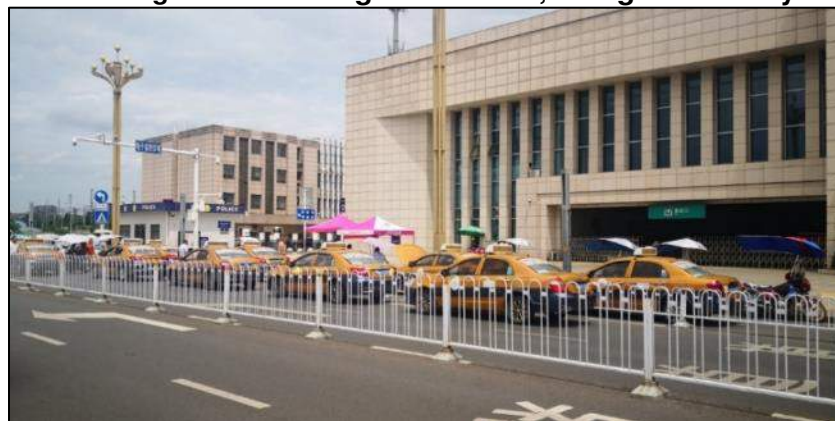
Figure 3: Locations of Xiangtan Railway Station and Bantang Intercity Railway Station.



Source: Google Earth 2019, and ADB PPTA consultant, 2019.

17. **Xiangtan Railway Station.** Xiangtan Railway Station is a second-class station on the Shanghai-Kunming Railway and the starting station of the Changzhu-tan intercity railway. It is located off Chezhan Road in Yuhu District (Figure 3), and is administered by the China Railway Guangzhou Group. The Xiangtan Railway Station was built in 1958, and a reconstruction and expansion project was completed in 2012. Problems with the current station design include the taxi que blocks public bus access; passengers need to cross the road twice when exiting the station to transfer to the nearest bus stop; and there is no shelter at the bus stop (Figure 4).

Figure 4: Waiting taxis blocking bus access, Xiangtan Railway Station.



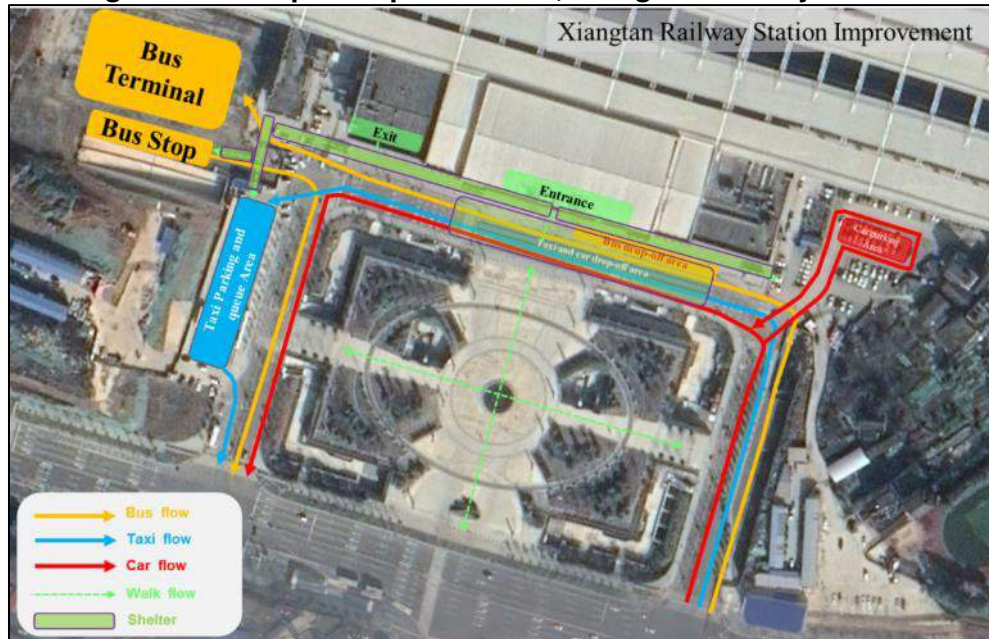
Source: ADB PPTA consultant, 2019.

18. To address these problems the program will:

- i) optimize the bus access route - the nearest position from the entrance of the railway station will be used as the bus unloading area, and the current bus stop will be

- ii) moved to the exit of the railway station to improve pedestrian safety by eliminating the need to cross the road to access the bus stop;
- iii) establish a covered bus shelter;
- iv) establish safe taxi and private car unloading area;
- iv) establish a new taxi parking and queuing area.

Figure 5: Transport improvements, Xiangtan Railway Station.



Source: ADB PPTA consultant, 2019.

Figure 6: Current situation of bus terminal in Xiangtan Railway Station.



19. **Batang Intercity Railway Station.** Batang station is located at the intersection of Furong Avenue and Banwu Road in Yuetang District (Figure 3). There are currently two bus stops located to the south of the station (Figure 7).

20. The program will support the development of the station through improvements to the transport access, including: (i) relocating the bus drop-off area to near the station entrance or green space; (ii) moving the taxi and private cars drop-off area further to the west to avoid interference with busses and improve safety; (iii) rerouting bus travel to the bus terminal station to be established to the west of the train station; and iv) establishing a covered shelter at the bus stations. LA of Batang Intercity Railway Station was completed in 2011 and LA of supporting facilities was completed in 2016, the station started operation in 2016. All the land in the project scope are state-owned land. Please find the current situation of the faculties in the station in Figure 8.

Figure 7: Bantang Intercity Railway Station in Xiangtan



Source: ADB PPTA consultant, 2019.

Figure 8: Current situation of Bantang Intercity Railway Station.



Source: ADB PPTA consultant, 2019.

21. Above all, the subproject will not change anything at the railway stations, just optimization space outside the railway stations such as the squares in front of the station, public parking lots, internal roads, passengers' pick-up and drop-off areas for better space use to help easy mode-shift among public transport modes.

D. Clean energy transportation

22. A total of 778 charging piles will be installed in 30 locations in the subproject. All 30 locations for the installing of charging piles are currently parking lots in bus stations, bus hubs, bus terminals and municipal and public parking lots, among them, 7 are belonged to Jiaofa Group (please find details in the table of Appendix 4), who is also the project company, 7 of them are the parking lots of railway stations and industrial park which belonged to local government and operated by the state-owned companies, the other 16 are the parking lots belonged to public service departments of government, such as environmental sanitation office, garden bureau, and public parks, etc. All locations are currently existed and operated, except the one location in Hexi General Bus Hub (please find I-4 in the table of Appendix 4) which is still under construction by Jiaofa Group and is expected to be completed in 2020. Jiaofa Group has obtained state-owned land use right certificate (SLURC) of this project site in 2008. Please find the copy of SLURCs of Hexi General Bus Hub and other bus stations owned by Jiaofa Group in appendix 4.

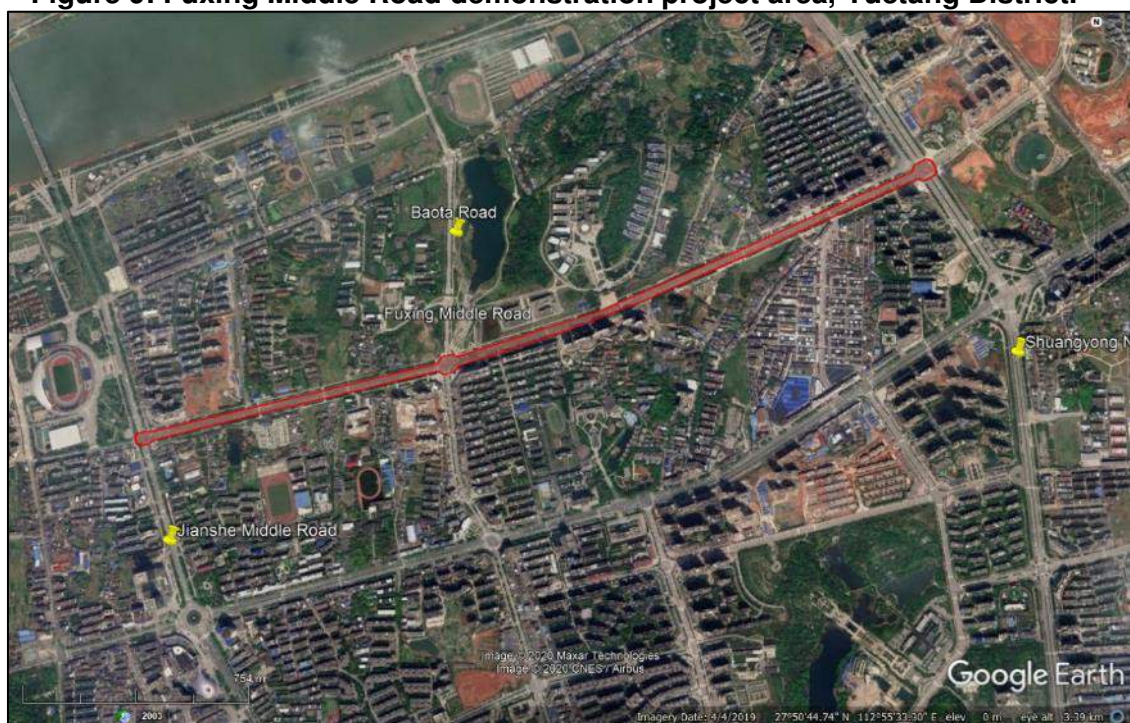
23. There are two types of land use and construction: (i) cooperative construction. 488 charging piles will be built in the 23 municipal and public parking lots in the railway stations, public parks and industrial parks without newly land occupation; (ii) self-constructed and self-operated. The other 290 charging piles will be built in 7 parking lots in bus stations, bus terminals and bus hubs owned by the Jiaofa Group themselves and operated by themselves. In neither case above, the subproject will only install the charging piles in the parking lots without land occupation directly and no land acquisition will be required.

E. Low-Carbon and Resilient, Multi-Functional Fuxing Middle Road

24. Fuxing Middle Road runs from Jianshe Middle Road to Shuangyong North Road, and is 2.9 km long. It is a two way trunk road with 6 lanes, and has several intersections with 6 lane cross streets. It has 4 to 8 m wide sidewalks. According to the Xiangtan Urban Master Plan, the road is targeted for education, scientific research and green space. A comprehensive road improvement demonstration project will be undertaken at Fuxing Middle Road, with the goal to create a safer, convenient, accessible and user-friendly street. Please find the project map in figure 9 and current situation of the road in Figure 10.

25. The current road from middle to side are main road, trees, sidewalk, landscape and sidewalk. The total width of the right of way (ROW) is 60 m. The road layout improvements will be conducted on sidewalks and landscapes within ROW. EbA will measures will be conducted on sidewalks which also within ROW. No land acquisition or house demolition impacts for the project.

Figure 9: Fuxing Middle Road demonstration project area, Yuetang District.



Source: ADB PPTA consultant, 2019.

Figure 10: Current situation of Fuxing Middle Road



Source: ADB PPTA consultant, 2019.

F. Public building retrofitting for Low-carbon demonstration

26. The program will support the retrofit a semi-abandoned government-owned office building into a training center to showcase green and low-carbon building techniques. Located in Yuetang District near the intersection of Furong Mi Road and Mudan Road. The building was originally

built in 2003, belonged to Xiangtan Municipal Authority Affairs Bureau and was used as government offices. Currently only the 4th floor is still in use as a government's training center which will relocate to their new building, and the rest of the building has been abandoned. (Figure 11)

27. The total floor area to be retrofitted is approximately 6,000 m², not including the basement parking area. The retrofit will include external wall and roof insulation, triple/quadruple-glazed windows, an intelligent sunshade system, central air conditioning, combined with heat pump system and/or roof top solar energy system to optimize energy consumption, an intelligent building energy monitoring system, high efficiency energy appliances, water saving faucets and toilets, and other green and low-carbon features. No additional land acquisition or house demolition will be required for the subproject. No tenants or employees were found to be affected also.

Figure 11: Government building current condition, November 2019.



Source: ADB PPTA consultant, 2019.

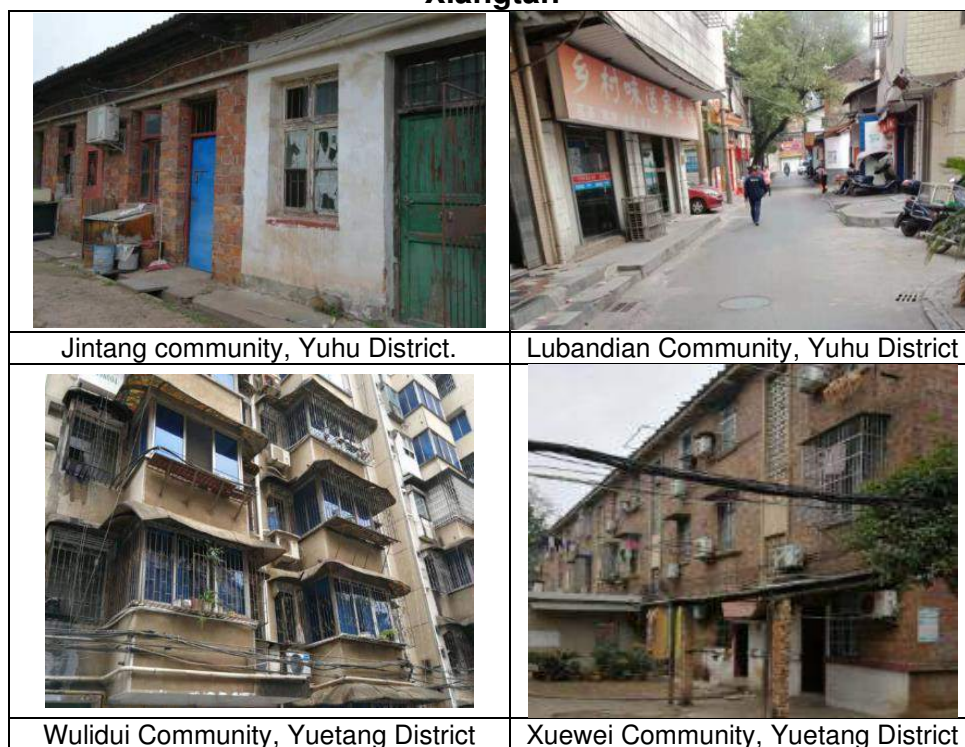
G. Low-carbon communities' improvement

28. Small-scale low carbon renovations and retrofitting will be undertaken in 20 Xiangtan low-income communities in Yuhu District and Yuetang District. Low carbon community (LCC) works will include building insulation improvements, conversion from coal to natural gas cooking for low income households, installation of roof top solar hot water systems and solar PV panels, LED street lighting, EbA measures in community parks, and installation of electric vehicle and bike charging stations. All of these LCCs located in urban areas. Works will be undertaken in existing buildings or facilities, and no building demolition will be required. The typical LCC measures including:

- Wall and rooftop insulation at community center and residential buildings;
- LED lights in residential buildings and streets;
- Energy saving doors and windows in residential buildings;
- Upgrading sewage and stormwater pipes;
- Installation of charging piles for e-bikes;
- Renovation of parking spaces;
- Short distance internal road maintenance;
- Transformation of natural gas pipeline;
- EbA measures in community parks.





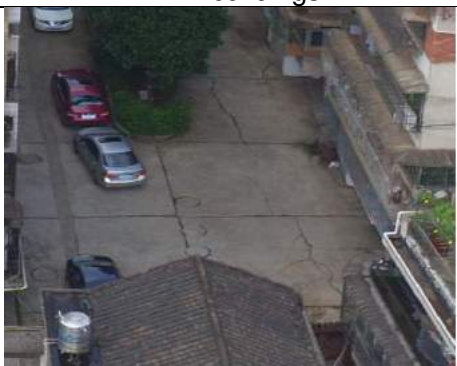

29. Please find the typical low-income communities in Figure 12 and the current situation of facilities which will receive LCC measures and the effect drawings after transformation through the project.

Figure 12: Typical low-income communities that will receive LCC improvements in Xiangtan



Source: ADB PPTA consultant, 2019.

Figure 13: Typical works that will be conducted in LCC improvements subproject

	
<p>Current situation of external walls of the building</p>	<p>The effect drawing after transformation</p>
	
<p>Current situation of windows in residential buildings</p>	<p>The effect drawing after transformation</p>
	
<p>Current situation of the roads in the communities</p>	<p>The effect drawing after transformation</p>

	
Current situation of the parking lots in the communities	The effect drawing after transformation
	
Current situation of the sewage and stormwater pipes in the communities	The construction site of other similar old community upgrading project in Xiangtan
	
Current situation of the community public park	The effect drawing after transformation

Source: ADB PPTA consultant, 2019.

30. The implementation of the subproject will not have permanent and negative impact on residents. But there might be some temporary inconvenience for the residents living in the communities during construction period. To mitigate potential impacts on community health and safety contractors will implement good practice community health and safety measures, including traffic safety measures, informing residents about construction activities and potential disruptions, and prohibiting the public from entering construction sites. All of them has been included in the EMP.

V. SOCIAL SAFEGUARDS RELATED IMPACTS OF THE POLICY-BASED LENDING

31. The policy-based loan (PBL) will reinforce project base loan and also assure the Xiangtan Municipal Government's (XMG's) low-carbon development commitments and efforts to be sustained. A series of policies, guidelines and regulations related to low-carbon transformation will be approved and public consultations on proposed policy reforms will be conducted during project implementation under PBL. At this point, the ADB actions would focus on institutionalize transformations and activate all stakeholders for low-carbon behaviors and practices, rather than infrastructure construction, so there is unlikely to be involuntary acquisition of land or house demolition. The policy reforms will not trigger involuntary resettlement safeguard. Therefore, the program has been categorized as C for involuntary resettlement.

32. The policy reforms will not trigger Indigenous Peoples safeguard. The poverty and social impact analysis was carried out to assess direct and indirect, and positive and negative impacts on ethnic minorities. Population of scattered ethnic minorities in Xiangtan Municipality is accounts for 0.49% of the total municipal population. The program does not have any direct adverse impacts on ethnic minorities as it is designed to promote XMG's institutionalize transformations and activate all stakeholders for low-carbon behaviors and practices through a series of policy actions. The project will benefit all the residents and it does not have differential impacts on any specific ethnic minority communities that would trigger ADB's Indigenous Peoples policy requirements. The programs will benefit all the residents and it does not have differential impacts on any specific ethnic minority communities that would trigger ADB's Indigenous Peoples policy requirements. Therefore, the program has been categorized as C for Indigenous Peoples.

Table 3: Social Safeguards Impacts of Policy Actions

	Tranche 1 (prior actions before June 2020)		Tranche 2 (by June 2022)	Social impact	Mitigation Measures
Reform area: Low-Carbon, Resilient, and Smart City Development Strategy and Policy Issued					
1	<p>XMG shall have issued the Xiangtan Low-Carbon Development Plan 2020-2030 to set the carbon peaking target by 2028 and provide a framework for low carbon development which includes priorities and requirements by sector, governance and institutional coordination mechanisms, and resource allocation.</p> <p>(Document required: XMG to provide the copy of officially issued Xiangtan Low-Carbon Development Plan 2020-2030)</p>			<p>Involuntary resettlement. The policy actions in this reform area will not trigger involuntary resettlement safeguards as there will be no involuntary acquisition of land or house demolition. The ADB actions would focus on the promotion of coherent development across sectors, layout strategic plan and adoption of GPF, rather than infrastructure construction.</p> <p>Indigenous Peoples. The policy actions will not trigger Indigenous Peoples safeguard as there will be no adverse impacts and no differential positive benefits on ethnic minorities</p>	Not applicable
2	<p>XMG shall have issued an addendum to Accelerating the Construction of Sponge City to improve climate resilient infrastructure development by including mechanisms for cross-sectoral coordination, training, and clear adoption deadlines for updated design standards that incorporate EbA measures.</p> <p>(Document required: XMG to provide the copy of the issued addendum to Accelerating the Construction of Sponge City)</p>	20	<p>XMG shall have developed and issued Xiangtan Design Standards, providing technical specifications which incorporate EbA measures for infrastructure development to improve quality and resilience in infrastructure development.</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Design Standards on EbA measures infrastructure development)</p>		
3	<p>XMG shall have issued an addendum to Xiangtan city Flood prevention emergency plan to improve drought and flood warning systems; and strengthen institution and capacity on flood risks response system and other urban resilience.</p> <p>(Document required: XMG to provide the copy of the issued addendum to Xiangtan city Flood prevention emergency plan)</p>				

4	<p>XMG shall have endorsed Decision on Accelerating the Construction of Smart Xiangtan to layout strategic plan to implement smart Xiangtan development</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Decision on Accelerating the Construction of Smart Xiangtan) (completed in March 2018)</p>	21	<p>XMG shall have issued Xiangtan Management Rules on integration of ICT platforms to provide details on management rules on the use of centralized server, improve institutional arrangement, provide user-fee calculation methods, regulate data sharing and strengthen data security.</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Management Rules on integration of ICT platforms)</p>		
5	<p>XMG shall have endorsed Smart Xiangtan Construction Master Plan submitted by Xiangtan Big Data Center to strengthen consolidated efforts to develop various ICT platforms, institutionalize Xiangtan Big Data Center to ensure integration in management, operation, data standards, data sharing, data security, and R&D.</p> <p>(Document required: XMG to provide the copy of the official approval of Smart Xiangtan Construction Master Plan) (completed in March 2019)</p>	22	<p>XMG shall have issued Xiangtan Notice of using smart environmental monitoring and assessment system and governance to enhance institutional arrangement, designate specific roles and tasks on monitoring and data analysis, reporting, evaluation, and information management, provide resource allocation, develop coordination and cooperation mechanism with other XMG bureaus.</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Notice of using smart environmental monitoring and assessment system and governance)</p>		
6	<p>XMG shall have issued Xiangtan Framework Low-Carbon Procurement Policy to set the goals, principles, institutional arrangements and coordination mechanisms to enable the prioritization and integration of low carbon procurement in goods and services in government procurement.</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Framework Low-Carbon Procurement Policy)</p>	23	<p>XMG shall have issued Xiangtan Low-Carbon Procurement Policy Action Plan to describe specific actions to support implementation of the Procurement Policy, including how to prepare bid criteria, scoring and reporting templates and mechanism, selection of pilot categories, how to design a monitoring and e-procurement system, and capacity buildings activities.</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Low-Carbon Procurement Policy Action Plan)</p>		
7	<p>XMG shall have issued Action Plan for the Reconstruction of the Old Community in Xiangtan City 2020-2022 that adheres to green and low-carbon concept in community improvement activities.</p>				

	(Document required: XMG to provide the copy of the issued Action Plan for the Reconstruction of the Old Community in Xiangtan City 2020-2022)				
Reform area: Low-Carbon Mobility Systems Enhanced					
8	<p>XMG shall have issued an addendum to Xiangtan City Public Transport Specific Plan 2014-2030 to indicate the implementation of bus priority system, create public transport promotion fund, provide capacity building activities to enhance integrated land use and transport planning, and carry out feasibility and appropriateness of implementing demand-driven bus routes.</p> <p>(Document required: XMG to provide the copy of the officially issued addendum to Xiangtan City Public Transport Specific Plan 2014-2030)</p>	24	<p>XMG shall have issued Xiangtan Notice on Operational Management Rules on city-express and neighborhood buses to expand public bus services by introducing demand-driven bus routes and fare operation.</p> <p>(Document required: XMG to provide Xiangtan Notice on Operational Management Rules on city-express and neighborhood buses)</p>	<p>Involuntary resettlement. The policy actions in this reform area will not trigger involuntary resettlement safeguards as there will be no involuntary acquisition of land or house demolition. The ADB actions would focus on the development of public transport policies, rules and regulations, and guidelines and promote public awareness raising, rather than infrastructure construction.</p> <p>Indigenous Peoples. The policy actions will not trigger Indigenous Peoples safeguard as there will be no adverse impacts and no differential positive benefits on ethnic minorities</p>	Not applicable
9	<p>XMG shall have issued Urban comprehensive transportation system planning in Xiangtan to enhance integrated transportation network, enhance public transport hubs for better integration and easier mode shift, and encourage the development of diversified bus service system.</p> <p>(Document required: XMG to provide the copy of the officially issued Urban comprehensive transportation system planning in Xiangtan) (completed in March 2018)</p>				
10	<p>XMG shall have issued an addendum to Xiangtan Cycling and Pedestrian Development Specific Plan to enhance safer and more comfortable access for pedestrians, better integration between NMT and public bus facilities, and improve public awareness on active transportation like walking and cycling.</p>	25	<p>XMG shall have developed and issued Xiangtan Low-Carbon Sustainable Urban Road Design Guidelines, providing design specifications for people-oriented transport infrastructure, including dedicated walk and cycle-ways, dedicated bus lanes, public transport prioritization, hubs, and enhanced road safety features.</p>		

	(Document required: XMG to provide the copy of the officially issued addendum to Xiangtan cycling and pedestrian development specific Plan)	(Document required: XMG to provide the copy of the officially issued Xiangtan Low-Carbon Sustainable Urban Road Design Guidelines)		
11	XMG shall have issued the Introduction of Shared Bicycle with docking stations (Including electric bicycle) Operation Implementation Plan to improve shared bicycle schemes with better management and operation. (Document required: XMG to provide the copy of the officially issued Introduction of Shared Bicycle with Docking Stations Operation Implementation Plan) (completed in January 2020)	26 XMG shall have issued Xiangtan Notice on moto-bikes free zones to designate zones to prevent any access to motor-bikes and e-motobikes, develop penalty mechanism, and improve parking facilities nearby the motorbike free zones so to enhance safety of pedestrians and cyclists. (Document required: XMG to provide the copy of the officially issued Xiangtan Notice on moto-bikes free zones)		
12	XMG shall have issued an addendum to Notice on Strengthening the Management of Electric moto-bikes to control e-motorbike' speed and regulate the use of e-motorbikes in the area with high volume pedestrians and cyclists and school zones. (Document required: XMG to provide the copy of the officially issued addendum to Notice on Strengthening the Management of Electric moto-bikes) (completed in August 2019)	27 XMG shall have issued Xiangtan Management Rules and design guides on School Zones for Road Safety Enhancement to ensure strict enforcement of 150 meter school zones and enhance safety features. (Document required: XMG to provide the copy of the Xiangtan Management Rules and design guides on School Zones for Road Safety Enhancement)		
13	XMG shall have issued Interim Measures for Vehicle Parking Management in Xiangtan City to introduce vehicle parking management and parking fee, (Document required: XMG to provide the copy of the officially issued Interim Measures for Vehicle Parking Management in Xiangtan City)			
14	XMG shall have issued an addendum to Implementation Plan of New Energy Vehicle Promotion and Application in Xiangtan City to enhance e-bus charging infrastructure in bus terminals, provide incentives for long-distance vehicles with cleaner fuels,			

	and carry out capacity buildings of local authorities on clean vehicles. (Document required: XMG to provide the copy of the officially issued addendum to Implementation Plan of New Energy Vehicle Promotion and Application in Xiangtan City)				
Reform area: Low-Carbon Energy and Building Systems Enhanced					
15	XMG shall have issued Xiangtan 13th Five-Year Plan Comprehensive Work Program for energy conservation and emission reduction, identifying objectives and priority projects which promote clean and renewable energy technologies, energy performance contracts (EPC) and energy service companies (ESCOs), and green buildings. (Document required: XMG to provide the copy of the issued Xiangtan 13th FYP Comprehensive Work Program for energy conservation and emission reduction) (completed in March 2019)			Involuntary resettlement. The policy actions in this reform area will not trigger involuntary resettlement safeguards as there will be no involuntary acquisition of land or house demolition. The ADB actions would focus on the development of sector policy, institutional, operational reforms and capacity building, rather than infrastructure construction. Indigenous Peoples. The policy actions will not trigger Indigenous Peoples safeguard as there will be no adverse impacts and no differential positive benefits on ethnic minorities	Not applicable
16	XMG shall have issued Notice on the Establishment of Energy Expert Committee to support in energy efficiency policies and technology improvement to institutionalize the involvement of energy experts in policy design and evaluation, and enhance technical capacity of local authorities. (Document required: XMG to provide the copy of Notice on the Establishment of Energy Expert Committee)				
17	XMG shall have issued Approval of Developing District Energy in Xiangtan (except for industrial zones) for the use of concession contracts, providing clear roles and responsibilities and rules on concessions to encourage private investment in energy development and market-	28	XMG shall have issued Xiangtan Special Planning for Urban Centralized energy Supply (heating and cooling) Systems, outlining key technical specifications and requirements for low carbon technologies (including waste-heat), connection requirements, and consumption-based tariff setting.	Involuntary resettlement. This policy action will not trigger involuntary resettlement safeguards as there will be no involuntary acquisition of land or house demolition. The ADB actions would focus on the energy systems and waste heat recovery policy for energy	Not applicable

	based district energy tariff-setting. (Document required: XMG to provide the copy of Approval of developing district energy in Xiangtan (except for industrial zones) under concession contracts) (completed in March 2019)		(Document required: XMG to provide the copy of Xiangtan Special Planning for Urban Centralized energy Supply (heating and cooling) Systems)	efficiency, rather than infrastructure construction. Indigenous Peoples. The policy actions will not trigger Indigenous Peoples safeguard as there will be no adverse impacts and no differential positive benefits on ethnic minorities.	
18	XMG shall have issued an addendum to Xiangtan Implementation Rules for Green buildings to promote the use of energy performance contracting (EPC) for public institution buildings' energy efficiency, support local banks to develop green financing products for building energy efficiency, green buildings; and pilot building energy management for public buildings. (Document required: XMG to provide the copy of the issued addendum to Xiangtan Implementation Rules for Green buildings)	29	XMG shall have issued Xiangtan green building development plan to enhance incentives for green building developers through various measures, promote awareness raising on green buildings, promote quantifiable green building certification for green financing, and enhance capacity building on green buildings and building materials, passive design, and EDGE certification tools. (Document required: XMG to provide the copy of the issued Xiangtan green building development plan)		
19	XMG shall have issued Notice on training of energy and resource consumption statistical information management system of public institutions to improve the energy consumption statistics and enhance quality and efficiency of energy statistics works. (Document required: XMG to provide the copy of Notice on training of energy and resource consumption statistical information management system of public institutions) (completed in September 2019)	30	XMG shall have issued Xiangtan management measures for scaling up energy performance contracting (EPC) for energy renovation to implement building energy management system for efficiency improvement, and enhance building energy accounting and incentive mechanisms for public buildings to apply EPC and ESCO. (Document required: XMG to provide the copy of the issued Xiangtan management measures for scaling up energy performance contracting (EPC) for energy renovation)		
		31	XMG shall have issued Xiangtan Notice on expanding energy consumption statistics to large-scale public and commercial buildings to requires energy intensive buildings to report their energy consumption, encourage building energy efficiency works and better building energy management.		

			(Document required: XMG to provide the copy of the issued Xiangtan Notice on expanding energy consumption statistics to large-scale public and commercial buildings)		
		32	<p>XMG shall have issued Xiangtan Notice of implementing energy audit for governmental office buildings and large scale public and commercial buildings to improve quality of energy consumption data and statistics, while promoting building energy efficiency.</p> <p>(Document required: XMG to provide the copy of the issued Xiangtan Notice of implementing energy audit for governmental office buildings and large scale public and commercial buildings)</p>		

APPENDIX 1: LAR DUE DILIGENCE OF XIANGTAN TRADITIONAL CHINESE MEDICINE HOSPITAL

A. Basic information of the subproject

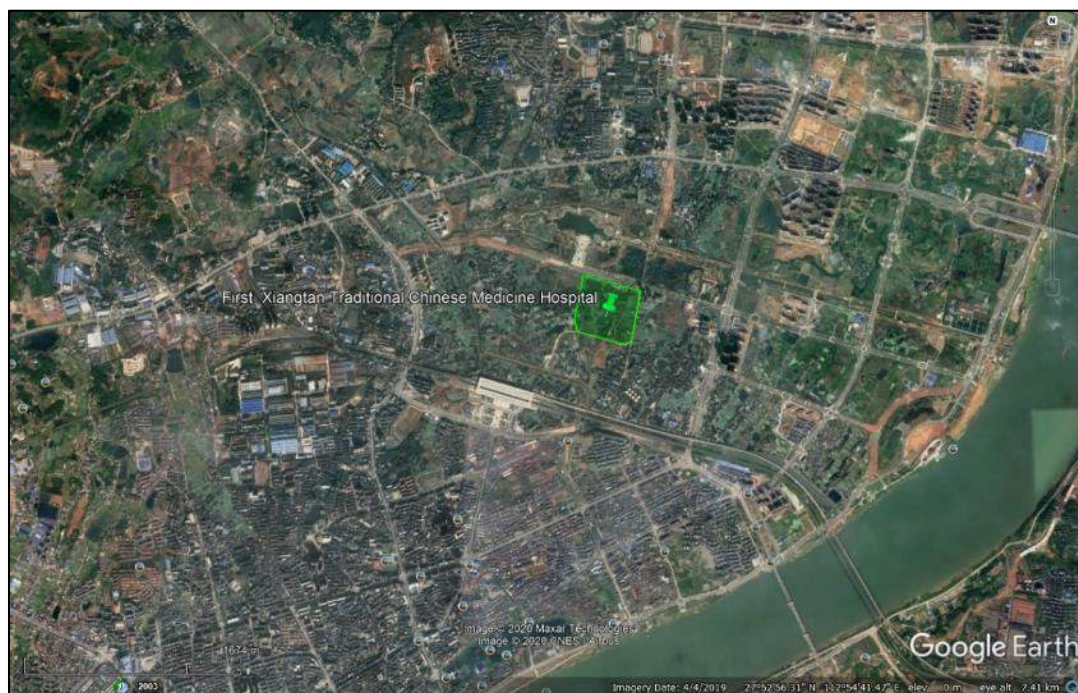
1. Subproject 9 will support the construction of a green, resilient, low-carbon Xiangtan First Traditional Chinese Medicine Hospital through EDGE⁵ certification resulting from energy and other conservation design modifications, and the reduction of flood threats through the application of EbA measures. The design modifications and EbA measures will help in the creation of a pleasant environment for patients, staff and visitors, and will be supportive of Xiangtan's transition into a "sponge city".

2. The Xiangtan First Traditional Chinese Medicine Hospital will be built on a 5.34 ha (80 mu) site in the northern part of Wanlou new development area in Yuhu District, near the intersection of Jiangnan and Hutan Roads. The site is across the road from the newly built Biquan Lake Park (Figure 1). Please find the current situation of project site in Figure 1. The hospital will include an inpatient building (41,476 m³), an outpatient building (36,575 m³), a dormitory building (11,655 m³), and a medicine manufacturing building (3,450 m³).

3. The subproject's executive agency is the Project Management Office for ADB-financed Project (PMO) and the project company is Xiangtan First Traditional Chinese Medicine Hospital (XTCMH). Total cost estimate of the subproject is CNY 6.85 million. The construction period of the subproject is 36 months, i.e. from June 2020 to June 2023.

⁵ The program will support the hospital in achieving EDGE certification, the first hospital in the PRC to be so certified. Developed by the International Finance Corporation (IFC) under the World Bank Group, EDGE (*Excellence in Design for Greater Efficiencies*) is an online platform, a green building standard, and a certification system used in over 150 countries.

Figure 14: Future location of the Xiangtan Frist Traditional Chinese Medicine Hospital.



Source: ADB PPTA consultant 2019, and Google Earth 2019.

Figure 15: Current Situation of Project Site



Source: ADB PPTA consultant, 2019

B. Current status of project site

4. The land of project site of Xiangtan First Traditional Chinese Medicine Hospital Project was previously belonged to Fuqiang Village of Wanlou Subdistrict (the original name is Hutun Township) of Yuhu District. It was acquired by the government in Jan 2017 for the High-Speed Railway Area Phase II Project of Xiangtan City (the railway area project) which totally acquired 278.64 mu of land in Fuqiang village, including the 80.03 mu of land for this proposed project. Since land acquisition has been completed for more than two years, most of the land is overgrown with weeds and with some small nurseries that have been compensated. In 2019, Xiangtan Traditional Chinese Medicine Hospital obtained state-owned land use right certificate for 53,348.51 m² land, please find the copy below (Figure 3).

5. The land acquisition and resettlement due diligence aims to (i) review the land acquisition and resettlement in light of the Land Administration Law of the PRC, and the applicable provincial and county regulations and policies on resettlement; (ii) check the land acquisition and resettlement processes, their progress and effectiveness, and fund management; (iii) the affected persons (APs) production level and living standards; iv) their satisfaction with land acquisition and resettlement; (v) identify outstanding land acquisition and resettlement issues; and (vi) propose corrective actions if there are significant remaining issues.

Figure 16: State-owned land use right certificate obtained by XTCMH in 2019

湘 2019 湘潭市 不动产权第 0009659 号		附 记
权利人	湘潭市中医医院	该不动产使用划拨土地使用权,在转让和抵押时应当经有批准权的人民政府批准,并补缴土地出让价款。
共有情况	单独所有	
坐落	雨湖区万楼街道富强村	
不动产单元号	430302 103006 GB00081 W00000000	
权利类型	国有建设用地使用权	
权利性质	划拨	
用途	医疗卫生用地	
面积	53348.51m ²	
使用期限		
权利其他状况	土地面积: 53348.51m ² 土地用途: 医疗卫生用地	

C. Land acquisition review

C.1 Implementation agencies

6. The People's Government of Yuhu District of Xiangtan City is responsible for coordination, management, and supervision during land acquisition and resettlement implementation of the High-Speed Railway Area Phase II Project of Xiangtan City, and reporting the implementation progress to the Xiangtan Municipal Government and other relevant authorities. The Land Acquisition and House Demolition Office of Yuhu District was mainly responsible for the implementation of land acquisition and house demolition. Wanlou Subdistrict Office have appointed persons to be responsible specifically for resettlement and coordination and endowment insurance implementation. The Fuqiang Village Committee had assigned someone in charge of land acquisition and resettlement. In addition, Human Resources and Social Security Bureau of Yuhu District also provided skill trainings and job opportunities for the APs. The functions of the resettlement agencies are as follows:

The People's Government of Yuhu District of Xiangtan

- Conduct coordination, supervision, and arbitration during land acquisition

The Land Acquisition and House Demolition Office of Yuhu District

- Conduct the detailed measurement survey (DMS)
- Participate in the calculation of compensation fees for affected households
- Participate in the disbursement of compensation fees to affected persons
- Handle grievances and appeals arising from resettlement
- Provide employment opportunities for affected persons
- Carry out land acquisition

Land Resource Bureau of Xiangtan

- Handle, review, and approve land acquisition formalities
- Develop resettlement policies in coordination with authorities concerned
- Participate in the DMS
- Conduct coordination, supervision, and arbitration during land acquisition

Wanlou Subdistrict Office

- Participate in the DMS
- Handle grievances and appeals arising from resettlement
- Assist the Land Acquisition and House Demolition Office in going through the land acquisition formalities

Fuqiang Village Committee

- Participate in the DMS
- Convene a village congress to discuss the compensation and resettlement program
- Organize the implementation of the resettlement program
- Disburse and manage compensation fees
- Providing assistance to the vulnerable groups

Human Resources and Social Security Bureau of Yuhu District

- Organize skills training for affected persons
- Provide job opportunities for affected persons

C.2 Land acquisition process and procedure

7. As LAR of the project was included in the whole railway area project which was started since 2012, the LAR announcement time was the same as the railway project which was in 2

November 2012. The actual time for the beginning of LAR of this project was in December 2015 and all of the compensation were fully paid to the APs in Jan 2017. Land compensation agreement of total affected land area which is 278.64 mu (including 80.03 mu of land for this proposed project) was signed between Yuhu District Land Acquisition and House Demolition Office (LAHDO) and Fuqiang Villagers' Committee.

8. Several villagers' representative meetings have been conducted in affected village groups and the key issues raised during the meetings including the confirmation of land type. According to the compensation policy, the land compensation rate for different land type in the same area are different, e.g. the compensation rate for paddy field is the highest and the compensation rate of other types of land needs to be multiplied by an adjustment factor from 0.5 to 0.8. Some of the villagers thought that their land outputs were generally the same as although the registered types were different and they should be compensated according to the highest compensation rate. The issue was addressed and all of the affected land were compensated in the same rate of the paddy field, which is the highest one.

9. The timeline of land acquisition and compensation payment is given below:

Table 1: Land Acquisition and Compensation Milestones

No.	Name of the activities	Date	Responsible agencies	Document number and main contents
1	Land acquisition announcement	2012.11.2	Xiangtan Municipal People's Government	Tantugong zi (2012) No.17
2	Land acquisition compensation and resettlement scheme announcement	2013.11.25	Xiangtan Land Resource Bureau	Tanzhengbu (2013) No.17
3	Detailed measurement survey (DMS) of land acquisition impacts	December 2015 to May 2016	Villagers' Committee, Wanlou Sub-district Office, land acquisition and house demolition office, land resource bureau and affected villagers	Conducted the land acquisition impacts survey
4	Disclose the DMS results	May 2016 to June 2016	Wanlou Sub-district and land resource bureau	Confirm the impacts
5	Villagers' representative meetings	May 2016 to June 2016	Villagers' Committee, Wanlou Sub-district Office, land acquisition and house demolition office,	Explain land acquisition and resettlement policies; compensation standard;

			village officers and group leaders	resettlement scheme.
6	Signing land acquisition compensation agreement	2016.7.30	Wanlou Sub-district Office and Yuhu district land acquisition and house demolition office	The agreement was signed between village committee and Yuhu district land acquisition and house demolition office
7	Villager group meetings	August 2016 to December 2016	Affected village group leaders and villagers' representatives	Discuss the compensation distribution scheme among the group.
8	Distribute land acquisition compensation to affected villagers	January 2017	Villagers' Committee	

Source: Interview with leader of Fuqiang Village, officers from Wanlou Subdistrict and LAHDO of Yuhu District.

C.3 Land acquisition impact analysis

10. The total population of Fuqiang Village is 1,700 households with 5,170 persons in 23 village groups, among them, 100% are Han people, 53% are women and 60% are labor force workers. Among the labor force, 20% of whom work in Xiangtan City and 10% work out of Xiangtan, about 50% work in the factories around the village or doing temporary jobs, the others doing small business. The original total cultivated land area of the village was about 4,000 mu, and about 2,200 mu has been acquired for urban development projects. The remaining land area per capita was less than 0.4 mu. Before land acquisition, about 28% of the affected land was leased to the seedling companies for planting nurseries with the rent of CNY 800/mu/year. Some elderly villagers plant vegetables on the remaining land and only for the consumption of their own families without agriculture income from the land. The per capita net income of villagers was about CNY 11,000/year in 2018. In 1981, the land was contracted to households in the village and they didn't adjusted land during the second round of land contracting in 1996. Therefore, in the process of land acquisition, the distribution of land compensation fee was decided by the villagers' representative meeting held by each group, which was distributed equally according to the population.

11. From 2015 to 2017, the government acquired 278.64 mu (including 80.03 mu of land for this proposed project) of rural collectively-owned land of Fuqiang Village of Wanlou Subdistrict of Yuhu District, affecting 5 village groups include Hujia Group, Miaoixiang Group, Dapi Group, Jizhong Group and Chunhua Group in the village. As the land compensation were distributed evenly according to the population, the total affected population was the whole population of the 5 village groups which was about 300 households with 900 persons. No house demolition was involved. No vulnerable group was affected. Please find the land acquisition impact in table 2.

Table 2: LA Impacts Summary

Land type	Paddy field	Garden land	Forest land	Ponds and water area	Waterways	Construction land*	Unused land	Total
Quality (mu)	50.84	47.81	111.69	41.36	6.05	10.96	9.93	278.64
Percentage(%)	18.25	17.16	40.08	14.84	2.17	3.93	3.56	100.00

Source: LAHDO of Yuhu District

*the construction land refers to roads and residence land which belonged to village collective and not contracted to villagers.

C.4 Land Acquisition and Compensation

12. The collective land in Fuqiang Village acquired for the project is classified as Area I land, where the land compensation rate is based on location-based land price with adjustment coefficient for different land types. According to the Notice of the *Hunan Provincial Government on Amending Compensation Standards for Land Acquisition (XZF [2012] No.46)*, the compensation rate is CNY 72,000/mu for paddy field, CNY 57,600/mu for cultivated land and garden land, CNY 43,200/mu for forest land and CNY 36,000/mu for unused land. The rate included land compensation and resettlement subsidy. During LAR implementation, in order to address the issues raised during consultations, the compensation rate of CNY 72,000/mu was applied for all types of land. As the affected land was leased or planting for self-consumption without agriculture income, it is estimated that the compensation standard was nearly 90 times of the rent income which is about CNY 800/mu. And the compensation rate for young crops and ground facilities is according to *Reply of the People's Government of Hunan Province on the Compensation and Resettlement Measures for Collective Land Acquisition and House Demolition in Xiangtan City (XZH[2013] No. 84)*. Please find details in table 3.

Table 3: Land Acquisition Compensation Rate

Policy	Land type	Compensation rate according to the policy (CNY/mu)		
		Land compensation	Young crop	Average compensation rate for facility
XZF [2012] No.46 and XZH[2013] No. 84	Paddy field	72000	3000*	5000
	Garden land	57600	4000*	6000
	Dry land	57600	2000*	3000
	Pond	72000	4000	6000
	Forest land	43200	3000	1000
	Construction land	72000	0	6000

* if LA happened before transplanting rice seedlings, will be compensated according to the half of compensation rate of young crop; if LA happened after transplanting rice seedlings, will be compensated according to the compensation rate of young crop.

Source: LAHDO of Yuhu District

13. The total land acquisition compensation fee consistent with the agreement was paid to the village committee and finished in Jan 2017 which was CNY 23.32 million including CNY 20.06 million land compensation fee and CNY 3.26 million compensation fee for the young crops and ground attachments. The compensation fee for young crops and ground attachments were paid to the owners. Based on the decision of village meeting, CNY 3,800/mu of land compensation was reserved in the village collective for the construction of public utilities, such as sanitation facilities and roads for the environmental improvement of the village, other land compensation

fee for affected land were equally disturbed to all of the villagers of affected villager groups. There were three main resettlement schemes for collective land acquisition as follows:

- Cash compensation. The APs were satisfied with the compensation and have used the land acquisition compensation to start small businesses and work as migrate workers in other cities which increase both sideline income and wage income. Post land acquisition phase does not show any impoverishment of affected households. In fact, due to the generous cash compensation that they received, household income has increased.
- Social security. The APs could choose to join the social security voluntarily and make contribution based on different ages. The land users have to pay CNY 29,000/mu⁶ as security subsidies to the public social security accounts for overall utilization which was included in the cost of land acquisition but not paid to the APs directly. The APs could receive CNY 800 to CNY 1,000 per capita monthly pension when they reached the retired age (male after 60 years old and female after 55 years old). If the APs was over 80 years old during LA, they could get pension immediately after LA and the pension standard was CNY 1,800/month per capita.
- Providing training and job opportunities. The Human Resources and Social Security Bureau is responsible for the organization of priority training for affected farmers. According the officer from the bureau, they have provided several certification trainings for the affected farmers each year according to their demand, such as Chinese and western pastry making, electrician and welding. Meanwhile, they also provided entrepreneurship guidance and entrepreneurship fund to the APs who are willing to do small business by themselves. The bureau also provided job opportunities to the APs through publishing information in the WeChat group by the subdistrict office and on the Wechat Subscription of the bureau. The APs could find jobs easily in the surrounding factories and the average salary is more than CNY 2,000/month

C.5 Complaints and Grievances

14. The project has established a transparent and effective channel for grievance redress. Land Resource Bureau of Xiangtan was responsible for explaining to the APs all related issues of land acquisition. It also informed the APs about the appeal procedure to the villagers' committee, Wanlou Subdistrict, Acquisition and House Demolition Office of Yuhu District, Land Resource Bureau of Xiangtan, and the procedure of seeking court's assistance to arbitrate disputes. All resettlement policies and compensation standards had been disclosed to the APs.

15. According to the office records, no grievances or complaints had been received by the authorities. Also, no judicial case related to resettlement had been filed.

⁶ As some villagers in Wanlou Subdistrict have experienced land acquisition for several projects in recent ten years (including the Biquan Lake Park project), and endowment insurance policy for landless farmers have adjusted during the period and they hope to be resettled according to the new endowment insurance policy. In order to solve the issue, a joint meeting was held in September 2016 by the LAR leader group, according to the *Memorandum of Joint Meeting on Issues Related to Social Security Overall Balance of Landless Farmers in Wanlou Subdistrict*, CNY 29,000/mu should be paid by the land users to make up the fund gap between the old policy and new policy. It is not specific for this proposed project, but also applied to affected person of this project.

Figure 17: Documents of LAR in Fuqiang Village for the project

湘潭市人民政府征收土地方案 公 告

彈土公字「2012」17 号

枫桥地(大坪山片区二区)建设项目用地红线由南浔区人民政府[2011]联农土第146号文件确定,而在征收南浔区大坪山乡3个村,富林村部分集体土地。根据《土地管理法》第45条规定,征收土地公告应当载明《土地管理法》第48条第25条规定的公告内容,即:《土地管理法》第48条第25条规定,征收土地公告应当载明:“征收土地的范围、征收土地的用途、征收土地的所有权人、使用权人、补偿标准、安置途径、办理征地手续的期限、其他需要公告的事项等”。《南浔区人民政府关于公布南浔区土地补偿和地上附着物安置公告》(南政发〔2009〕43号)中,《南浔区人民政府土地补偿和地上附着物安置公告》的批复(南政发〔2010〕1号)中,《南浔区人民政府关于公布南浔区征地补偿和安置标准》的批复(南政发〔2010〕215号)等有关规定,现将征收土地的范围和范围等有关事项公布如下:

1. 批准征用机关：湖南省人民政府
2. 批准时间：2011年10月31日
3. 建设用项目名称：杭桂线（火车站北片区二期）
4. 征收土地单位、位置及面积：
1、被征收土地单位：河滩乡茅草冲乡草村，富源村；
2、地理位置：具体位置见附图征收地块范围图；
3、征收面积：51,940.00亩（合470.1135万亩）
5. 征收补偿标准（包括土地补偿费及安置补助费）：
1、征收补偿标准：按照《湖南省征地补偿安置办法》和《湖南省征地补偿安置办法实施细则》湘政发〔2009〕43号）和《湖南省人民政府关于〈湖南省征地补偿安置办法实施细则〉的通知》（湘政发〔2010〕215号）文件标准执行。
2、土地补偿费：按照补偿标准执行《湖南省人民政府关于〈湘潭市集体土地上房屋拆迁补偿安置办法〉的通知》湘政发〔2010〕101号）、《湖南省人民政府关于印发湘潭市国土资源局关于土地征收补偿安置办法等问题的通知》湘政发〔2010〕45号）和《湘潭市人民政府办公室关于转发市国土资源局湘潭市城区征地拆迁补偿安置办法的通知》潭政办字〔2010〕10号）文件标准执行。
6. 被征收土地用途：征收土地用途为：公共办公、住宅、工业用地等被征收征迁农民住房用地和公共保障用地补偿的通知》湘政发办〔2010〕55号）文件标准执行。
7. 被征收范围内房屋因土地权利人、使用人及其他权利人应当依法向本县不动产登记部门、土地征收补偿费征收者具有合法不动产登记材料或权属证明（土地北片区二期）项目取得补偿资格。土地所有权人、使用权人在规定期限内办理征地拆迁补偿手续，其补偿内容以经依法公证的征收补偿协议。
8. 房屋补偿标准：（构）筑物和征收补偿公告中的补偿、搬迁、临时费（构）筑物拆迁补偿标准。
9. 房屋补偿期限：自公告之日起22日至2013年2月5日
联系人：陈忠
联系电话：13087213333
联系地址：长沙县
房屋补偿期限：自公告之日起22日至2013年2月5日
联系人：陈忠
联系电话：13087213333
联系地址：长沙县

Announcement of land acquisition issued by
Xiangtan Municipal Government in 2 Nov 2012

湘潭市国土资源局征地补偿安置方案 公 告

原刊于〔2013〕17号

张维旭《大丰北片片区二组》建设项目用地经湖南省人民政府[2018]政国土字第165号文件批准。2017年11月27日湘潭市人民政府发布了《征收土地方案公告》(潭土公字[2017]第12号),在该项目实施过程中,湖南省人民政府发布了新的在地外补偿标准,恢复了湘潭市新的征地拆迁补偿标准。依据《中华人民共和国土地管理法》第48条,《中华人民共和国土地管理法实施条例》第25条和《征收土地公告办法》(国土资源部令第10号)等规定,现将有关土地补偿安置方案的调查和勘测定额公告如下:

- (一) 恒托标准村(包含土地买卖和安置补偿事务之村)按照《湖南省人民政府关于调整湖南省农村土地补偿标准的通知》(湘政发[2012]46号)文件的规定执行。恒托标准村按照同洲区土地和房屋征收补偿系列(下称“征收机构”)自本公告发布之日起三个月内完成补偿标准核定工作。

(二)青苗及地上附属设施补偿标准按《湖南省人民政府关于〈湘潭市集体土地征收与房屋拆迁补偿安置办法〉的批复》(湘政函〔2013〕84号)文件的规定执行。补偿款按规定统一支付给征收地农村集体经济组织,由征收地农村集体经济组织发放。

種植地 藥材	種植上地 面積	年 產 量	紅柱桂每畝 (元/畝)	前年產 量	經濟效益 (元/畝)	外銷金額 (元)
英屬 區和 鄰村	廣南木	229.35	72103	3500	3000	1034800
	寬 梲	4.31	72000	4000	6000	93540
	老漢藤	1.91	72000	—	—	6900
	土 漆	22.57	71000	5000	5000	1385510
	樹 乳	13.49	72000	3000	2000	99600
	海 參	6.65	72000	—	3500	161130
	包生藥材	1.52	72000	—	—	10040
合 計	277.08	—	—	—	2310000	

Land acquisition and resettlement plan published
by Land Resource Bureau of Xiangtan on 25
November 2013 (page 1)

序号	征收土地名称	面积(亩)	征收土地用途(亩)	征收土地补偿(元/亩)	征收土地补偿(元)
1	董桥水面	154.33	72000	3000	12245400
2	沟渠	9.81	72000	5000	755370
3	低洼地	0.76	72000	5000	94720
4	水塘	7.82	72000	5000	625600
5	田坎	8.32	72000	5000	649600
6	基本农田	12.19	72000	5000	877600
7	小计	193.03	72000	5000	18309370
8	总计	470.12	72000	5000	37449440

三、被征地范围内房屋补偿安置及支付方式：按照《湖南省人民政府关于<湖南省集体土地征收与房屋拆迁补偿安置办法>的实施意见》(湘政发〔2013〕84号)文件的规定执行。由征收机构根据《房屋拆迁补偿安置通知》或评估结果，将补偿费存入被拆迁人指定的银行账户，同时得存折送达被拆迁人。支持征地拆迁人按相关规定支付。

四、被征地农业人员安置办法：符合安置条件的被征地农业人口按照湖南省人民政府湘政发〔2013〕84号和《湘潭市人民政府关于印发湘潭市被征地农民社会保障和社会保险实施办法的通知》(潭政发〔2010〕55号)文件的规定执行。

五、相关告知：

(一) 被征地农民对集体组织、农村村民委员会或其他权利人征收补偿安置有不同意见或争议的，应当在公告之日起10个工作日内向湘潭市国土资源局提出书面申请，逾期不提出申请的，视为放弃听证。

(二) 被征地农民对集体组织、农村村民委员会或其他权利人征收补偿安置方案不服的，可以自本公告发布之日起60日内向上一级人民政府申请行政复议。征收补偿安置争议不影响征收工作的实施。

六、征地办法及时间：补偿费按法定程序支付后，各相关权利人应当按规定时间自行处理好青苗及附着物。被征地农村集体经济组织应当在收到征地补偿款之日起30日内交出被征地。逾期不交出，将依法申请人民法院强制执行，执行费用由被执行人承担。

联系人：刘铁志

联系电话：13087213333

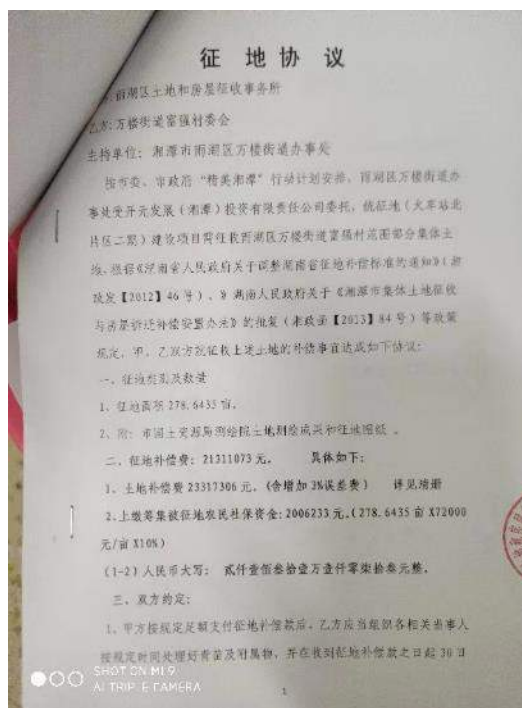
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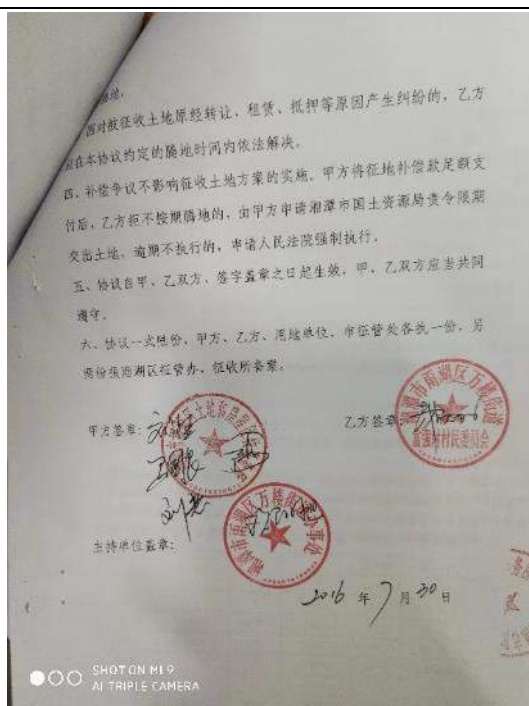
特此公告

湘潭市国土资源局
2013年11月25日

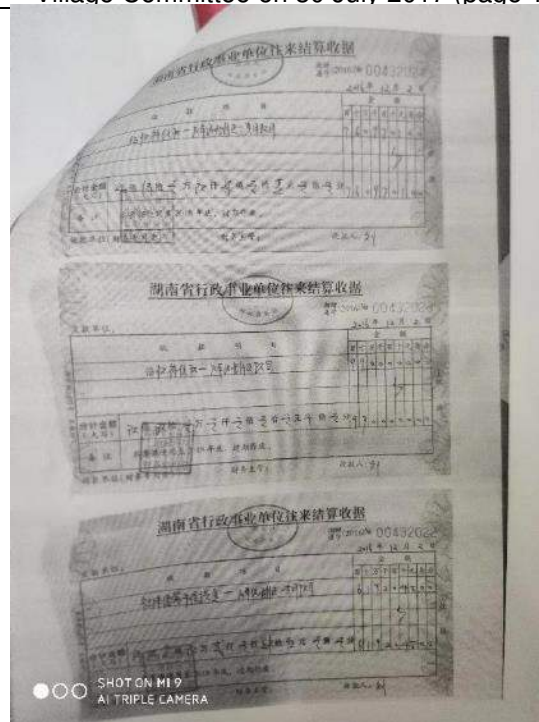
Land acquisition and resettlement plan published by Land Resource Bureau of Xiangtan on 25 November 2013 (page 2)



Land Acquisition Compensation Agreement for Dingjia Village signed by LAHDO of Yuhu District, Dingjia Village, Wanlou Subdistrict and Fuqiang Village Committee on 30 July 2017 (page 1)



Land Acquisition Compensation Agreement for Dingjia Village signed by LAHDO of Yuhu District, Dingjia Village, Wanlou Subdistrict and



The receipt of land compensation fee (page 1)

Fuqiang Village Committee on 30 July 2016
(page 2)

湖南省行政事业单位往来结算收据

日期: 2016.07.30

收款单位: 湘潭市雨湖区征地拆迁补偿费用发放清册

付款单位: 湘潭市雨湖区征地拆迁补偿费用发放清册

金额: 22317306.00

SHOT ON MI 9 AI TRIPLE CAMERA

The receipt of land compensation fee (page 2)

湖南省行政事业单位往来结算收据

日期: 2016.07.31

收款单位: 湘潭市雨湖区征地拆迁补偿费用发放清册

付款单位: 湘潭市雨湖区征地拆迁补偿费用发放清册

金额: 22317306.00

SHOT ON MI 9 AI TRIPLE CAMERA

The receipt of land compensation fee (page 3)

湘潭市雨湖区征地拆迁补偿费用发放清册

工程项目: 火车站北片区二期 共 2 页

征收地点: 万福街道安源村 第 1 页

户主姓名: 万福街道安源村村委会 造表日期: 2016 年 7 月 30 日

序号	补偿名称	计算式	单位	数量	单价 (元)	总价 (元)	领款人 签名	领款 日期
1.	土地补偿费	22317306.00	元	22317306.00	1.00	22317306.00		
2.	水田	7200+2000+5000	亩	5000	2000	10000000		
3.	菜地	7200+4000+6000	亩	4000	2000	8000000		
4.	林地	7200+4000+6000	亩	4000	2000	8000000		
5.	沟渠	7200+4000	亩	4000	2000	8000000		
6.	房屋补偿	7200+2000+5000	亩	2000	10000	20000000		
7.	水田补偿	7200+4000+6000	亩	4000	2000	8000000		
8.	林地补偿	7200+4000+6000	亩	4000	2000	8000000		
9.	公路用地	7200+4000	亩	4000	2000	8000000		
10.	空闲地	7200+4000+5000	亩	4000	2000	8000000		
11.	宅基地	7200	亩	2000	2000	4000000		
12.	废弃地	7200+6000	亩	4000	2000	8000000		
13.	菜地补偿	7200+2000+5000	亩	4000	2000	8000000		
合计 (大写): 22317306.00								

经办单位 (盖章): 湘潭市雨湖区征地拆迁补偿费用发放清册

经办人: 刘国平

复核: 刘国平

主管: 刘国平

The certificate of payment (page 1)

湘潭市雨湖区征地拆迁补偿费用发放清册

工程项目: 火车站北片区二期 共 2 页

征收地点: 万福街道安源村 第 2 页

户主姓名: 万福街道安源村村委会 造表日期: 2016 年 7 月 30 日

序号	补偿名称	计算式	单位	数量	单价 (元)	总价 (元)	领款人 签名	领款 日期
1.	土地补偿费	22317306.00	元	22317306.00	1.00	22317306.00		
2.	水田	7200+2000+5000	亩	5000	2000	10000000		
3.	菜地	7200+4000+6000	亩	4000	2000	8000000		
4.	林地	7200+4000+6000	亩	4000	2000	8000000		
5.	沟渠	7200+4000	亩	4000	2000	8000000		
6.	房屋补偿	7200+2000+5000	亩	2000	10000	20000000		
7.	水田补偿	7200+4000+6000	亩	4000	2000	8000000		
8.	林地补偿	7200+4000+6000	亩	4000	2000	8000000		
9.	公路用地	7200+4000	亩	4000	2000	8000000		
10.	空闲地	7200+4000+5000	亩	4000	2000	8000000		
11.	宅基地	7200	亩	2000	2000	4000000		
12.	废弃地	7200+6000	亩	4000	2000	8000000		
13.	菜地补偿	7200+2000+5000	亩	4000	2000	8000000		
合计 (大写): 22317306.00								

经办单位 (盖章): 湘潭市雨湖区征地拆迁补偿费用发放清册

经办人: 刘国平

复核: 刘国平

主管: 刘国平

The certificate of payment (page 2)

APPENDIX 2: LAR DUE DILIGENCE REVIEW OF 110KV LIWEI SUBSTATION AND ASSOCIATED FACILITY

A. Basic information of the subproject

1. The program will develop a multi-energy and utility management system (MEMS) at Jiuhoa Economic and Technological Development Zone covering 670 industries and enterprises. The Jiuhoa Economic and Technological Development Zone is currently underserved by electrical infrastructure. There are few substations, and the distribution network is limited. To address these shortcomings, the program will construct i) construct a 110 kV substation and associated transmission lines, and ii) a power distribution grid.

2. **Liwei Substation.** The program will construct the 110 kV Liwei Substation, consisting of one 63 MVA transformer, one 110 kV feeding bus, 14 outgoing feeder lines of 10 kV, and one 6000 kvar low voltage capacitor. One bay will be added to the existing Jiuhuabei 220 kV Substation, and it will be the 110 kV power source for the Liwei Substation. The total permanent land occupation area of 110KV Liwei Substation is 0.554 ha (8.3 mu) and the land has been acquired by the local government before.

3. A 0.8 km JL/G1A-300/25 overhead transmission and a 1.9 km of YJLW-110-1600 underground cable will connect the Liwei Substation with the Jiuhuabei substation. The cable will be started from 220KV Jiuhuabei Substation, and built along the West Jinpeng road (under construction), Shimatou road (existed) and Fazhan road (under construction) within the ROW of these roads and no need for additional LAR.

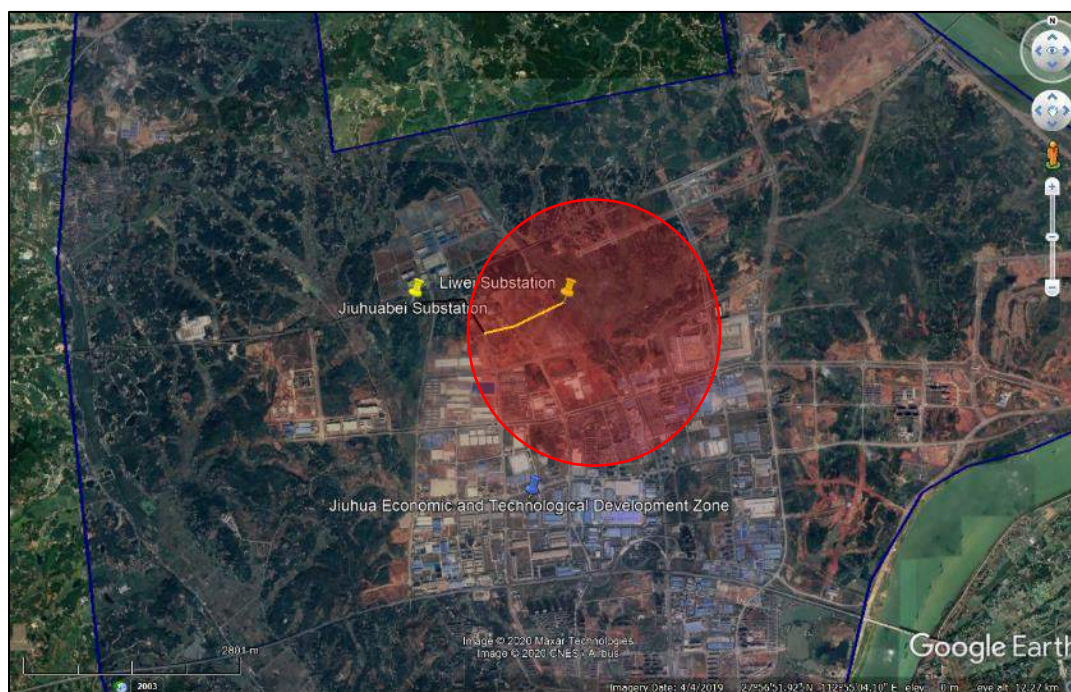
4. **Power Distribution.** The program will install 10 kV power distribution lines in a pilot area within the Jiuhoa Economic and Technological Development Zone (JETDZ). The lines will have a maximum length of 1.8 km, and in total of 7.3 km of lines will be installed. All lines will be built underground. As the detailed routes of six lines have not designed during feasibility study, according to the rough route provided by Design Institution of FSR, the routes will mainly along with Fazhan Road and will be built underground along the planning road which in the west of Changtan West Expressway and east of Liwei Substation without permanent land occupation. Both the land of Fazhan Road and the planning road has been acquired by the local government before.

5. Please find the locations of the 110 KV Liwei Substation, 220KV Jiuhuabei Substation, transmission lines and power distribution area, Jiuhoa Economic and Technological Development Zone in Figure 1.

6. Associated facilities are facilities that are not funded as part of a project but whose viability and existence depend exclusively on the project, or whose goods or services are essential for successful operation of the program. The only associated facility that has been identified for the program is the 220 KV Jiuhuabei substation to which the 110 kV Liwei substation and transmission line will connect.

7. The subproject's executive agency is the Project Management Office for ADB-financed Project (PMO) and the project is the Management Committee of Jiuhoa Economic and Technological Development Zone (MCJETDZ). Total cost estimate of the subproject is CNY 111.69 million (including the MEMS). The construction period of the subproject is 36 months, i.e. from March 2021 to March 2024.

Figure 1: Locations of the Liwei Substation, transmission lines and power distribution area, Jiuhoa Economic and Technological Development Zone. The black lines denotes an underground cable, the yellow an above ground transmission line. The red zone is the approximate area for power distribution lines.



Source: Google Earth, 2019; and ADB PPTA consultant, 2019.

B. Current status of project site and associate facility

B.1 Liwei Substation

8. The land of 110 KV Liwei Substation previously belonged to Hongsha Village (the original name is Shimu village) of Xiangshui Township of in Jiuhoa Economic and Technological Development Zone. This land was acquired by the MCJETDZ in Jan 2013 for the Advanced Mining Equipment and Hengrun High Tech Base Project in this area⁷ which totally acquired 683.4 mu of land of Hongsha village including the 8.3 mu of land for Liwei Substation. Among the 8.3 mu of land, about 4.3 mu was a pond and 4 mu was paddy field before, without house demolition impact at project site. Since land acquisition and compensation have been completed for more than 7 years and the land has not been used for any project, most of the land is overgrown with weeds, a small amount of vegetables were planted on the land beside the pond. Please find the photo of project site in figure 2.

9. As the land has not been used for project construction since LA completed in 2013 (including the pond), one villager of Hongsha village has applied to the MCJETDZ for the temporary use of the pond to breed fish fry and grow vegetables around the fish pond for their own consumption after land acquisition and promised to return the land according to the land

⁷ It is explained by the officer from LAHDO of Jiuhoa that the total land acquisition area of the whole Advanced Mining Equipment and Hengrun High Tech Base Project is about 202 ha and acquired block by block and phase by phase, he has selected the two blocks (portion A in figure 9) in this area related to our project for the due diligence of this project, one is about 449.81 mu of LA in Yujia village group and one is about 233.65 mu of LA in Zhushan village group, all belong to Shimu village before.

demand schedule of the government, without further compensation from the government. The MCJETDZ agreed with his request and promised to inform him to harvest the vegetables and get the fish fry out from the pond at least three months in advance before the commencement of the project and give support to him for the harvest vegetables and fry. It is reported by MCJETDZ that during the preparation of feasibility study and planning site selection survey in 2019, the villager was informed that there will be a substation construction in the project site, and he has stopped planting and and get the fish out from the pond since early this year. There isn't remaining issue for the project site of this subproject.

Figure 2: Project site photo of 110KV Liwei Substation



ADB PPTA consultant, 2019.

B.2 Jiuhuabei Substation

10. The Jiuhuabei 220 kV Substation is located in the Jiuhua Economic and Technological Development Zone, 2 km west of the proposed 110 kV Liwei Substation. The substation was constructed by the Hunan Power Transmission and Transformation Engineering Co., Ltd., Xiangtan. It started operation in October 2019, and is operated by the Xiangtan Jiuhua Economic Construction Investment Co., Ltd. Please find the project photo of the substation in figure 3.

11. The total land area of Jiuhuabei Substation is 0.88 ha (13.2 mu). The land previously belonged to Qingzhu village (1.8mu) and Maojia village (11.4 mu) of Xiangshui Township in Jiuhua Economic and Technological Development Zone. The land has been acquired by the MCJETDZ for the Comprehensive Bonded Zone Project (total land acquisition area was 487.8 mu) in 2013 and 2017 separately.

Figure 3: Jiuhuabei 220 kV Substation



Source: PMO, 2020

B.3 Transmission Lines and Power Distribute Lines

12. The total length of the underground cable and overhead transmissions connected two substations is 2.7 km which will be started from 220KV Jiuhuabei Substation, and built along the West Jinpeng road (under construction), Shimatou road (existed) and Fazhan road (under construction) within the ROW of these roads and no need for additional LAR. Please find the current situation of the roads and location of the transmission lines in figure 4.

13. The total length of six 10 kV power distribution lines in the program is 7.3 km with length 1km to 1.8 km each. All lines will be built in the reserved underground cable pipes along the main roads. As the detailed routes of six lines have not designed during feasibility study, according to the rough route provided by Design Institution of FSR, the routes will mainly along with Fazhan Road (under construction), Jiuzhao Road (existed) and a planning road along the west of Changtan West Expressway without permanent land occupation. Both the land of Fazhan Road, West Jinpeng road and the planning road have been acquired by the local government before.

Figure 4: Location of transmission lines and current situation of the roads



C. Land acquisition review

14. The land acquisition and resettlement due diligence was conducted for the 110 KV Liwei Substation (site I), the 220 KV Jiuhuabei Substation (site II), Fazhan Road (site III) , West Jinpeng Road (site IV) and the planning road (site V) where the transmission lines and power distribution lines will be installed overhead or underground in the project. Among them, Site I and site V were included in the same LAR of Advanced Mining Equipment and Hengrun High Tech Base Project (portion A), site II and site IV was included in Comprehensive Bonded Zone Project (portion B) and site III was included in Fazhan road construction project (the 1 km section in project area) (portion C). All of them were conducted in the same area and same implementation agencies. At that time, land acquisition (LA) was not in anticipation of any ADB project, but was conducted in a unified manner for the three domestic projects with no difference made to the subproject. This report reviews all LA activities in the affected village groups in the three domestic projects in project area. Please find the project sites map in figure 5.

15. This due diligence aims to review if the completed LA and resettlement work complies with the applicable laws and regulations, and if there is any major outstanding issue or appeal. This report was prepared on the basis of field visit and literature review.

Figure 5: Project site map of Liwei substation and associated Jiuhuabei substation



Note of the portions in the map, it should be noted that this is just a schematic diagram of the general scope of portion A to C through the consultation and confirmation with officer of LAHDO of Jiuhua, as the actual scope is very hard to be put in the map:

Portion A: the scope of the Advanced Mining Equipment and Hengrun High Tech Base Project which totally acquired 683.4 mu of land of Hongsha village including the 8.3 mu of land for Liwei Substation (red part).

Portion B: the scope of Comprehensive Bonded Zone Project which acquired 487.8 mu of land of Qingzhu village and Miaoja village including the 13.2 mu of land for Jiuhuabei Substation (the green part) and the land use for west Jinpeng road.

Portion C: the scope of Fazhan road project in the area of proposed subproject (orange part).

C.1 Implementation agencies

16. The Management Committee of Jiuhua Economic and Technological Development Zone (MCJETDZ) is responsible for coordination, management, and supervision during land acquisition and resettlement implementation of the projects in Jiuhua Economic and Technological Development Zone, and reporting the implementation progress to the Xiangtan Municipal Government and other relevant authorities. The Land Acquisition and House Demolition Office of Jiuhua Economic and Technological Development Zone (LAHDO of Jiuhua) was mainly responsible for the implementation of land acquisition and house demolition. Xiangshui Township have appointed persons to be responsible specifically for resettlement and coordination and endowment insurance implementation. The affected Village Committees had assigned someone in charge of land acquisition and resettlement. In addition, Human Resources and Social Security Bureau of Jiuhua Economic and Technological Development Zone also provided skill trainings and job opportunities for the APs. The functions of the resettlement agencies are as follows:

MCJETDZ

- Conduct coordination, supervision, and arbitration during land acquisition

LAHDO of Jiuhua

- Conduct the detailed measurement survey (DMS)
- Participate in the calculation of compensation fees for affected households
- Participate in the disbursement of compensation fees to affected persons
- Handle grievances and appeals arising from resettlement
- Provide employment opportunities for affected persons
- Carry out land acquisition

Land Resource Bureau of Jiuhua

- Handle, review, and approve land acquisition formalities
- Develop resettlement policies in coordination with authorities concerned
- Participate in the DMS
- Conduct coordination, supervision, and arbitration during land acquisition

Xiangshui Township government

- Participate in the DMS
- Handle grievances and appeals arising from resettlement
- Assist the Land Acquisition and House Demolition Office in going through the land acquisition formalities

Affected Village Committees

- Participate in the DMS
- Convene a village congress to discuss the compensation and resettlement program
- Organize the implementation of the resettlement program
- Disburse and manage compensation fees

Human Resources and Social Security Bureau of Jiuhua

- Organize skills training for affected persons
- Provide job opportunities for affected persons

C.2 Land acquisition process and procedure

17. According to the interview with officers from LAHDO of Jiuhua and director of Natural Resource Bureau of Jiuhua, land for Liwei substation, related (Fazhan road, west Jinpeng road, the planning road) and associated Jiuhuabei substation have been acquired by MCJETDZ from 2013 to 2018 due to local projects. By April 2018, all compensation have been received by the villagers. There weren't house demolition impacts in the project sites before. Land acquisition

announcements were issued by MCJETDZ, detailed measurement survey (DMS) were conducted by LAHDO of Jiuhua and the results disclosed in the village, vitrified and signed by the villagers' representative of affected village groups for confirmation, consultations about compensation standard and resettlement schemes of land acquisition have been conducted between LAHDO of Jiuhua, affected village committees, affected village groups and affected villagers before land acquisition. Land acquisition compensation agreements were signed between LAHDO of Jiuhua and affected village committees based on the DMS results and consultations. The compensation fees were paid to affected village committees and distributed to affected villagers through affected village groups according to the distribution schemes agreed by affected villagers in the village group meetings. Please find the timeline of land acquisition and compensation payment is given below:

Table 1: Land Acquisition and Compensation Milestones of the projects

No.	Activities	Date			
		Portion A	Portion B		Portion C
		Site I and site V	Site IV	Site II	Site III
1	Consultation with affected villages for the land acquisition compensation standard	April 2013	April 2013	December 2017	December 2016
2	Preliminary measurement of the land acquisition impacts	April to June 2013	April to June 2013	December 2017	December 2016 to January 2017
3	Land acquisition announcement	June 2013	June 2013	June 2013	April 2017
4	Detailed measurement survey (DMS) of land acquisition impacts	June 2013	July 2013	January 2018	April 2017
5	Disclose the DMS results	June 2013	July 2013	March 2018	April 2017
6	Signing land acquisition compensation agreement	June 2013	August 2013	March 2018	From April 2017 to November 2017
7	Distribute land acquisition compensation to affected village committee	June 2013	August 2013	March 2018	From April 2017 to November 2017
8	Villagers' representative meetings in affected village groups for the discussion of land acquisition compensation distribution schemes	July to August 2013	August 2013	April 2018	From May 2017 to December 2017
9	Distribute land acquisition compensation to affected villagers	August 2013	August 2013	April 2018	From May 2017 to December 2017

Source: according to the interview with officers from LAHDO of Jiuhua and the related documents provided by PMO.

C.3 Land acquisition impact analysis

18. LAR of the three portions totally affected 5 village groups in 3 villages of Xiangshui Township, no ethnic minority village or people were affected by the projects. The total amount of LA area of the three domestic projects was 1,200.85 mu, among them, about 46.9% were cultivated land (paddy field accounted 37.9% and garden plot accounted 9%), 24.29% were forest land, 8.78% were pond and the other 20.03% were construction land including roads and public facilities land, etc. The per capita cultivated land loss area was 0.77 mu. Among the 5 affected village groups, 3 of them including Yujia village group and Zhushan village group in Shimu village and Pangu village group in Qingzhu village, have lost almost all their land due to the three projects, as these village groups have lost their land because of other projects before. In order to make sure that the income of APs will not decrease after LA, fully consultations have been conducted between APs and government before LA, it was agreed by both side that to provide a one-off subsidy to each AP who have lost all land for their livelihood restoration in addition to getting land compensation according to the standard of resettlement policies. Please find the summary of LA impact in table 2.

19. In the process of land acquisition, the distribution scheme of land compensation fee was decided by the villagers' representative meeting held by each affected group. It's approved by more than 2/3 of the villagers' representatives that the compensation would be distributed equally according to the population. As the land compensation were distributed evenly according to the population, the total affected population was the whole population of the 5 village groups which was about 300 households with 900 persons. to No house demolition was involved.

Table 2: LA Impacts Summary (Unit: mu)

Table 2: Impact Summary (Unit: mu)								
Project area	Name of the village	Name of the village group	AP (person)	Cultivated land (mu)	Forest land (mu)	Ponds	Construction land (mu)	Total (mu)
Portion A	Shimu village	Yujia group	135	168.43	164.32	45.44	71.38	449.81
		Zhushan group	138	111.24	43.7	24.08	54.64	233.65
Subtotal			273	279.67	208.02	69.52	126.02	683.46
Portion B	Maojia village	Qingshan group	196	10.67	0	0	0.73	11.39
	Qingzhu village	Pangu group	168	264.09	73.09	31.91	107.32	476.41
Subtotal			364	274.76	73.09	31.91	108.05	487.8
Portion C	Fengjia village	Wenxia group	90	8.75	10.59	4	6.25	29.58
Total			727	563.17	291.687	105.425	71.38	1200.85
Percent (%)			N/A	46.90	24.29	8.78	20.03	100

Source: LAHDO of Jiuhua

C.4 Land Acquisition and Compensation

20. The collective land in affected villages acquired for the projects are classified as Area I land, where the land compensation rates are based on location-based land price. The compensation rates of the land acquisition were according to the *Notice on the Announcement of Compensation Standards for Land Acquisition in Hunan Province (XZF [2009]No. 43)* and *Notice of the Hunan Provincial Government on Amending Compensation Standards for Land Acquisition (XZF [2012] No.46)*. The compensation fee included compensation for land and resettlement subsidy. And the compensation rate for young crops and ground attachments were determined according to *Reply of the people's Government of Hunan Province on the Supplementary Standard for Land acquisition Compensation of Xiangtan City (XZH [2010] No. 215)* and *Reply of the People's Government of Hunan Province on the Compensation and Resettlement Measures for Collective Land Acquisition and House Demolition in Xiangtan City (XZH[2013] No. 84)*. Please find the details in table 3.

Table 3: Compensation rated of LA

Policy	Land type	Compensation rate (CNY/mu)		
		Land compensation	Young crop	Average compensation rate for facility
XZF [2009]No. 43 and XZH [2010] No. 215	Paddy field	55550	2340*	2000
	Garden land	38885	3910*	2000
	Dry land	38885	1560*	2000
	Pond	55550	3510**	2000
	Forest land	27775	1400	2000
	Construction land	55550		2000
XZF [2012] No.46 and XZH[2013] No. 84	Paddy field	72000	3000*	5000
	Garden land	57600	4000*	6000
	Dry land	57600	2000*	3000
	Pond	72000	4000	6000
	Forest land	43200	3000	1000
	Construction land	72000		6000

Note:

* if LA happened before transplanting rice seedlings, will be compensated according to the half of compensation rate of young crop; if LA happened after transplanting rice seedlings, will be compensated according to the compensation rate of young crop.

** only compensated for the fish pond.

Source: LAHDO of Jiuhua

21. According to the officer from MCJETDZ, the affected land mainly planted rice before land acquisition, and the annual average net income from planting rice was about CNY 1,500 per mu. It is estimated that the compensation standard was nearly 37 times to 48 times of their annual agriculture net income.

22. Except land compensation fees for affected land, young crops and facilities, additional subsidies and rewards were provided to the APs and affected village groups:

- One-off subsidy to APs who have lost all their land. For the affected village groups who have lower level⁸ of cultivated land per capita before LA, the amount of land

⁸ According to the interview with director of LAHDO of Jiuhua, in the ten years since the establishment of the new area, the local villagers have experienced several times of LAR, resulting in less and less cultivated land per capita. Judging from the history of land acquisition in the whole region, some village groups have little cultivated land per capita, and will lost all their land after LA, which is called in "low-level". In order to make sure that the income of

compensation fee per capita was also in a lower level among all the villages affected by LA in Jiuhua area. In order to make sure that the income of APs will not decrease after LA, a one-time subsidy was raised by the government for the affected groups because of LA in the whole Jiuhua area who have lost all their land or the per capita cultivated land before LA was very small. It was explained by the director of LAHDO of Jiuhua that the amount of one-off subsidy was determined based on the calculation by the inspection and verification department of LAHDO according to the level of average land area per capita of affected groups and discussed with affected village groups and APs. After confirmation and agreed by both sides, the one-off subsidy was provided to APs for their livelihood restoration in addition to getting land compensation according to the standard of resettlement policies. It is calculated that the average subsidy is CNY 51,338 per capita in the three affected village groups.

- Rewards to the village groups who have signed the agreement in time. About 5% of the total land compensation fee were provided to the village groups and evenly distributed to APs.
- Meanwhile, 8.5%⁹ of the total land compensation fees (including compensation for land, young crops and facilities) or 10%¹⁰ of the total land compensation fees have been put into the social security co-ordination account for the APs to get pension after they reach the retirement age and not distribute to APs directly.

23. The total land acquisition compensation fees consistent with the agreement were paid to the village committees in one to two months after signing compensation agreement which was totally CNY 83.77 million including CNY 55.44 million land compensation fee and CNY 3.05 million compensation fee for the young crops and ground attachments, CNY 22.64 million of one-off subsidies for the APs who have lost all land and CNY 2.65 million of village group collective reward. The compensation fee for young crops and ground attachments were paid to the owners directly. Except CNY 5 million taken from the total compensation fees which has been put into the social security co-ordination account for the APs to get pension after they reach the retirement age and not distribute to APs directly, all of the land compensation fees were equally distributed to all of the villagers of affected villager groups. Please find the summary of land compensation to the APs in table 4.

APs will not decrease after LA, especially those who is in low level, a special compensation method was adopted during 2009 to 2014 for the affected people who have lost all of their land, which called one-time subsidy. The one-off subsidy was determined based on the calculation by LAHDO of Jiuhua according to the level of average land area per capita of affected groups and consultation with affected village groups and APs. The original calculation records are not available.

⁹ According to the *Measures for the Implementation of Housing Monetary Resettlement for Farmers on Collective Land Affected by LAR in Jiuhua Demonstration Area of Xiangtan City* (TJSG [2010] No. 158).

¹⁰ According to the *Notice of Xiangtan Municipal People's Government Office Issued the Measures for the Implementation of Social Security for the Land Expropriated Farmers in Xiangtan City* (TZBF[2015]No.85).

Table 4: LA Compensation Summary (Unit: CNY 10,000)

Name of the village	Name of the village group	LA Compensation							Policy
		Land	Young crops	Facility	One-off subsidy	Reward for LA in time	Total	Average (CNY 10,000/person)	
Shimu village	Yujia group	1969.53	17.97	89.96	741	98.48	2916.94	20.3	XZF [2009]No. 43 and XZH [2010] No. 215
	Zhushan group	1176.55	13.01	46.73	759	58.83	2054.13	14.12	
Maojia village	Qingshan group	66.68	2.13	3.64	0	0	72.45	0.34	XZF [2012] No.46 and XZH[2013] No. 84
Qingzhu village	Pangu group	2150.56	21.41	95.28	764	107.53	3138.79	17.54	XZF [2009]No. 43 and XZH [2010] No. 215
Fengjia village	Wenxia group	180.35	7.25	7.53	0	0	195.13	1.97	XZF [2012] No.46 and XZH[2013] No. 84
Total		5543.68	61.79	243.14	2264	264.83	8377.44	11.52	

Source: LAHDO of Yuhu District.

24. Most of the people in the affected village have experience LA before and worked in the factories of the economic zone before LA. The left cultivated lands were planted by the elderly people and the young generations were preferred to live like urban residents. There were several main resettlement schemes for collective land acquisition as follows:

- Cash compensation. Among 5 affected village groups, 3 of them lost 100% of their remaining land and land loss rate of other 2 village groups were less than 10%. For the three village groups who lost all their land, the average amount of compensation for each AP is CNY 173,200. The average cultivated land loss area of the three groups is 1.23 mu per capita and the average compensation is about 93 times of the agriculture income from affected land. Meanwhile, the interest income of CNY 6880 per year could be obtained according to 4% annual interest rate if the APs deposit the compensation into the bank which is about 3 times of the annual agriculture income. The APs were satisfied with the compensation. Post land acquisition phase does not show any impoverishment of affected households. In fact, due to the generous cash compensation that they received, household income has increased.
- Social security. The APs could receive CNY 800 to CNY 1000 per capita monthly pension when they reached the retired age (male after 60 years old and female after 55 years old).

- Transfer from rural resident to urban residents and benefit sharing measures. Jiuhua Economic and Technological Development Zone was established in 2003 and upgrade to national level economic and technological in 2011. The total area of the development zone is about 138 km² with total population of 200,000 in 17 villages and 9 communities of 1 township and 2 subdistricts. The whole area experienced rapid urbanization and industrialization in the past years. By the end of 2017, about 1,520 automobile and auto parts enterprises, IT companies and modern equipment manufacturing factories, etc have been established in the area and about half of them have started operation in 2017. In the first ten years of the establishment of the economic zone, most of the villagers in the area have experienced LAR and transferred to urban residents, about 90% of the labors are working in the factories or doing small business after land acquisition and house demolition. It is introduced by the officer from LAHDO of Jiuhua that in addition to provide compensation, social security and job opportunities, a series of benefit sharing measures were used to increase the property income of the affected people by the government of economic zone, e.g. (i) the APs could get 10% fixed income return every year through participating in the shares of wholly-owned economic construction investment company established by the MCJETDZ voluntarily and (ii) rental income from resettlement housing purchased with compensation.

C.5 Complaints and Grievances

25. MCJETDZ has established a transparent and effective channel for grievance redress of LAR since the establishment of economic zone in 2003. Land Resource Bureau of Jiuhua was responsible for explaining to the APs all related issues of land acquisition. It also informed the APs about the appeal procedure to the villagers' committee, Xiangshui Township, LAHDO of Jiuhua, Land Resource Bureau of Xiangtan, and the procedure of seeking court's assistance to arbitrate disputes. All resettlement policies and compensation standards had been disclosed to the APs.

26. According to the office records, no grievances or complaints had been received by the authorities. Also, no judicial case related to resettlement had been filed.

D. Conclusion

27. According to interview of key persons from MCJETDZ and LAHDO of Jiuhua, based on the comprehensive reviews for the LA files of these domestic projects, the land acquisition and compensation payment of the projects were implemented in accordance with the resettlement policies of Hunan Province and Xiangtan city and have fully consulted with APs. All compensations have been paid in full amount and in a timely manner to the affected people. There are no pending land acquisition and compensation issues. The APs are satisfied with the resettlement policies.

28. Meanwhile, the subproject has obtained Opinion on Site Selection of Construction of 110KV Liwei Substation Project (No.430302201900007) in March 2019 and Preliminary Opinion on Land Use of 110KV Liwei Substation project (TZRZYSZ[2019]No.18) in June 2019 and is applying for the State-owned Land Use Right Certificate and expected to be obtained in December 2020. It is stated in the Preliminary Opinion on Land Use that that the land use of this subproject was in compliance with *Overall Land Use Planning of Xiangshui Township (2016-2020)*

[illegible]

¹¹ Refers to “resource saving society and environment-friendly society”. After the 17th National Congress of the Communist Party of China, Wuhan city circle and Changsha Zhuzhou Xiangtan city group were designated as the “two oriented society” demonstration areas by the state and given the privilege of policy innovation to take the lead.

俞家 村 竹木 组 仙桃 项目土地款分配到户表									
户主姓名	人口	身份证号码	承包面积	分配金额	合计金额	户主姓名	人口	身份证号码	承包面积
1 徐 林	5	420201198208079	20000	20000		1 徐 林	5	420201198208079	20000
2 王 友	5	420201198208079	20000	20000		2 王 友	5	420201198208079	20000
3 徐 林	5	420201198208079	20000	20000		3 徐 林	5	420201198208079	20000
4 徐 林	5	420201198208079	20000	20000		4 徐 林	5	420201198208079	20000
5 徐 林	5	420201198208079	20000	20000		5 徐 林	5	420201198208079	20000
6 徐 林	5	420201198208079	20000	20000		6 徐 林	5	420201198208079	20000
7 徐 林	5	420201198208079	20000	20000		7 徐 林	5	420201198208079	20000
8 徐 林	5	420201198208079	20000	20000		8 徐 林	5	420201198208079	20000
9 徐 林	5	420201198208079	20000	20000		9 徐 林	5	420201198208079	20000
10 徐 林	5	420201198208079	20000	20000		10 徐 林	5	420201198208079	20000
11 徐 林	5	420201198208079	20000	20000		11 徐 林	5	420201198208079	20000
12 徐 林	5	420201198208079	20000	20000		12 徐 林	5	420201198208079	20000
13 徐 林	5	420201198208079	20000	20000		13 徐 林	5	420201198208079	20000
14 徐 林	5	420201198208079	20000	20000		14 徐 林	5	420201198208079	20000
15 徐 林	5	420201198208079	20000	20000		15 徐 林	5	420201198208079	20000
16 徐 林	5	420201198208079	20000	20000		16 徐 林	5	420201198208079	20000
17 徐 林	5	420201198208079	20000	20000		17 徐 林	5	420201198208079	20000
18 徐 林	5	420201198208079	20000	20000		18 徐 林	5	420201198208079	20000
19 徐 林	5	420201198208079	20000	20000		19 徐 林	5	420201198208079	20000
20 徐 林	5	420201198208079	20000	20000		20 徐 林	5	420201198208079	20000
21 徐 林	5	420201198208079	20000	20000		21 徐 林	5	420201198208079	20000
22 徐 林	5	420201198208079	20000	20000		22 徐 林	5	420201198208079	20000
23 徐 林	5	420201198208079	20000	20000		23 徐 林	5	420201198208079	20000
24 徐 林	5	420201198208079	20000	20000		24 徐 林	5	420201198208079	20000

Land Acquisition Compensation distribution scheme of Yujia village group in Shimiao village (page 1)

俞家 村 竹木 组 仙桃 项目土地款分配到户表									
户主姓名	人口	身份证号码	承包面积	分配金额	合计金额	户主姓名	人口	身份证号码	承包面积
1 徐 林	5	420201198208079	20000	20000		1 徐 林	5	420201198208079	20000
2 王 友	5	420201198208079	20000	20000		2 王 友	5	420201198208079	20000
3 徐 林	5	420201198208079	20000	20000		3 徐 林	5	420201198208079	20000
4 徐 林	5	420201198208079	20000	20000		4 徐 林	5	420201198208079	20000
5 徐 林	5	420201198208079	20000	20000		5 徐 林	5	420201198208079	20000
6 徐 林	5	420201198208079	20000	20000		6 徐 林	5	420201198208079	20000
7 徐 林	5	420201198208079	20000	20000		7 徐 林	5	420201198208079	20000
8 徐 林	5	420201198208079	20000	20000		8 徐 林	5	420201198208079	20000
9 徐 林	5	420201198208079	20000	20000		9 徐 林	5	420201198208079	20000
10 徐 林	5	420201198208079	20000	20000		10 徐 林	5	420201198208079	20000
11 徐 林	5	420201198208079	20000	20000		11 徐 林	5	420201198208079	20000
12 徐 林	5	420201198208079	20000	20000		12 徐 林	5	420201198208079	20000
13 徐 林	5	420201198208079	20000	20000		13 徐 林	5	420201198208079	20000
14 徐 林	5	420201198208079	20000	20000		14 徐 林	5	420201198208079	20000
15 徐 林	5	420201198208079	20000	20000		15 徐 林	5	420201198208079	20000
16 徐 林	5	420201198208079	20000	20000		16 徐 林	5	420201198208079	20000
17 徐 林	5	420201198208079	20000	20000		17 徐 林	5	420201198208079	20000
18 徐 林	5	420201198208079	20000	20000		18 徐 林	5	420201198208079	20000
19 徐 林	5	420201198208079	20000	20000		19 徐 林	5	420201198208079	20000
20 徐 林	5	420201198208079	20000	20000		20 徐 林	5	420201198208079	20000
21 徐 林	5	420201198208079	20000	20000		21 徐 林	5	420201198208079	20000
22 徐 林	5	420201198208079	20000	20000		22 徐 林	5	420201198208079	20000
23 徐 林	5	420201198208079	20000	20000		23 徐 林	5	420201198208079	20000
24 徐 林	5	420201198208079	20000	20000		24 徐 林	5	420201198208079	20000

Land Acquisition Compensation distribution scheme of Yujia village group in Shimiao village (page 2)

湘潭市自然资源和规划局

潭自然资预审字〔2019〕18号

关于湖南湘潭利伟 110 千伏输变电工程建设项目 用地预审意见

湘潭德盛能源配售电有限公司：

你单位《关于申请办理湖南湘潭利伟 110 千伏输变电工程建设项目用地预审的报告》及有关资料收悉。根据《湖南省建设项目用地预审管理办法》（湘国土资发〔2017〕4号）的规定，我局受理了湖南湘潭利伟 110 千伏输变电工程建设项目用地预审申请，经依法依规审查，用地预审意见如下：

一、根据《国家发展改革委和国家能源局关于规范开展增量配电业务改革试点的通知》（发改经体〔2016〕2480号），湘潭经开区已列为全国首批增量配电业务改革试点区。项目建设对于满足湘潭经开区负荷发展需求，提高供电可靠性，降低企业生产成本等具有重要意义。项目建设符合国家产业政策和供地政策。

二、该项目用地位于湘潭市雨湖区响水乡红砂村，用地总规模 0.5540 公顷，土地利用现状为国有土地 0.0182 公顷（全部为已报批的国有土地），集体土地 0.5358 公顷，其中农用地 0.5358 公顷（含耕地 0.1780 公顷），无集体建设用地和未

利用地（其详细地类及面积以勘测定界报告为准）。

该项目用地符合《响水乡土地利用总体规划（2006-2020 年）（2016 年修订版）》和《长株潭城市群两型社会示范区湘潭九华片区规划（2010-2030）（2016 年修编）》。

三、该项目用地总规模 0.5540 公顷，建设内容主要为新建主变压器：本期 2 台 63MVA，远期 3 台 63MVA，主变压器户内布置。110 千伏出线：本期出线 2 回，远期出线 2 回；10 千伏出线：本期出线 28 回，远期出线 42 回，本期单母线三分段接线，远期单母线四分段接线，户内开关柜双列布置。该项目用地符合《电力工程项目建设用地指标（大电厂、核电厂、变电站和换流站）》（建标〔2010〕78号）的规定。

四、该项目已按规定将补充耕地、土地使用补偿等相关费用足额纳入项目工程预算，请建设单位和地方政府在正式用地报批前按规定做好耕地占补平衡、土地补偿安置等工作。

五、同意湖南湘潭利伟 110 千伏输变电工程建设项目通过用地预审。项目获批后，必须依法依规办理建设用地报批手续，未取得建设用地批准手续的不得开工建设。

六、本文件有效期至二〇二二年六月二十四日。

湘潭市自然资源和规划局
2019 年 6 月 24 日

<p>Preliminary Opinion on Land Use of 110KV Liwei Substation project (TZRZYSZ[2019]No.18)(page 1)</p>	<p>Preliminary Opinion on Land Use of 110KV Liwei Substation project (TZRZYSZ[2019]No.18)(page 2)</p>
<p>Site Selection of Construction of 110KV Liwei Substation Project (No.430302201900007) (page 1)</p>	<p>Site Selection of Construction of 110KV Liwei Substation Project (No.430302201900007) (page 2)</p>

Source: provided by LAHDO of Jiuhua and Natural Resource Bureau of Jiuhua.

APPENDIX 3: NAME LIST OF PEOPLE MET DURING LAR DUE DILIGENCE




Name list of people met during LAR due diligence




No	Project Name	Type	title	Name
1	PMO	Coordination intitute	HILCC	Allen Zhang
			Director, HILCC	Lawrence Xu
			HILCC	Faai Liu
			HILCC	Jane Mo
2	E-bus and charging piles	PMO	XT transport Bureau	Zhang Yan
		PMO	Jiaofa Group	You Xin
		PMO	Jiaofa Group	Mr Xiang
		FSR	HIECC	Liu Zhaocheng
3	Bus priority project/ Smart bus system	leading unit	XT transport Bureau	Zhang Yan
		PMO	Jiaofa Group	You Xin
		FSR	HIECC	Liu Zhaocheng
4	Chinese medicine hospital	Project company	Chinese traditional medicine hospital	Wang Xing
		Related government bureau	Land Acquisition and House Demolition Office of Yuhu District (the current name is Xiangtan city Human Environment Optimization Office)	Li Haopeng
		Related government bureau	Land Acquisition and House Demolition Office of Wanlou Subdistrict	Wang Guoliang
		Related government bureau	Social Security Office of Wanlou Subdistrict in Yuhu District	Wang Lushuang
		Village leader	Leader of Fuqiang village committee	Dai Xiaoyang
		FSR	XT engineeing consultancy company	Peng Gang
5	Low carbon capacity building center (government retrofitting)	PMO	DRC	Liu Zhichen
		PMO	XT Administration bureau	Luo Hongbo
		FSR	HILCC	Lawrence Xu
		DI	XT architecture Desiging institute	Yang songjue

6	Muti-Energy System (at Jiuhua industrial zone)	Leading unit	Jiuhua DRC of Xiangtan Economic and High Tech Management Committee	Liu Leihua
		Related government bureau	Land Acquisition and House Demolition Office of Jiuhua	Yi Xijun
		Related government bureau	Land Acquisition and House Demolition Office of Jiuhua	Zuoluo
		Project company	Jiuhua Investment Company	Zhou Zaide
		Related government bureau	Natural Resource Bureau of Jiuhua	Mrs Liu
		DI	Hunan Huaxin survey and design Xiangtan branch	Qin Xinyi
7	Low Carbon Community	FSR	HIECC	Liu Zhaocheng




APPENDIX 4: DETAILED INFORMATION OF CURRENT STATUS OF THE LOCATIONS OF CHARGING PILES AND LAND APPROVAL DOCUMENTS OF THE PROJECT




Detailed Information of the Locations of Charging piles and Technical Data




#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
I Public Bus									
1	West Bus Hub	Shaoshan west Road, Yuhu District	8364.00	65	Yuetang District	Jiaofa Group	Passenger Depot. The state-owned land use right certificate was obtained in 2002 by Jiaofa Group	Operating on their owned land	
2	East Bus Hub	No. 108, Furong East Road, Yuetang District	5037.60	85	Yuetang District	Jiaofa Group	Bus Station. The state-owned land use right certificate was obtained in 2003 by Jiaofa Group	Operating on their owned land	
3	Hetang Bus Hub	Near the Hetang inter-city train station	3374.40	3	Yuetang District	Government land	Parking Area.	Government land reserved for charging piles	




#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
4	Hexi General Bus Hub	South of Baihe Yudu, Liancheng Avenue, Yuhu District	16347.36	98	Yuhu District	Jiaofa Group	Passenger Depot (Under Construction). The state-owned land use right certificate was obtained in 2008 by Jiaofa Group. The construction of terminal is expected to be completed next year.	Operating on their owned land	
5	Chezhan Road Bus Terminal	Yuhu Bus station	1544.88	16	Yuhu District	Jiaofa Group	Bus Station. The state-owned land use right certificate was obtained in 2004 by Jiaofa Group	Operating on their owned land	
6	New West Station Bus Center	Baoshui Road, Heping street, Yuhu District	2875.44	16	Yuhu District	Jiaofa Group	Bus Station	Operating on their owned land	






#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
7	Xiangtan North Bus Hub	Xinglong village, Yuhu District	1711.20	11	Yuhu District	Government land	Parking Area	Government land reserved for charging piles	
8	Zhaoshan Inter-City Train Station Bus Hub	Near the Zhaoshan inter-city train station	1711.20	5	Yuetang District	Government land	Parking Area	Government land reserved for charging piles	
9	Zhaoyun Avenue Bus Terminal	Zhaoyun Avenue, Yuetang District	1711.20	22	Yuetang District	Government land	Bus Station	Government land reserved for charging piles	
10	Chuangxin Road Bus Terminal	Chuangxin Road, Yuhu District	1544.88	7	Yuetang District	Jiaofa Group	Bus Station	Operating on their own land	
I	Operation								
I	Vehicle								




#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
11	Yuhu Sanitation Parking Area	South west corner of intersection between Nanling Road and Gaobiao Road	602.40	4	Yuhu District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	
12	Garden Maintenance Team No. 1	South west corner of intersection between North second ring and Jianguan Avenue	602.40	3	Yuhu District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	
13	Garden Maintenance Team No. 2	South west corner of intersection between Dongsi Road and	602.40	5	Yuetang District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	

#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
		Hedong branch Road							
14	Hexi Urban Sanitation Parking Area	North west corner of intersection between North second ring and Tanmeng Road	1378.56	12	Yuhu District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	
15	Hedong Urban Sanitation Parking Area	North of East train station, South of Banma Road	935.04	8	Yuhu District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	
16	Yangtang Village Sanitation Parking Area	East of Shuangyong south Road, inside Dongyangtang village	1156.80	15	Yuetang District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	

#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
17	Zhaoshan Sanitation Parking Area	North east corner of intersection between Zhaoyi fifth Road and Zhaoyun Road	713.28	4	Yuetang District	Government Land	Sanitation Parking Area	Government land reserved for charging piles	
I Public Bus Charging/Exchange									
18	Jiangnan Avenue Charging/Exchange Stations	South east corner of intersection between Jiangnan Avenue and Baishi Road	2048.00	40	Yuhu District	Government Land	Parking Area At Public Parks	Government land reserved for charging piles	
IV Public									
19	Xianfeng Park Parking Area	South east corner of intersection between North second ring and	279.25	10	Yuhu District	Government land	Parking Area of Park	Government land reserved for charging piles	

#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
Xiangda Road									
20	Xiangtan Station	South square of train station	279.25	10	Yuhu District	Government land	Parking Area	Government land reserved for charging piles	
21	Baishi Square	South west corner of intersection between Gaobiao Road and Dahu Road	163.63	5	Yuhu District	Government land	Parking Area of Park	Government land reserved for charging piles	
22	Dongfanghong Square	North of Xiangtan Avenue, East of Huxiang west Road	1828.63	60	Yuetang District	Government land	Parking Area of Park	Government land reserved for charging piles	

#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
23	East Bus Station	North east corner of intersection between Xiangtan Avenue and Furong Avenue	279.25	6	Gaoxin District	Jiaofa Group	Public Parking Area	Operating on their owned land	
24	Hetang Inter-City Train Station	South west corner of intersection between Tuanzhu Road and Bantang eleventh Road	348.63	19	Yuetang District	Government land	Inter-City Train Station Parking Area	Government land reserved for charging piles	
25	Xiangtan North Station	North of Jinpeng Road	1204.25	11	Yuhu District	Government land	Speed Train Station Parking Area	Government land reserved for charging piles	
26	Qingzhu Lake Park Parking Area	West of Baoshui Road, inside Qingzhu lake park	510.50	111	Yuhu District	Government land	Parking Area of Park	Government land reserved for charging piles	
27	Yangtian Lake Parking Area	West of Yanjiang North Road	279.25	8	Yuhu District	Government land	Parking Area of Park	Government land reserved for charging piles	

#	Type and Name	Location	Land area of parking lots (m ²)	# of Chargers	District	Land Ownership	Current Land Use Situation	Land use and construction mode	Site photo
28	Zhaoshan Inter-City Train Station	Zhaoshan Road inter-city train station	348.63	87	Yuetang District	China Railway Group	Inter-City Train Station Parking Area	Government land reserved for charging piles	
29	Zhaoshan Scenic Zone Parking Area	West of Furong Avenue	464.25	19	Yuetang District	Government land	Parking Area of Park	Government land reserved for charging piles	
30	Stereo Parking Building	No. 10 Chezhan Road	233.00	13	Yuhu District	Jiaofa Group	Public Parking Area. The state-owned land use right certificate was obtained in 2005 by Jiaofa Group	Operating on their own land	
Total		30 Stations	58456	778					

Source: ADB PPTA consultant, 2019.

State-owned Land Use Right Certificate(SLURC) and Land Use Approval of the Locations belonged to Jiaofa Group

<p>SLURC of West Bus Hub (I-1 in the table)</p>	<p>SLURC of East Bus Hub (I-2 in the table)</p>
<p>SLURC of Hexi Bus Hub (I-4 in the table)</p>	<p>SLURC of Chezhan Bus Station (I-5 in the table)</p>

湘潭市人民政府
国有土地使用权划拨审批单

(湘)划(地)字第01号

0000220

划拨用地使用权人	湖南湘潭汽车运输总公司
建设项目名称	湘潭汽车总站迁址新建工程
宗地位置	湘潭岳塘区岳塘乡仁福村、北山村
宗地号	1-2-2-201-4
土地来源	新增
供地方式	划拨
土地用途	公共交通用地
供地面积(公顷)	762097
划拨价款(万元)	
供地日期	2004.4.22
开工日期	2005.4.21
竣工日期	2006.4.21
备注	

发: 湖南湘潭汽车运输总公司

2004年5月12日

宗地号: 1-2-2-201-4

土地使用者	湖南湘潭汽车运输总公司
宗地号	1-2-2-201-4
宗地用途	公共交通用地
宗地来源	新增
宗地面积	762097
宗地位置	湘潭岳塘区岳塘乡仁福村、北山村

根据《中华人民共和国宪法》、《中华人民共和国土地管理法》和《中华人民共和国城市房地产管理法》等法律法规，为保护土地使用权人的合法权益，对土地使用权人申请登记的本证所列土地权利，经审查核实，准予登记，颁发此证。

宗地图

比例尺: 1:1000

宗地号: 1-2-2-201-4

宗地用途: 公共交通用地

宗地来源: 新增

宗地面积: 762097

宗地位置: 湘潭岳塘区岳塘乡仁福村、北山村

宗地使用权人: 湖南湘潭汽车运输总公司

宗地使用权类型: 划拨

宗地使用权期限: 无期限

宗地使用权取得日期: 2004.4.22

宗地使用权终止日期: 无期限

宗地使用权转让日期: 无期限

宗地使用权抵押日期: 无期限

宗地使用权出租日期: 无期限

宗地使用权其他权利: 无

宗地使用权其他事项: 无

宗地使用权其他备注: 无

宗地使用权其他说明: 无

宗地使用权其他附件: 无

宗地使用权其他附图: 无

宗地使用权其他附表: 无

宗地使用权其他附表: 无

宗地使用权其他附表: 无

宗地使用权其他附表: 无