

**HANOI PEOPLE'S COMMITTEE  
HANOI METROPOLITAN RAILWAY TRANSPORT PROJECT BOARD**

**HANOI CITY URBAN RAILWAY CONSTRUCTION PROJECT LINE 2,  
NAM THANG LONG – TRAN HUNG DAO SECTION**

**RESETTLEMENT ACTION PLAN (RAP)  
(Update as of May 2012)**

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<b>Name</b>	T. Hagiwara	T. Hagiwara	Chitoshi Izumi
<b>Signature</b>			

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## Abbreviations

AH	- Affected Household
AIDS	- Acquired Immunodeficiency Syndrome
BF	- Barrier Free
COI	- Corridor of Impact
CPC	- Commune People's Committee
CSR	- Compensation, Support and Resettlement
CSRC	- Compensation, Support and Resettlement Committee
CSRP	- Compensation, Support and Resettlement Plan
D	- Diameter
DOC	- Department of Construction
DOF	- Department of Finance
DOLISA	- Department of Labor, Invalids and Social Affairs
DONR	- Department of Natural Resources and Environment
DOT	- Department of Transportation
DMS	- Detailed Measurement Survey
DP	- Displaced Person
DPC	- District People's Committee
EA	- Executing Agency
EMA	- External Monitoring Agency
EVN Hanoi	- Hanoi Power Corporation
FS	- Feasibility Study
GC	- General Consultants
GDP	- Gross Domestic Product
GOJ	- Government of Japan
GOV	- Government of Vietnam
HAPI	- Hanoi Authority for Planning and Investment
HAUPA	- Hanoi Authority for Urban Planning and Architecture
HCMC	- Ho Chi Minh City
HH	- Household
HIV	- Human Immunodeficiency Virus
HPC	- Hanoi People's Committee
HRB	- Hanoi Metropolitan Railway Transport Project Board
IOL	- Inventory of Losses
IOM	- International Office of Migration
JBIC	- Japan Bank for International Cooperation
JICA	- Japan International Cooperation Agency
LURC	- Land Use Right Certificate
M	- Meter
MOH	- Ministry of Health
MOM	- Minutes of Meeting
MOT	- Ministry of Transport
NGO	- Non-Governmental Organization
ODA	- Official Development Assistance
PAPs	- Project Affected Persons
PCM	- Public Consultation Meeting
PID2	- Project Implementation Department 2
PLWHA	- People Living With HIV/AIDS
PMU	- Project Management Unit
PPTA	- Project Preparation Technical Assistance
PRC	- People's Republic of China
PZ	- Protection Zone
ROW	- Right of Way

RAP	-	Resettlement Action Plan
SES	-	Socio-economic Survey
SPD	-	Site Preparation Department
STI	-	Sexually Transmitted Infection
UD	-	Universal Design
UMRL2	-	Hanoi Urban Railway Line 2
UMRT	-	Urban Mass Rapid Transit
UN	-	United Nations
UNDP	-	United Nations Development Programme
USD	-	United States Dollars
VAST	-	Vietnam Academy of Science and Technology
VIAP	-	Vietnam Institute of Architecture, Urban and Rural Planning
WPC	-	Ward Peoples Committee
VND	-	Vietnam Dong
ZOI	-	Zone of Influence

## Definition of Terms

<b>Compensation</b>	Payment in cash or kind to which the affected people are entitled in order to replace the affected asset, resource or income
<b>Deep Tunnel</b>	Passageway under the ground or mountain/hill where the overburden is at least 2 times the diameter of the tunnel
<b>Displaced Persons</b>	In the context of involuntary resettlement, displaced persons are those who are physically (due to relocation or loss of shelter/residential land) and/or economically (involving the loss of land, assets, access to assets, income sources, or means of livelihoods) displaced as an effect of: (i) involuntary land acquisition; or, (ii) involuntary restrictions on land use or of access to legally designated protected areas and parks
<b>Eligibility Criteria</b>	Grounds used in the Project to establish if an individual or entity is qualified for compensation or assistance in the context of the Project's land acquisition and resettlement impacts
<b>Entitlement</b>	The scope of actions covering compensation in cash or kind, income rehabilitation assistance, relocation cost, transfer assistance, income substitution, and business restoration which are due to DPs based on the degree and form of their losses to re-establish their social and economic base.
<b>Income restoration</b>	Re-establishing DP's sources of income and livelihood
<b>Involuntary Resettlement</b>	Any resettlement where affected people/communities are unwilling but are compelled by law to accept land acquisition or displacement
<b>Land acquisition</b>	The process by which individual(s) are obliged by a government agency to turn over possession of all or part of their land for public use and receive just compensation in return
<b>Price of Land Use Right/Land Price</b>	The sum of money for a land area unit set by the State or determined in a transaction relating to land use rights.
<b>Right of Way</b>	Tracks of land along the project alignment that need to be permanently acquired and cleared of obstructions to allow installation of the facility's surface structures and to perform maintenance work during operations phase.
<b>Station</b>	Terminals strategically located between the tunnel segments on which passengers can ride or alight

<b>Tunnel</b>	Cavity through the earth or hill/mountain that can be used as a passageway for people and/or vehicles
<b>Underground construction space</b>	Underground space used for construction of urban underground works <sup>1</sup>
<b>Underground technical headworks</b>	Underground technical infrastructure works, including: underground constructed water supply stations, wastewater treatment stations, transformer stations, gas stations, etc <sup>1</sup>
<b>Underground transport facilities</b>	Includes facilities of metro, subway stations, highway tunnel, tunnel for pedestrians and link supplemental facilities (including road linking to ground) <sup>1</sup>
<b>Urban underground facilities</b>	Underground constructed facilities in cities including underground public facilities, underground transport facilities, underground technical head works and underground parts of ground construction works, facilities of underground wires, cables, technical pipes; technical trenches and tunnels <sup>1</sup>
<b>Zone of Influence</b>	Corridor parallel to the project alignment, where possible soil subsidence may occur resulting from the construction and operation of the underground railway facilities. The ZOI boundary is found on both sides of the alignment centerline, measured at a distance of 4.5 times the diameter of the tunnel, measured from the center of the tunnel projection on the ground surface. For a twin tunnel arranged parallel to each other, the Zone of Influence will be measured starting from the center of each tunnel projection on the ground surface and outwards in the opposite direction

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<sup>1</sup>Decree No. 39/2010/ND-CP dated 07/04/2010 of the Government on managing urban underground construction space

## **EXECUTIVE SUMMARY**

Hanoi Metropolitan Rail Transport Project Board (HRB) will be implementing Hanoi City Urban Railway Construction Project Line 2 with loan assistance from Japan International Cooperation Agency (JICA). The project is among 8 other metro mass transit projects that seek to address the chronic vehicular traffic problem of the City. The project is 11.5 km long, in which 2.6 km segment is elevated and 8.9 km underground. Project facilities include 3 elevated and 7 underground stations with ancillary facilities; 2.6 km viaduct, 8.6 km tunnel, and 17.5-hectare Depot. Construction of the facilities is scheduled to start in 2013 and expected to be completed by 2018.

Preliminary assessment of the project's social impacts indicates that there are about 271 possible affected households, most of which are in Depot area (160HHs), Station C5 (33HHs), C6 (53 HHs), C8 (9 HHs), C9 (3 HHs) and Station C10 (13 HHs). These HHs will be permanently losing land, house, trees/crops and/or other non-movable assets. The project will require a total of 23.34 hectares of land for the construction of metro rail facilities, in which 18.6 hectares (79.7%) will be permanent acquisition. Likewise, about 23,692 m<sup>2</sup> (floor area) of buildings will be permanently affected, most of which are also in Depot area (17,634 m<sup>2</sup> or 74.4%). Affected buildings are mostly private houses/buildings. About 2,216 trees and ornamentals will also be affected, most of which (1,921 trees or 86.7%) are in Depot area, the rest are in parks and sidewalks within underground station locations. Only private trees in Depot area will require payment.

It is estimated that a total of 1.316 Trillion VND (US\$63.1) will be required to cover the resettlement cost of the project. Much of the amount covers the cost for loss of land at 646.8 billion VND (49.1%), followed by contingencies at 284.16 billion VND (21.6%), loss of major structures at 150.51 billion VND (11.4%), administrative overhead of 85.25 billion VND (6.5%), other support to PAPs and HHs 142.11 billion VND (10.8%), land handover progress reward of 7.74 billion VND, and loss of trees & ornamentals at 0.58 billion VND (0.04%). Valuation used to compute for the affected private assets are based on latest Decisions of HPC and Department of Finance (No. 35/2011/QĐ-UBND dated 5/12/2011; No. 50/2011/QĐ-UBND dated 30/12/2011; and Notification No. 6323/STC-BG dated 29/12/2011).

Under ideal conditions, the land acquisition and resettlement process leading to the compensation of affected persons, shifting of displaced PAPs to suitable relocation sites and handover of the ROW by DPCs to HRB is planned to be completed by the end of November 2012. The handover schedule is timed to coincide with the issuance of the "Notice to Proceed" to winning contractors tasked to do the detailed design and construction of the Urban Railway Line 2 Project. It is planned that once the DMS and SES are provided by the concerned DPCs to GC by the end of May 2012, and the CSRPs are prepared and approved by DPCs by end of June 2012, then the RAP can be completed by July 2012.

## PRELIMINARY RESETTLEMENT ACTION PLAN

### 1. PROJECT DESCRIPTION

#### 1.1 BACKGROUND

On 09/7/2008, the Prime Minister approved the Transport Development Plan for Hanoi Capital until 2020 (Decision No. 90/2008/QĐ-TTg dated 09/7/2008 approved by the Prime Minister), which called for the establishment of 5 Urban Transport Facilities (Lines 1-5) that will service various sections of the City. This legislation was followed by the approval of the General Construction Plan for Hanoi Capital until 2030 and Vision until 2050 (Decision No. 1259/QĐ-TTg dated 26/7/2011 by the Prime Minister) that added 3 more lines (Lines 6-8) to the Urban Metro Railway Transit System. Table 1.1 contains the listing of the approved UMRT Lines as well as their respective lengths.

**Table 1.1. List of UMRT Lines in Hanoi**

Name	Section	Length	Mode
Line1	Ngoc Hoi -Yen Vien	38.7 km	Railway
Line2	Noi Bai-Thuong Dinh	35.2 km	Railway
Line2 A	Cat Linh- Ha Dong	14 km	Railway
Line3	Troi - Nhon - Yen So	21km	Railway
Line4	Lien Ha - Bac Thang Long	53.1 km	Dedicated Bus
Line5	Southern West Lake - Ngoc Khanh - Hoa Lac	34.5 km	Railway
Line6	Noi Bai - Ngoc Hoi	47 km	Railway
Line7	Me Linh - Ngoc Hoi	35 km	Railway
Line8	Co Nhue - Trau Quy	28 km	Railway

One of these transport systems is Hanoi Urban Railway Line 2 that traverses central part of Hanoi, connecting key government offices, central business district and major tourist destinations to Noi Bai International Airport. UMRL2 will be constructed in phases; the project covered in this report focuses on Phase 1 that starts at Nam Thang Long Street in Phu Thang Ward (Tay Ho District) and ends at Tran Hung Dao Street in Hang Bai Ward (Hoan Kiem District). The feasibility study for the project was approved by HPC on 13/11/2008 with the issuance of Decision No. 2054/QĐ-UBND. Subsequently, the loan agreement for the implementation of Phase 1 of UMRL2 was signed between the Government of the Socialist Republic of Vietnam (GOV) and Japan International Cooperation Agency (JICA) on 31/3/2009. The services of the General Consultants for the project

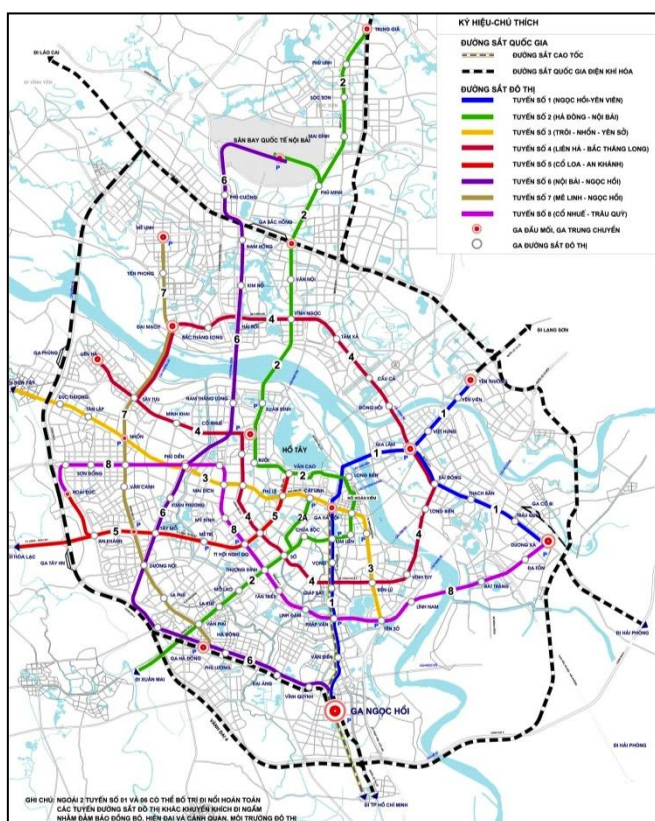


Figure 1.1. Location Map of UMRT Lines

commenced in April 2011. Figure 1.1 contains the alignment of the 8 UMRLs.

## 1.2 HANOI URBAN RAILWAY LINE 2

The 11.5 km-long Phase 1 of UMRL2 will traverse 5 Districts, namely: Tu Liem, Tay Ho, Cau Giay, Ba Dinh and Hoan Kiem. The facility starts at Nam Thang Long Street of the CIPUTRA urban area (Phu Thuong Ward, Tay Ho District), then follows the alignment of Nguyen Van Huyen Road extension – Hoang Quoc Viet Street – Hoang Hoa Tham Street – Thuy Khue Street – Phan Dinh Phung Street – Hang Giay Street – Hang Duong Street – Hang Ngang Street – Hang Dao Street – Dinh Tien Hoang Street – Hang Bai Street – and ends at the intersection with Tran Hung Dao Street. UMRL2 will be intersecting other metro rails such as Line 5 at Station C5, Line 1 at Station C8 and Line 3 at Station C10. Figure 1.2 shows the location of UMRL2 and the intersections with other UMRT Lines.

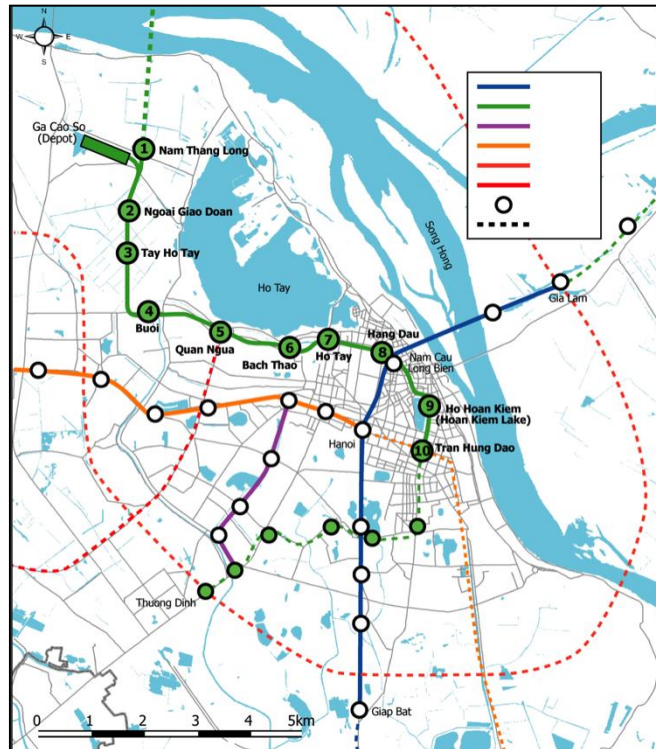


Figure 1.2. UMRL2 Alignment

UMRL2 (Phase 1) will have 3 elevated stations (Stations C1- C3), 7 underground stations (Stations C4- C10) with ancillary facilities and a 17.5 hectare Depot. The elevated section is 2.6 km long and will be built mostly at the median of the Nguyen Van Huyen Road extension, which has a 50m wide ROW and some of its segments currently under construction (see Figure 1.3 for the artist drawing of a typical elevated Station). The 8.9 km underground section on the other hand will follow mostly below existing roads except for some segments along its bends that will be below existing residential and institutional structures. The depth of the tunnels that connects each station are between 12m to 25 m where the shallower sections are those near the underground stations and the deep ones are those between stations.



Figure 1.3. Artist drawing of elevated Station

While elevated stations will be built on the center median of the Nguyen Hoang Ton and Nguyen Van Huyen Extension Streets where most of the 50 m wide ROW have already been secured by respective developers, underground stations and their ancillary facilities will be constructed mostly below existing roads, parks and government properties. There

are, however, some private residences that also exist over portions of some underground stations. These may be affected by the construction of the facilities. Details of the involuntary resettlement impact are discussed in the next chapters.

The underground station will have a dimension of 21.4 m wide, 150 m long and 17.25 m high. It will have three levels, the concourse, mezzanine and platform. The concourse is where passengers get their tickets; the mezzanine houses the electrical and mechanical facilities of the station; and the platform is where passengers wait and board or alight from the trains. The station will be installed underground at a total depth of 19.25 m with a soil cover of 2 m. Figure 1.4 contains the schematic diagram of a typical underground station layout.

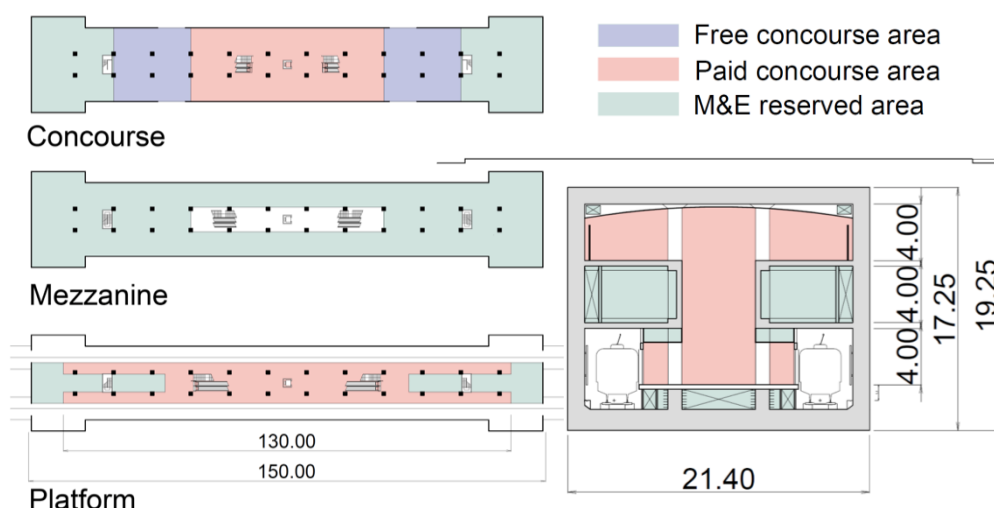


Figure 1.4. Schematic Diagram of Underground Station

The tunnels will have an external and internal diameter of 6.5 m and 5.5m. The 3.4 m wide tracks on which the train will move on will be installed 0.95 m from the bottom inner lining of the tunnel and 0.35 m clearance will be provided for the ceiling of the tunnel to the top of the train. Sufficient space on the side of the tracks will also be provided to allow maintenance

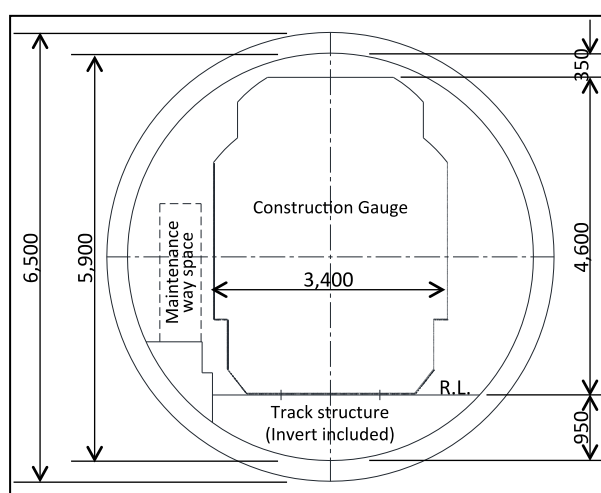


Figure 1.5. Schematic Diagram of Tunnel layout

personnel to freely move, and this can also be used as emergency passageways for passengers and train crew. Figure 1.5 contains the schematic drawing of the tunnel layout.

Each train will initially have 4 cars each when the UMRL2 would start its operations in 2018. However, the number of cars can increase to 6 for each train in the future should the number of passengers would require such additional capacity. A typical train car would be 3.6 m height, 2.95 m wide and 20 m long. Figure 1.6 contains an artist drawing of a typical train car.

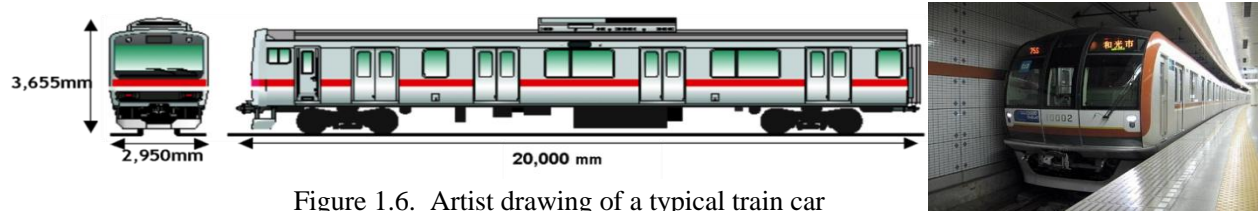


Figure 1.6. Artist drawing of a typical train car

The Depot is the project component that serves as the trains' garage and maintenance facility. The Depot has a total area of 17.5 hectares that will contain buildings such as the administrative office building, main workshop, infrastructure maintenance building, stabling yard, water supply tank, waste water treatment plant, electric power substation, car and motorbike parking and others. This facility has the capacity to service 24 trains (100 m long) at full capacity. At the end of each operating day, the trains will return to the Depot to park and/or undergo maintenance work so that they will be ready for the following day. Regular maintenance schedule will be followed to ensure that the rolling stock perform properly. However, provisions will be provided for emergency repairs should there be any unexpected damage or breakdown of the units during the course of their operations. The ROW boundary of the Depot contained in a 1/500 scale drawing was approved on 15/4/2011 by HAUPA, however actual staking has not yet commenced as of this report writing.



Figure 1.7. Artist drawing of the Depot and its facilities

## 2. POTENTIAL IMPACT

### 2.1 BACKGROUND

The implementation of the UMRL2 project will require the acquisition of land on both permanent and temporary basis. Permanently recovered lands are those on which the surface project facilities will be built on. Likewise, temporary land acquisition are those areas needed only during the construction period and will be returned to its owner after the works are completed.

Land acquisition will likewise entail the clearing of non-movable assets established on the affected area. These assets may include houses, buildings, trees, public infrastructures, utilities and others. Restoration of the temporarily affected areas will be pursued by the project unless otherwise instructed by the owner or the local authorities. Agreements on the affected assets restoration or other related works will be made by the project owner and the PAPs or the local authorities (if owner of property is the government) prior to construction work.



Figure 2.1. Portion of the Mai XuanThuong Park (Tay Ho District) where Station C6 will be built requiring temporary land acquisition work

The loss of houses will displace a number of households from their current residence. These families will need to be relocated to suitable houses as close as possible to the original area, with at least similar amenities. Reducing the distance from original houses to the relocation site will help ensure that the PAPs will have lesser difficulty to reach their livelihood source (if employed) and they will not be displaced far from their relatives and other support systems.

A number of the PAPs owning multi-story houses have converted their first floor unit into an income generating shop (i.e. small variety store, dress shop, computer shop, office and others). The implementation of the project construction may result in the loss of the house and consequently, income from the small enterprise. There are also those establishments whose structures are not affected; however, the access to their shops are restricted due to the construction activities and therefore may result in loss of income for the affected enterprises or total loss of livelihood if the access problem is not resolved within a short period of time, since the regular shop customers may choose to patronize other establishments that have no access problem.

Much of the affected areas are government properties, specifically those belonging to District/Ward People's Committees, Hanoi Departments and instrumentalities. Coordination work will be required by the project owner for the handover of these properties for the use of the project.

## 2.2 RIGHT OF WAY

### 2.2.1. ROW of Elevated Section and Depot

The project has two main sections, namely the Elevated Sections and the Underground Section. The Elevated Section covers the Depot, Stations C1 to C3 and viaducts complete with the train rails. The Underground Stations cover Stations C4 to C10, the tunnels (with rails) and ancillary facilities (supporting each underground station). For the Elevated Section, the ROW drawings have been derived from: a) ROW drawing of the Depot HAUPA approved (March 2011); b) ROW drawings for the Nguyen Van Huyen Road extension (where Stations C1-C3 will be built on its center median) provided by PMUs of other projects along the elevated section alignment (i.e. Investment and Development Management Unit for New Urban Areas in Hanoi, PMU of Diplomatic Area, PMU of Tay Ho Tay, etc.).



Figure 2.2. Newly built Nguyen Van Huyen Road extension at the Diplomatic Compound

According to the “Investment and Development Management Unit for New Urban Areas in Hanoi”, portions of the ROW for the Nguyen Van Huyen Road extension had already been approved (Decision No. 86/2003/QĐ-UBND of HPC), while the portions within the Diplomatic Area is approved in principle pending resolution of conflicts in utility lines. Already, the main road network of the Diplomatic Compound had been built by the developer including a portion of the Nguyen Van Huyen Road Extension where the elevated section including Station C2 will be built.

However, the Nguyen Van Huyen Road extension section between Stations C1 and C2 has not yet been constructed pending the resolution of land clearance for ROW. The concerned Road PMU is responsible for the land clearance. A whole village located along the road alignment and UMRL2 Depot will be affected by the road widening and Depot construction. The PAPs residing in this village prefer a “land for land” mode of relocation. Most residents of the village are farmers and agriculture is their only known livelihood.

### 2.2.2. ROW for Underground Section

Following experiences from design and construction of metro rail projects in other countries, the project boundary for the UMRL2 Project had been drawn using AutoCAD software by GC Underground Section team. The Project boundary extends 30 m on both sides of the twin tunnel project layout. The ROW (red line), however, only covers the area on which the underground station ancillary facilities will be constructed, including a 3 m buffer zone around these structures. The layout of the underground station that includes the ancillary facilities was prepared by GC



Figure 2.3. Craft Village established along Nguyen Van Huyen Road extension alignment

Architecture and Planning Division. No red line will be established on the Project boundary, as this imaginary line only indicate the extent soil settlement may occur resulting from tunnel construction, and it is still acceptable to have structures and human activities established within the project boundary so long as these do not affect the underground project facilities (i.e. stations, tunnels, ancillary facilities, etc.). Details of the project layout are found in **Appendix 1** (Draft Compensation Policy on Underground Works for the Hanoi Urban Metro Rail Construction Line 2 Project).

### 2.3 ROW BOUNDARY STAKING

Mission 9.5 requires GC to do coordination work with the client and other relevant agencies for the establishment of stakes which presumably should be placed along the ROW boundaries. Following the procedure for land acquisition called for in Decision 2/2010/QĐ-UBND (Chapter II, Article 8; Chapter V, Article 22; and Chapter V, Article 21, No.1) that defines the role of the Department of Natural Resources and Environment (DONRE) of each City/Province to be responsible for verifying the boundaries of the project ROW based on maps/drawings provided by the proponent, and installing the necessary landmark on the ground as reference. Action by DONRE follows instructions from HPC once ROW drawings are approved by HAUPA.

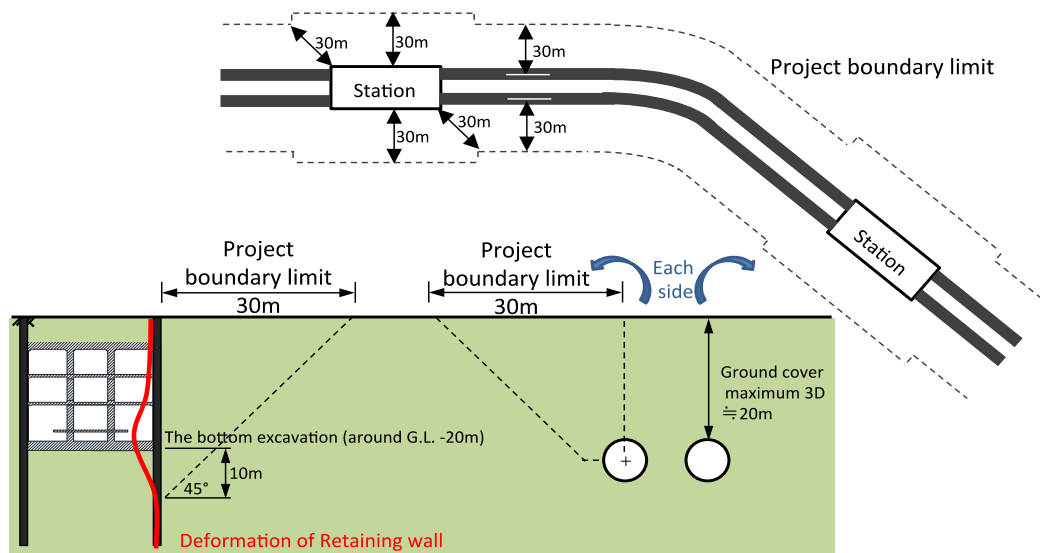


Figure 2.4. Proposed Project boundary limit for the underground section

For UMRL2 Project, the ROW drawings for the Depot area were approved last March 2011. However, the staking of the boundaries has not yet been pursued. Inquiries made by GC to DPC TuLiem and WPC XuanDinh as to the status of the staking has yielded no definite response.

The ROW for the elevated section as mentioned in Chapter 2.1.2 follows the boundary of the Nguyen Van Huyen Road extension, which is currently waiting for approval from HPC according to Statement No. 1457/QHKT-TTr-P7 dated 31/05/2012 of HAUPA to HPC.

For the ROW along the underground section, staking cannot yet be pursued until the ROW drawings have been approved by HAUPA. The topographic surveys have been completed, and its results have been used in finalizing the ROW drawings by GC. Once these drawings are reviewed and considered by HRB, they will be forwarded to HAUPA for final review and

approval. When the ROW drawings are approved by HAUPA, then coordination work will be pursued by GC with HRB, DONRE, DPC and other concerned groups on the staking work.

The consultation meetings held with the traversed District People's Committees (Ba Dinh, Tu Liem and Hoan Kiem) and Ward People's Committees (Xuan Dinh in Tu Liem District; Quan Thanh and Vinh Phuc in Ba Dinh District) gained the interest and support of the concerned local government units. In Hoan Kiem, for example, the Urban Management Office DPC officers want to participate in the ground survey and staking work, in order that they will determine the extent of the ROW acquisition within their area. GC will coordinate with HRB, the DPC of Hoan Kiem as well as the survey team of DONRE when the ROW drawings are approved by HAUPA and forwarded to DONRE for site validation and staking of the red line boundaries.

## 2.4 PRELIMINARY INVENTORY OF PROJECT AFFECTED PERSONS

The preliminary impact assessment had identified a total of 271 possible affected households residing in the Depot, Stations C5, C6, C8, C9 and C10. This figure is based on the number of affected lots within the project area. Following the average household size within the traversed Districts of 4, it is estimated that a total 1,104 persons may be displaced from their current abode. Most of the affected households are found in the Depot area at 160 (59.04%), followed by 53HHs in Stations C6 (19.56%) and finally Station C5 at 33 HHs (12.18%). These PAPs are those residing in: a) military and high school residential area, as well as the Craft Village within the Depot area; b) residential cum small shop buildings in Station C5; and c) residential cum small shop buildings in Station C6. It is worth noting that many of the PAPs in the Depot area are also farming the nearby affected agricultural lands, some of which are within the Depot area. The final listing of affected persons will be generated during the Detailed Measurement and Survey (DMS) to be performed by the respective DPCs. Details on the preliminary inventory of project affected persons are found in **Table 2.1**.

**Table 2.1. Preliminary Inventory of Affected Persons**

District	Stations/ Depot	Affected Households	Persons	% HHs
Tu Liem	1 Depot	160	800	59.04%
Tay Ho	2 C1	-	-	-
Tu Liem	3 C2	-	-	-
Tu Liem	4 C3	-	-	-
Cau Giay	5 C4	-	-	-
Ba Dinh	6 C5	33	108	12.18%
Tay Ho	7 C6	53	196	19.56%
Tay Ho	8 C7	-	-	-
Ba Dinh	9 C8	9	-	3.32%
Hoan Kiem	10 C9	3	-	1.11%
Hoan Kiem	11 C10	13	-	4.80%
	<b>Total</b>	<b>271</b>	<b>1,104</b>	<b>100%</b>

### 2.4.1. Involuntary Resettlement Issues

One issue that surfaced during the consultation meeting conducted at the Xuan Dinh Commune (site of Depot area), is the preference of the PAPs for a “land for land” relocation

mode. Since as earlier mentioned, most of them are farmers, they opt to be relocated to another area with similar agricultural lands for them to cultivate. The request (“land for land”) has not yet been acted upon by HPC, and so the PAPs have not yet agreed to handover their lands to the government.

Another issue that surfaced during the consultation meeting at the Ba Dinh DPC was the case of PAPs in Station C5, some of which have been affected more than once by government road improvement projects. The intersection at Van Cao Road and Hoang HoaTham Road had undergone 3 types of road improvement,namely: a) widening of Van Cao Road up to the intersection of Hoang HoaTham; b) widening of Van Cao Road segment from intersection with Hoang Hoa Tham up to the intersection with Thuy Khue (next intersection Northward); and c) widening of ThuyKhue at its intersection with Van Cao to allow the construction of a Viaduct. The construction of the UMRL2 Station C5 will again affect about 33HHs along the corner of these two roads. DPC and WPC officials have raised their concern on this involuntary impact and suggested modifications to be made on the project design to avoid damaging the properties of the preliminary identified PAPs.

Affected government institutions met such as the Academy for Science and Technology and the Military Academy at Cau Giay District (fronting Station C4) have expressed their support for the project, but relayed their unwillingness to give up a part of their land. Two alternative station layouts will use part of their land to locate the Station C4 Generator and Ventilation Shaft. Both suggested that private land be acquired to locate the ancillary facilities. While the Traffic Police officials and the Green Tree Company Director with properties affected by Station C10 and Station C6 respectively have no objections to the project acquiring a part of their property so long as appropriate approval is secured from HPC and replacement land is provided (in the case of C6), the Hanoi Power Corporation did express objection to the acquisition of its parking lot fronting Station C9 citing compromise of state security by the project as reason.

Other issues raised during the consultation meetings held were related to the environmental impact of the tunnel construction to existing houses and relics found over the underground transport facility. Related DPC and WPC officials are concerned that the construction will cause damages to their buildings, and disrupt their way of life as a result of noise, vibrations and soil subsidence. The matrix containing the consultation meetings held, people met, issues discussed and other information are found in Chapter 10.

#### **2.4.2. Non-Inclusion of Structures over Tunnel Alignment in PAPs Inventory**

Households residing on buildings directly above the tunnel alignment had not been considered as affected persons. The project is not expected to significantly affect the buildings nor disrupt activities over the tunnel alignment, as the transport facility will be built deep under the ground at a depth of at least twice the diameter of the tunnel (12 m depth minimum). Experiences in other countries with similar underground rail facility have indicated very minimal adverse impacts of project construction to surface structures due to soil subsidence. Details on the impacts to surface structures by underground works and proposed compensation policy should adverse impacts do occur are found in **Appendix 1** of this report.

#### **2.4.3. Affected Government Properties**

There are also GOV agencies owning properties within the project areas that will be affected. They include: a) military camp, high school and agricultural lands within the Depot area (Xuan Dinh Ward, Tu Liem District); b) portions of roads and their sidewalks throughout the alignment (Nam Thang Long Street, Nguyen Van Huyen Road Extension, Hoang Quoc Viet

Road, Hoang Hoa Tham Road, Thuy Khue Road, Van Cao Road, etc.); c) parks (Hang Dau Park, Mai Xuan Thuong Park, Hoan Kiem Park, etc.); d) government office (i.e. Green Tree Company, and Medical facility at Mai Xuan Thuong Park); and d) parking spaces (Hanoi Power Corporation, and Vietnam Academy for Science & Technology). While GOV agencies are also considered as project affected persons, impacts to these facilities are not discussed in details in this report. Much of the discussions will be made once the DMS information is made available by the respective District People's Committee.

## 2.5 PRELIMINARY AFFECTED BUILDINGS SURVEY

### 2.5.1. Background

A preliminary inventory of affected buildings was conducted by the General Consultant. The work involved the identification of major structures found within the underground stations location including the ancillary facilities as well as within the Depot site. The inventory was done utilizing the preliminary project alignment drawings, preliminary station layouts, and Depot ROW boundary in BD phase associated with field survey and local data (Notification No. 101/TB-UBND of Tu Liem DPC on land recovery to implement Depot project). No survey was done for the structures along the alignment for the elevated stations (C1 to C3) as the ROW here will be secured by other projects. Likewise, no inventory was conducted for major structures found above the tunnel alignment, as the activity will be pursued by the Building Condition Survey Subcontractor hired by HRB through GC for the purpose.

Based on experiences by GC engineers from the construction of metro rail projects in other countries with similar site conditions, structures above deep tunnels (with minimum soil cover of twice the tunnel's diameter) will have minimal negative impacts caused by soil settlement (Please refer to Appendix 1). In view of those experiences, it is not expected that significant adverse impacts will be caused by the UMRL2 project construction to buildings located on the ground directly over the tunnel; therefore, no acquisition is necessary. Following this argument, no inventories of buildings directly over the tunnel alignment was conducted by GC at the time of the report writing.

### 2.5.2. Preliminary Inventory of Affected Buildings at Stations and Depot Area

It is estimated that a total of about 25,296 m<sup>2</sup> of buildings will be affected by the implementation of the project. Most of these affected major structures are found at the Depot site with a floor area of 17,634 m<sup>2</sup> (74%), followed by those from Stations C6 at 3,916 m<sup>2</sup> (15%) or 59 houses/buildings, and Station C5 at 2,024 m<sup>2</sup> (9.6%) or 33 houses/buildings. There are 3 other single-story government-owned structures that may be affected located at Station C7 with a floor area of 341 m<sup>2</sup>. Most of the affected structures are residential in nature with the number of floors ranging from 1 to 6 stories. Many of these buildings have small shops established at the first floor. It is estimated that about 29 shops that will be affected, 8 of which are from Station C5 and 21 are from Station C6. There are temporary market stalls at the Depot area that may be affected by the project construction. Vendors constructed temporary stalls at the narrow sidewalk along the existing road linking Nguyen Hoang Ton Street and Xuan Dinh Road. The preliminary inventory of affected buildings is found in **Table 2.2**.

**Table 2.2 Preliminary Inventory of Affected Buildings**

Station/ Depot	Unit	Floors						Temp	Total	%
		1	2	3	4	5	6			
Depot	m <sup>2</sup>	3,781	3,184	8,004	2,822	-	-		17,792	69.8%

C1	m <sup>2</sup>	-	-	-	-	-	-	-	-	
C2	m <sup>2</sup>	-	-	-	-	-	-	-	-	
C3	m <sup>2</sup>	-	-	-	-	-	-	-	-	
C4	m <sup>2</sup>	-	-	-	-	-	-	-	-	
C5	no.	15	6	5	5	2	-		33	7.9%
	m <sup>2</sup>	347	207	444	512	514	-		2,024	
C6	no.	23	5	12	10	1	2	6	59	15.4%
	m <sup>2</sup>	747	369	880	1,155	139	319	306	3,916	
C7	no.	4 *	1 *	-	-	-	-		5	1.7%
	m <sup>2</sup>	310*	113*	-	-	-	-		423	
C8	m <sup>2</sup>	58	280	40	115	-	-	32	525	2.1%
C9	m <sup>2</sup>	55	61	135	-	-	-		251	1.0%
C10	m <sup>2</sup>	349	129	6	-	-	-	69	552	2.2%
Total	m <sup>2</sup>	5,490	4,343	9,509	4,605	653	319	407	25,296	100%

\*Government buildings

### 2.5.3. Preliminary Inventory of Affected Lands

The construction of the UMRL2 may also require the permanent acquisition of lands for use for ROW and those for use only during the construction of the transport facilities (temporary use) that are both under the stewardship of the government and the people. These lands have diverse landuse such as residential, agricultural and other non-agricultural lands. Of primary concern are those lands that entail involuntary resettlement of its current residents and/or users. A total of 23.3 hectares of land will be required for the construction of the Urban Railway Line 2, of which 18.8 hectares (80.8%) are permanent and 4.5 hectares (19.2%) are temporary, specifically to be used during the construction phase. Agricultural lands constitute the biggest affected area at 15.5 hectares (66.7%), including 8.2 hectares state-owned Agricultural Land. **Table 2.3** contains more details on the preliminary affected lands. **Figure 2.5** shows the project affected buildings in Station C5. These structures were built on top of the future Station C5. Ancillary facilities will also be placed on the site.



Figure 2.5. Project Affected Buildings in Station C5

**Table 2.3 Preliminary Inventory of Affected Lands (m<sup>2</sup>)(Temp = Temporary, Perm = Permanent)**

Location		%	Total	Area Affected (m <sup>2</sup> )									
				Residence		Public Land		Authority Land		Other Land*		Agriculture	
				Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm
Depot		74.9%	174,975	0	9,641	0	82,797	0	11,983	0	0	0	70,554
Elevated Structures	C1	1.3%	3,108	0	0	0	0	0	0	3,108	0	0	0
	C2	1.8%	4,116	0	0	0	0	0	0	4,116	0	0	0
	C3* *	1.3%	3,108	0	0	0	0	0	0	0	0	3,108	0
	Sub-total		10,332	0	0	0	0	0	0	7,224	0	3,108	0
Approach to Underground		1.1%	1.1%	2,452	0	0	0	0	0	0	0	0	0
Under-ground Structures	C4	3.2%	7,518	0	0	0	911	0	0	6,156	451	0	0
	C5	2.5%	5,723	0	830	0	0	0	0	4,115	778	0	0
	C6	2.6%	5,971	0	1,595	0	1,661	0	0	2,715	0	0	0
	C7	3.5%	8,176	0	0	0	0	0	1,742	6,434	0	0	0
	C8	2.6%	6,061	0	273	0	0	0	0	4,461	1,327	0	0
	C9	2.6%	6,094	0	87	0	0	0	437	5,570	0	0	0
	C10	2.7%	6,216	0	179	0	896	0	0	5,047	94	0	0
	Sub-total		45,759	0	2,963	0	3,905	0	1,742	34,499	2,650	0	0
Grand Total		100%	233,518	0	12,605	0	86,265	0	14,162	41,723	2,650	3,108	73,006
%				5.4%		36.9%		6.1%		19.0%		32.6%	

\* Other land includes roads, sidewalks and center medians.

\*\*Segment includes the viaduct section from Station C3 up to the Transition entrance where the elevated road goes under the ground to take on a tunnel layout.

Of the total 18.8 hectares permanently required for the construction of the facility, only 8.5 hectares are privately owned, and thus will entail payment of compensation for the affected households/persons. The remaining 10.3 hectares are government-owned lands and will not necessitate payments for the plots converted to rail facility from their present use. Details on the permanently affected lands requiring payments will be discussed in subsequent sections below. **Table 2.3** contains more details on the preliminary inventory of affected lands and their respective present uses.

In terms of affected lands per district, TuLiem District has the biggest area estimated at 18.5 hectares (79.1%), which mostly come from the Depot area. Tay Ho District follows TuLiem District with an estimated affected plot area of 1.7 hectares (7.4%). CauGiay District has the least affected area at 0.85 hectares (3.3%) where most of the lands needed for construction (temporary) are along the road (Hoang Quoc Viet Road) and its sidewalk. **Table 2.4** has more details on the affected lands on a per District basis.

**Table 2.4. Preliminary Inventory of Affected Lands per District**  
(Temp = Temporary, Perm = Permanent)

Location		Total (m <sup>2</sup> )		Residential Land (m <sup>2</sup> )	Agricultural and other Land (m <sup>2</sup> )			
					Total (m <sup>2</sup> )	Agri-cultural land (m <sup>2</sup> )	Land for business, production, non-agri, offices, etc.(m <sup>2</sup> )	Public area, other land (m <sup>2</sup> )
(1)	(2)	Type of impact	(3) = (4)+ (5)	(4)	(5) = (6) + (7)+(8)	(6)	(7)	(8)
Tu Liem District	Depot	Perm	174,975	9,641	165,334	70,554	11,983	82,797
		Temp	0	0	0	0	0	0
	Station C2	Perm	0	0	0	0	0	0
		Temp	4,116	0	4,116	0	0	4,116
	Station C3	Perm	2,452	0	2,452	2,452	0	0
		Temp	3,108	0	3,108	3,108	0	0
	Sub-total	Perm	<b>177,427</b>	<b>9,641</b>	<b>167,786</b>	<b>73,006</b>	<b>11,983</b>	<b>82,797</b>
		Temp	7,224	0	7,224	3,108	0	4,116
Tay Ho District	Station C1	Perm	0	0	0	0	0	0
		Temp	3,108	0	3,108	0	0	3,108
	Station C6	Perm	3,256	1,595	1,661	0	1,661	0
		Temp	2,715	0	2,715	0	0	2,715
	Station C7	Perm	1,742	0	1,742	0	1,742	0
		Temp	6,434	0	6,434	0	0	6,434
	Sub-total	Perm	<b>4,998</b>	<b>1,595</b>	<b>3,403</b>	<b>0</b>	<b>3,403</b>	<b>0</b>
		Temp	12,257	0	12,257	0	0	12,257
Cau Giay District	Station C4	Perm	1,362	0	1,362	0	0	1,362
		Temp	6,156	0	6,156	0	0	6,156
Ba Dinh District	Station C5	Perm	1,608	830	778	0	0	778
		Temp	4,115	0	4,115	0	0	4,115
	Station C8	Perm	1,600	273	1,327	0	0	1,327
		Temp	4,461	0	4,461	0	0	4,461
	Sub-	Perm	<b>3,207</b>	<b>1,102</b>	<b>2,105</b>	<b>0</b>	<b>0</b>	<b>2,105</b>

**Table 2.4. Preliminary Inventory of Affected Lands per District**  
(Temp = Temporary, Perm = Permanent)

Location		Total (m <sup>2</sup> )		Residential Land (m <sup>2</sup> )	Agricultural and other Land (m <sup>2</sup> )			
					Total (m <sup>2</sup> )	Agri-cultural land (m <sup>2</sup> )	Land for business, production, non-agri, offices, etc.(m <sup>2</sup> )	Public area, other land (m <sup>2</sup> )
	total	Temp	8,577	0	8,577	0	0	8,577
Hoan Kiem District	Station C9	Perm	524	87	427	0	0	437
		Temp	5,570	0	5,570	0	0	5,570
	Station C10	Perm	1,169	179	990	0	0	990
		Temp	5,047	0	5,047	0	0	5,047
	Sub-total	Perm	<b>1,693</b>	<b>266</b>	<b>1,427</b>	<b>0</b>	<b>0</b>	<b>1,427</b>
		Temp	10,617	0	10,617	0	0	10,617
Total		Perm	<b>188,687</b>	<b>12,332</b>	<b>174,756</b>	<b>73,006</b>	<b>15,386</b>	<b>86,364</b>
		Temp	44,831	0	40,369	3,108	0	37,261
		Total	<b>233,518</b>	<b>12,332</b>	<b>215,125</b>	<b>76,114</b>	<b>15,386</b>	<b>123,625</b>

From the total area needed to be permanently acquired with compensation, the Depot, which is in TuLiem District, has the biggest affected lands at 92,179 m<sup>2</sup> (91.5%), this is followed by Station C6 at 3,256 m<sup>2</sup> (3.2%) and Station C5 at 830 m<sup>2</sup> (0.8%). Agricultural lands constitute the biggest type of land required for acquisition at 73,006 m<sup>2</sup> (72.5%) followed by residential lands at 12,332 m<sup>2</sup> (12.2%) out of the total 100,724 m<sup>2</sup>. There are also other areas that need to be acquired; however, these are government lands and as such will only entail coordination with the concerned agencies to affect the transfer of their jurisdiction to HRB for use in the UMRL2. **Table 2.5** contains the breakdown of affected lands that need to be permanently acquired with compensation for the project's ROW and Depot.

**Table 2.5. Preliminary Inventory of Permanent Affected Lands**

Stations/ Depot	Residential	Agricultural	Land for business production, offices, etc.	Total	%
1 Depot	9,642	70,554	11,983	92,179	91.5%
2 C1	-	-	-	-	-
3 C2	-	-	-	-	-
4 C3	-	-	-	-	-
5 C4	-	-	-	-	-
6 C5	830	-	-	830	0.8%
7 C6	1,595	-	1,661	3,256	3.2%
8 C7	-	-	-	-	-
9 C8	-	-	-	-	-
10 C9	-	-	-	-	-
11 C10	-	-	-	-	-
<b>Total</b>	<b>9,165</b>	<b>68,735</b>	<b>-</b>	<b>77,900</b>	<b>100.0%</b>

#### 2.5.4. Preliminary Inventory of Affected Trees

It is estimated that there are about 2,216 affected trees and ornamentals to be affected. The Depot area has the most number of affected trees number at 1,921 (86.7%), followed by Station C10 at 77 trees (6.0%); then Station C4 at 71 trees (5.5%); and Stations C8, C7, C9 and C6 have 48 (2.2%), 44 (2.0%), 38 (1.7%) and 17 (0.8%) trees respectively. It is initially estimated that there are at least 16 valuable trees affected, mostly in Stations C9 (8 trees) and C8 (7 trees). At the time of the report writing, only the trees (privately owned) at the Depot site will require payment, the rest are planted in government lands (park and sidewalk).



Figure 2.6. Assorted timber trees planted at HoanKiem Park that may be affected by Station C9 construction

#### 2.5.5. Preliminary Inventory of Affected Lands in the Depot Area

Pursuant to Field Surveys of GC and Notification on Land Recovery to Implement Depot and Access Road Project - UMRL2 (No. 101/TB-UBND dated 15/5/2012 by Tu Liem DPC), the total area required to establish the Depot site equals to 174,975 m<sup>2</sup>. Of the total area (Depot), the current land-use includes: land in the Depot owned by the People's Committee at 82,796 m<sup>2</sup> (47.3%); agricultural lands at 70,554 m<sup>2</sup> (40.3%), followed by institutional lands at 11,983 m<sup>2</sup> (6.8%), residential at 9,641 m<sup>2</sup> (5.5%). It is noted that about half of the land is owned by the government at 94,780 m<sup>2</sup> (54.2%), thus does not need to be acquired but needs to have support budget.



Figure 2.7. Marginal crop land at Depot site

Details of the existing land-use in the depot area is found in **Table 2.6**.

**Table 2.6. Preliminary Inventory of Affected Lands in Depot Area**

	Land-use	Unit	Quantity (m <sup>2</sup> )	%
1	Residential lands	m <sup>2</sup>	9,642	5.5%
2	Institutional land*			

2.1	High School	m <sup>2</sup>	6,491	3.7%
2.2	Military Camp	m <sup>2</sup>	5,492	3.1%
<b>3</b>	<b>Agricultural Lands</b>	m <sup>2</sup>	70,554	40.3%
<b>4</b>	<b>Non-Agricultural Lands</b>	m <sup>2</sup>	82,797	47.3%
<b>5</b>	<b>Other Lands</b>	m <sup>2</sup>	-	-
<b>Total</b>			<b>174,975</b>	<b>100.0%</b>

### 3. OBJECTIVES

#### 3.1 GENERAL OBJECTIVE

The main objective of the Resettlement Action Plan (RAP) is to ensure that no affected person shall be worse off as a result of the implementation of the Project.

#### 3.2 SPECIFIC OBJECTIVES

The RAP seeks to it that:

- a. Adverse social impact are whenever possible avoid, minimized, else appropriately mitigated;
- b. Stakeholders, most especially the severely affected and/or vulnerable groups are not marginalized, and will benefit from the Project;
- c. PAPs are provided with sufficient compensation and other benefits to enable them to be restored to at least their pre-project socio-economic conditions;
- d. Resettlement is planned and implemented as an integral part of the over UMRL2 Project.

### 4. SOCIO-ECONOMIC STUDIES

#### 4.1 BRIEF SOCIO-ECONOMIC PROFILE OF THE PROJECT AREA

##### 4.1.1. General Issues

In 2009, Hanoi underwent an area expansion with the annexation of adjacent areas resulting to an increase of its total land area to 3,329 km<sup>2</sup>. As a result, its population increased with a population density of 6,688.6 persons per km<sup>2</sup> as of 2009. However, the population is unevenly distributed with high densities concentrated in the districts of the inner City, which resulted in rapid urbanization problems such as vehicular traffic congestion during peak hours, sometimes causing significant adverse impact to the economic activities of the country's capital.

This section provides an overview of the general socio-economic condition within the areas traversed by the UMRL2 based on official 2010 statistics. Focus of the section is on general demographics, migration and local economy. Details have been provided for two districts traversed by UMRL2, specifically Tu Liem District, which is planned to be a new high-end urban center and Hoan Kiem District, which is old urban area that is undergoing controlled development as a result of the growing tourism industry.

##### 4.1.2. Population of Project Districts

UMRL2 Phase 1 traverses 4 Districts of Hanoi, namely: Tu Liem, Cau Giay, Tay Ho, Ba Dinh and Hoan Kiem. In 2010, it is estimated that the population residing within the project

area is 1,195,698, which constitute 18.1% of Hanoi's resident population of 6,617,900. Tu Liem District has the biggest population among the 4 project Districts at 429,400 (35.9%), followed by Ba Dinh and Cau Giay Districts at 238,800 and 238,700 persons respectively (20%). Hoan Kiem and Tay Ho Districts have also relatively similar population at 149,498 and 139,300 persons respectively and they both constitute 12.5% and 11.7% respectively of the population residing within the project area. Tay Ho District has the biggest natural population growth rate at 12.57% followed by Ba Dinh District (11.98%) and then Cau Giay (11.26%). There are slightly more males (598,189) than females (597,509) in 2010. **Table 4.1** has the details on the population distribution.

**Table 4.1. Population Distribution in Districts Traversed by UMRL2 in 2010**

Districts (Ward/ Commune)	Average Population ('000)						
	Population			Natural increase rate (%)	Number of HH	Average (person/ HH)	Female- Headed HH
	Total	Male	Female				
<b>Ba Dinh</b>	<b>230,000</b>	<b>111,200</b>	<b>118,800</b>	<b>11.98</b>	<b>45,500</b>		<b>1,225</b>
Quan Thanh	12,128	5,943	6,185	-	3,380	3.6	963
<b>Hoan Kiem</b>	<b>149,500</b>	<b>72,489</b>	<b>77,011</b>	<b>10.06</b>	<b>8,561</b>	<b>4.2</b>	<b>1,598</b>
Dong Xuan	8,663	4,185	4,478	0.9	700	3.9	650
Hang Buom	7,676	3,724	3,952	1.1	655	4.0	459
Hang Dao	4,608	2,146	2,462	1.2	366	4.5	542
Ly Thai To	5,367	2,538	2,829	1.01	469	4.1	235
Hang Bai	7,420	3,820	3,600	0.8	568	3.9	120
Trang Tien	6,671	3,161	3,510	1.0	455	4.0	321
<b>Cau Giay</b> Nghia Do	238,700	111,700	127,000	11.26	47,320	4.5	1,100
<b>Tu Liem</b> Xuan Dinh	429,400	223,400	206,000	9.94	83,900	5.0	1,200
<b>Tay Ho</b> Thuy Khue	139,300	70,600	68,700	12.57	27,260	4.1	998

Source: Hanoi Statistical Yearbook 2010

#### 4.1.3. Economic Indicators

According to Statistics Office, after the expansion Hanoi has an increased land area of 332,889 hectares at the end of 2010, of which 188,601 hectares (56.7%) is agricultural land; 134,947 hectares non-agricultural land (40.5%) and unused land 9,340 hectares (2.8%). Agricultural land is found mainly in the outlying districts, while non-agricultural land is concentrated in urban areas. The non-agricultural lands include surface water areas such as lakes and rivers; as well as dedicated lands (i.e. historical and cultural works, sports and recreational areas, airports, seaports and lands for national defence facilities). At the present there are still relatively more people living in the rural areas of Hanoi, estimated at 3,801,400 persons as compared to those residing in the urban areas at 2,816,500 persons. However, the rural areas are currently experiencing a growing shift to urbanization, where agricultural lands for food production are gradually reducing due to land use changes to non-agricultural functions such as expansion of transport facilities (i.e. highways, roads, rails) and establishment of new economic growth areas such as Hoa Lac High-Tech Park, New Towns Phap Van, Tay Ho Tay, Sai Dong, Viet Hung (Stage 2).

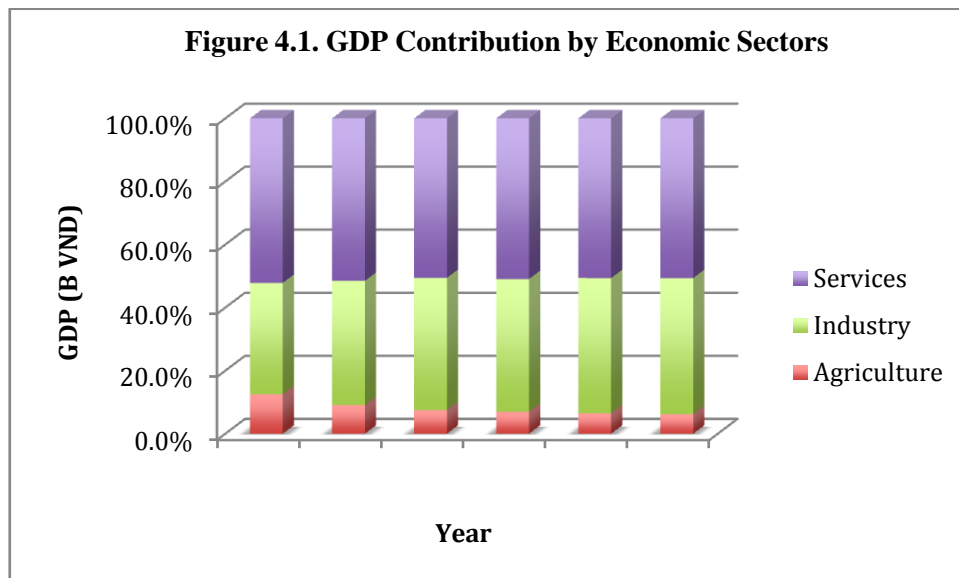
The Gross Domestic Product (GDP) growth rate of about 11% to 13% per year was recorded from 1995 to 2008. From 2009 to 2011, the growth rate tended to range within the range 10% -11% per year due to global economic downturn's impact on Vietnam, including Hanoi. However, the growth rate of Hanoi compared to the country is still high, as the country has only about 6.0% - 6.5% growth rate per year. While the total GDP is increasing, it is worth

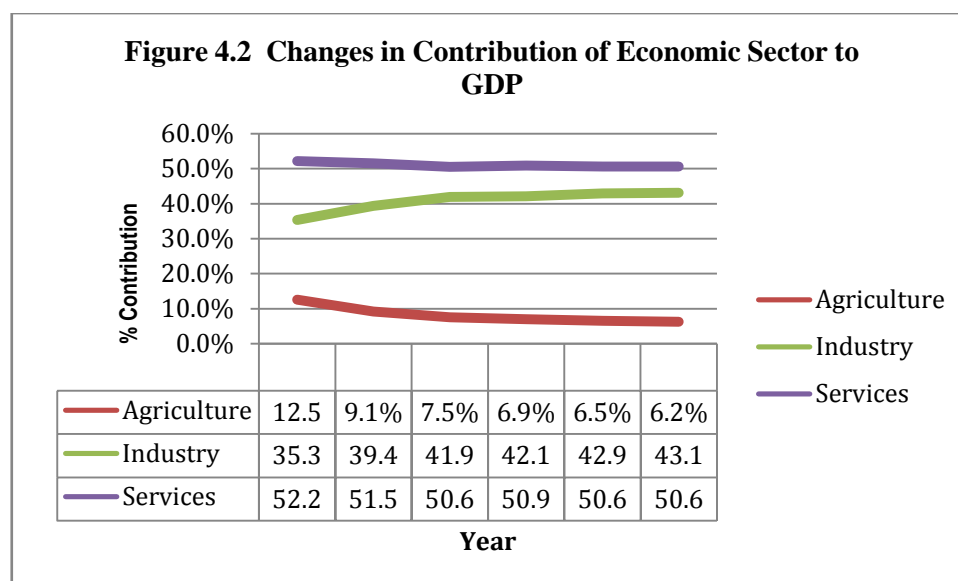
noting that the percentage contribution of the three economic sectors, namely Agriculture, Industry and Services, are changing. From 2000 to 2010, the percentage contribution of Services has a slight reduction (from 52.2% to 50.6%); however, the industry sector has grown (from 35.3% to 43.1%) at the expense of agriculture sector (from 12.5% to 6.2%). It is worth noting that the growth in the tourism industry has contributed to the services sector. Already new tourism related facilities have emerged such as 5-star hotels, resorts, among others that cater to international visitors that attend international events held in the country, as well as plain sight-seeing tours. However, the establishment of more industrial estates have significantly added more revenues to this sector. **Table 4.2** and **Figure 4.1** indicate the contribution of each economic sector from year 2000 up to 2010. **Figure 4.2** provides the table and graph of changes in the contribution of the 3 economic sectors to GDP.

**Table 4.2. Gross Domestic Product (by 1994 prices) Contribution by Economic Sectors (Billion VND)**

Year	Total	Agriculture	Industry	Services
2000	26,228	3,282	9,265	13,681
2005	44,130	4,013	17,373	22,744
2007	55,704	4,183	23,357	28,164
2008	61,635	4,267	25,970	31,398
2009	66,175	4,272	28,402	33,511
2010	73,478	4,568	31,694	37,216

Source: Hanoi Statistic Yearbook



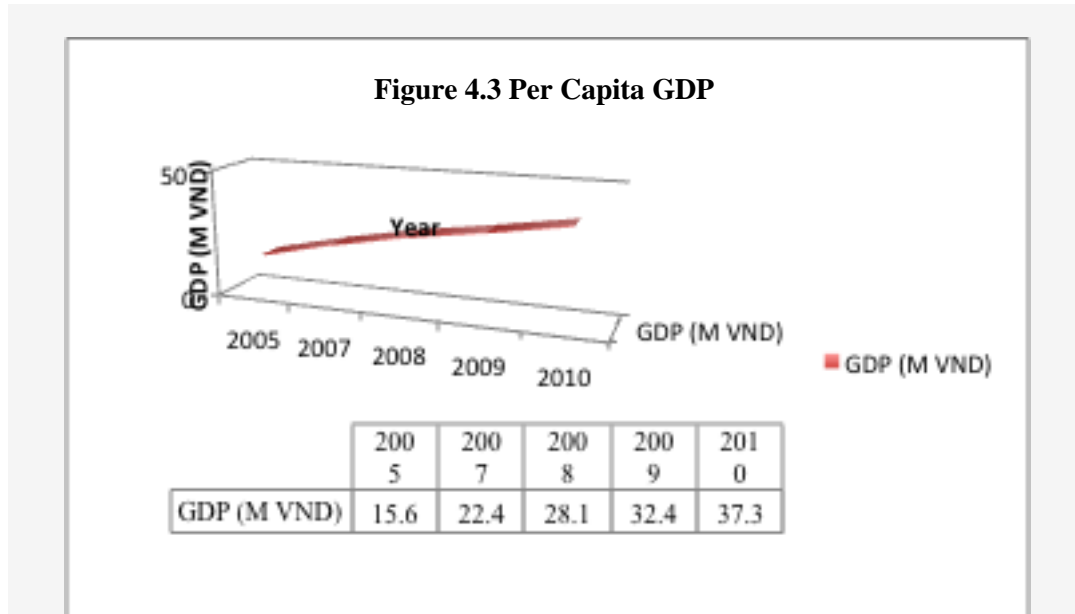


Based on Hanoi Statistical Year Book of 2010, the comparison of economic indicators shows that Hanoi is second only to HCMC in terms of GDP, GDP growth rate, industrial growth output index, export turnover and total state revenue. Hanoi generated a GDP (in 1994 prices) of 73,478 billion VND with GDP growth rate of 11.4%; its industrial growth output index was valued at 797,202 billion VND with export turnover of 8,109 million USD; and the City was able to generate a revenue of 100,000 billion VND. The capital city with 7.6% of the country's population contributed 13.3% of GDP, 13.6% of industrial gross output and 11.3% of total export turnover. **Table 4.3** contains more details on the economic indicators for Key Cities in Vietnam as well as for the whole country in the year 2010.

**Table 4.3. Comparison of Economic Indicators for Key Cities in Vietnam**

Criterion	Units	Vietnam	City			
			Hanoi	HCMC	Haiphong	Danang
Average Population	1,000 persons	86,930	6,6179	7,396	1,857	0.926
People employed in State sector	1,000 persons	---	597.0	392.2	117.8	---
GDP (1994 prices)	Billion VND	551,609	73,478	150,943	24,004	10,273
GDP Rate Increase	%	6.8	11.4	11.8	11.0	11.5
Index of Industry Gross Output	Billion VND	797,202	108,205	209,371	43,289	12,504
Export Turnover	Million USD	71,629	8,109	20,967	1,954	623
Total Revenue of State Budget	Billion VND	---	100,000	162,378	37,265	10,317

*\*Source: Hanoi Statistical Yearbook 2010*



Compared to 2005, average per capita income in 2010 was 2.1 times more at 37.3 million VND equivalents. However, due to inflation from 2009 to date at nearly 19%, the value of real per capita income is much reduced.

In 2010, 30% of Hanoi's population belongs to low-income group. If seasonal immigration (people residing in the City for at least 6 months) from provinces is considered, the proportion of low-income group would increase to about 35%. Approximately 45% of households belongs to middle-income group while the remaining approximately 20% constitutes high-income group. Note that if compared to 2006, the ratio of high-income group has declined to about 12%. While the proportion of high-income group has been reduced, the income level difference has significantly increased leading to a significant rich-poor income disparity. Also the income levels prevalent in urban and rural areas also vary significantly, even though the average income per capita annual has increase.

#### 4.1.4. Migration

Hanoi's land area has significantly increased after its merger with the former Ha Tay province, thereby garnering a current population of over 6.5 million people. Population growth is made due to the following factors:

- a. Population growth due to natural birth: The average annual birth rate is about 1.2%, which translated to the addition of over 8,500 people to the City's population per year;
- b. Population growth due to in-migration: Physical movement of people to the city for the various purposes such as work as migrant workers, education, performance of official state duties and others. There are three types of in-migration, including:
  - i) Organized migration: Movement from provinces to Hanoi by people performing official state functions/duties such as mobilization in the armed forces (army, police), taking on official state functions (i.e. position of leadership in government offices, scientific research facilities, academic institutions and others) and attending schools as students in colleges, vocational schools, and other academic institutions.
  - ii) Spontaneous Migration: This involves the movement of people to the city to find livelihood opportunities and seek residency. Most of these migrant workers seek mostly manual labor. They work as street cleaners, non-skill construction workers,

heavy equipment maintenance crew, loggers, messengers, porters at the seaport docks, transport workers, market vendors, dish washers, waiters in restaurants, security guards, housemaids and others. It is worth noting that there are also a small number of self-employed people that move to Hanoi for employment as skilled workers such as electronics technicians, civil construction workers, automechanics, and others. There is likewise an even smaller group of migrant professionals such as doctors, lawyers, artists, pilots, executives in private companies or international organizations.

- iii) Seasonal Migration: This involves the movement of people to Hanoi on a short-term basis to trade goods, attend seminars/workshops/conferences, sign contracts, and others. Those people often do not stay long in Hanoi, their visits last from a few days to 1 or 2 months at most.

A review of the migration information taken from the Hoan Kiem District statistics office shows that, in 2010, a total of 3,146 persons left the District bound for undetermined destinations, of which 1,354 people (43%) are women. Of these out-migrants, about 375 people (12%) left for various provinces. Similarly, during the same year (2010), about 3,687 people migrated to the District, of which 1,734 people (47%) are women. It is worth noting that 808 people representing 21.9% of total in-migrants are from provinces, the rest may have come from other areas within Hanoi. Also 435 people (11.8%) of the in-migrants from provinces are women. The migration statistics indicate that there is a net in-migration to Hoan Kiem District and part of it comes from people originating from the provinces. The other parts of Hanoi show a similar population dynamics. **Table 4.4** contains more details on the migration statistics from Hoan Kiem District of Hanoi.

The out-migration from the provinces can be attributed to the following:

- a) The area of productive land per capita in the rural areas is declining due to natural population growth and change in land use to non-agricultural for use in industrial zones;
- b) Low farm income which motivates the farmer to seek better earning jobs in the urban areas;
- c) Many livelihood opportunities in the urban areas that can provide more incomes as compared to the rural areas.

**Table 4.4. Migration Statistics per Ward in Hoan Kiem District ( 2010)**

Name of Wards	Out-Migration from Hoan Kiem District				In-Migration to Hoan Kiem District			
	Total Out-Migration	Female	Migration to Provinces		Total In-Migration	Female	Migration from Provinces to Hanoi	
			Total	Female			Total	Female
Cua Nam	185	64	22	11	171	87	53	33
Tran Hung Dao	261	107	23	13	350	149	60	29
Hang Bai	138	69	15	9	766	139	20	9
Phan Chu Trinh	168	62	8	5	90	99	62	31
Trang Tien	127	56	8	5	178	99	29	13
Hang Bac	185	60	10	6	48	39	26	16
Ly Thai To	161	66	14	6	83	86	37	18
Hang Buom	197	81	20	11	20	58	24	11
Dong Xuan	183	107	22	13	132	99	63	38
Hang Dao	95	55	6	2	50	84	37	25
Hang Ma	121	77	17	9	190	103	47	25

Hang Bo	190	74	16	9	111	84	52	34
Cua Dong	175	75	12	7	151	90	54	24
Hang Bong	146	78	17	9	126	93	34	20
Hang Gai	192	70	16	9	117	50	35	17
Hang Trong	149	65	14	8	158	80	43	24
Phuc Tan	172	73	60	29	263	73	64	33
Chuong Duong	301	115	74	35	683	220	69	35
<b>Total</b>	<b>3,146</b>	<b>1,354</b>	<b>375</b>	<b>197</b>	<b>3,687</b>	<b>1,734</b>	<b>808</b>	<b>435</b>

*\*Source: Statistical Section of Hoan Kiem District*

#### **4.1.5. Advantages of In-migration**

In-migration has significantly contributed to the enrichment of the population in terms of the quality of people residing in the area. In view of this, many scientists, academicians, economic managers and leading experts for economic development have moved to Hanoi and contributed to the city's development.

Currently, Hanoi has many industrial and hi-tech parks that have been attracting more skilled workers, who bring with them their technical expertise gained from working in similar establishment in provinces. Migrants like these further enrich the human stock within the city thereby providing more quality human resources for economic development purposes.

#### **4.1.6. Negative effects of In-migration**

In influx of people into the country's capital, especially spontaneous in-migrants, has also brought negative effects such as chronic vehicular traffic volume increase, which has been further aggravated by slow improvement of transport infrastructure of Hanoi. In-migration also causes significant pressure on available housing, medical treatment and academic facilities and has adverse impact to the environment. Adverse effects of in-migration also include increase in social evils and reduction of aesthetic quality of the urban landscape.

#### **4.1.7. The Socio-Economic Situation in Tu Liem District**

A brief review of the socio-economic situation of the project area focuses on Tu Liem District where the Depot is located as well as elevated Stations C2 and C3, and most of the viaduct sections. It is also in Tu Liem where most of the affected persons and assets are located. Discussions on current land use within the Depot area are covered in subsequent sections, while existing environmental conditions and issues related to project construction within the facility that will serve as the metro train's garage and maintenance yard are discussed in the environment section of the Basic Design Report Supplemental Section.

Suburban Tu Liem District is currently in the process of rapid urbanization. Its population attributed to natural birth (1.01% birth rate) increased from 0.27 million in 2006 to 0.42 million in 2010, thus doubling the number of residents in the matter of 4 years. Currently, several growth centers are planned to be developed in the area such as Ciputra, Diplomatic Compound and Tay Ho Tay area, where developers are actively engaged in planning and actual implementation of their development master plans, duly approved by the HAUPA and the PMU for the New Urban areas of Hanoi.

The agricultural production levels in the District have been declining. Output levels in agricultural sector in 2006 reported at 2.7% more than previous year's figure but dropped 0.4% in 2008 and further declined 3.0% in 2010. This declining farm production phenomenon can be attributed mostly to land use conversion from agricultural land to other purposes such as residential and commercial. In contrast, industrial production and services are reported to have improved considerably.



Figure 4.4. Diplomatic Compound under development in TuLiem District (foreground) with affluent residential area at background

The economic structure of Tu Liem consists of three sectors, namely: industries, services and agriculture, each had contribution in 2006 of 78.9%, 17.2% and 3.9% respectively. However, in 2010, the sectorial contribution to the economy changed considerably to 79.2%, 19.1% and 1.7% for industry, services and agriculture sectors respectively. The proportion of industry has increased at the expense of agriculture. The net increase in gross domestic product as a result of the rapid urban growth however yielded higher per capita annual GDP of 25 million VND in 2010 as compared to 9.5 million VND 4 years earlier. While the poverty rate slightly increased (6.6% in 2006 to 7.3% in 2010), unemployment was reported to decline (4.2% in 2006 to 2.24% in 2010) with many jobs created (6,550 jobs in 2006 to 8,500 jobs in 2010). **Table 4.5** contains the details on the socio-economic indicators of Tu Liem District.

**Table 4.5. Socio-Economic Indicators of Tu Liem District**

Socio-economic Criteria	Units	Year				
		2006	2007	2008	2009	2010
1. Average Population	Person	274,394	290,265	316,433	395,146	420,000
2. Natural Population Growth Rate	%	1.0	1.03	1.01	1.01	1.01
3. Gross Domestic Product (by 1994 Prices)	%	20.8	19.09	22.8	15.4	16.4
4. Contribution to Local Economic Structure by Sectors	%	100	100	100	100	100
-Industry	%	78.9	83.6	84.0	81.0	79.2
-Services	%	17.2	13.7	13.7	17.0	19.1
-Agriculture	%	3.9	2.7	2.3	2.0	1.7
5. Export Turnover	Million USD	1.668	16.947	23.985	13.923	15.000
6. Average Annual per Capita Income	Million VND	9.5	13.7	17.8	21	25
7. Skilled Worker Rate	%	39	41.5	44.2	47.15	50
8. Unemployment Rate	%	6.6	6.8	7.0	7.2	7.3
9. Poverty Rate	%	4.2	2.85	1.7	3.04	2.24
10. New job creation	Person	6,550	6,815	7,830	8,000	8,500

\*Source: Hanoi Statistical Yearbook 2010

## 5. LEGAL FRAMEWORK

### 5.1 LEGAL POLICY FRAMEWORK

The construction and operation of UMRL2 will entail involuntary resettlement impact on the residents and other persons that have interest on assets located within the ROW and Depot. Under relevant GOV laws and the social consideration policy of JICA, all persons or parties that are adversely affected by ODA projects are entitled to compensation and other support in order that they will be assisted to be restored to their pre-project socio-economic conditions.

Under UMRL2 project, appropriate GOV laws will be followed in the pursuit of land recovery and mitigation of social impact. These laws/regulations include:

- The 1992 Constitution of the Socialist Republic of Vietnam;
- Law No. 13/2003/QH11 of Congress - Socialist Republic of Vietnam on Land;
- Law No. 30/2009/QH12 of Congress - Socialist Republic of Vietnam on Urban Plan;
- Decree 181/2004/ND-CP dated 29/11/2004 – Regulation on implementation of Land Law approved by Congress Delegation XI, 4<sup>th</sup> Session on 26 November 2003;
- Decree 188/2004/ND-CP dated 16/11/2004 – Stipulation on calculation method for land prices, price frame for different types of land and valuation of local specific lands;
- Decree 197/2004/ND-CP dated 03/12/2004 - Compensation, support and resettlement when land is recovered by the State;
- Decree 17/2006/ND-CP dated 16/11/2006 – Stipulation on modification and supplementation of some articles in Decree 181/2004/ND-CP, Decree 182/2004/ND-CP, Decree 197/2004/ND-CP, Decree 198/2004/ND-CP and Decree 187/2004/ND-CP;
- Decree 84/2007/ND-CP dated 25/5/2007 – Supplementary stipulation on issues of land use right certificates, land recovery, land use right implementation, order and procedures for compensation, support and resettlement in case of land recovery by the state and grievance redress;
- Circular 06/2007/TT-BTNMT dated 02/7/2007 – Guideline on the implementation of some articles of Decree 84/2007/ND-CP dated 25/5/2007 of the Government;
- Decree 123/2007/ND-CP dated 27/7/2007 - Modification and supplementation of some articles in Decree 188/2004/ND-CP dated 16/11/2004 of the Government;
- Circular 145/2007/TT-BTC dated 06/12/2007– Guideline on the implementation of Decree 188/2004/ND-CP and Decree 123/2007/ND-CP of the Government;
- Decree 69/2009/ND-CP dated 13/8/2009 – Supplementary stipulation on planning, land use planning; land recovery, compensation, support and resettlement when the State recovers land; land price; land allocation; land leasing; land use right certificate (LURC), ownership right of houses and other assets attached to land and land use extension;
- Circular 14/2009/TT-BTNMT dated 01/10/2009 – Detailed stipulation of some contents on compensation, support and resettlement and order and procedure in land recovery, land allocation and land leasing in Decree 197/2004/ND-CP, Decree 17/2006/ND-CP, Decree 84/2007/ND-CP and Decree 69/2009/ND-CP;
- Decree 39/2010/ND-CP dated 07/4/2010 – Regulation on management of urban underground construction space in Vietnam;
- Circular 57/2010/TT-BTC dated 16/4/2010 – Regulation on cost estimation, use and finalization of expenses for compensation, support and resettlement when the State recovers land;
- Decision 108/2009/QĐ-UBND dated 29/9/2009 –Promulgation of regulation on compensation, support and resettlement upon land recovery by the State in Hanoi area;
- Decision 48/2011/QĐ-UBND dated 26/12/2011 – Amending and supplementing some articles of the regulation issued with Decision 02/2010/QĐ-UBND dated 18/01/2010 of HPC on land recovery, land allocation, land leasing and change in land use purpose

to implement investment projects and build rural houses in rural residential zones in Hanoi area;

- Decision 02/2010/QĐ-UBND dated 18/01/2010 – Promulgation of regulation on land recovery, land allocation, land lease and change in land use purpose to implement investment projects and build rural houses in rural residential zones in Hanoi area;
- Decision 45/1999/QĐ-UBND dated 04/6/1999 – Promulgation of “Temporary regulations on construction, conservation and improvement management of Hanoi’s ancient quarter”;
- Decision 35/2011/QĐ-UBND dated 05/12/2011 – Promulgation of construction prices for new houses, temporary houses and architectural structures as a basis for valuation of compensation and support when the State recovers land in Hanoi area;
- Decision 50/2011/QĐ-UBND dated 30/12/2011 – Promulgation of regulation on prices of lands in Hanoi area;
- Notification 6323/STV-BG dated 29/12/2011 of Hanoi Department of Finance – Promulgation of unit prices in compensation and support for trees, crops and livestock on land with water surface to serve land clearance works in Hanoi area in 2012.

Also, the JICA Guidelines for Environment and Social Consideration (April 2010) and JBIC Guidelines for Confirmation of Environment and Social Consideration (April 2002) will likewise be used to guide the land acquisition and resettlement process.

## **6. INSTITUTIONAL FRAMEWORK**

### **6.1 HANOI METROPOLITAN RAIL TRANSPORT PROJECT BOARD (HRB)**

HRB acts on behalf of the Government and HPC as the Project Owner for Hanoi Urban Railway Construction Projects. Project Implementation Department 2 (PID2) was established in HRB to oversee the planning and implementation of the UMRL2 Project. Site Preparation Department (SPD) in HRB is responsible for Hanoi Urban Railway Construction Projects including UMRL2 Project. One of the key responsibilities of the Project Owner is to ensure that Vietnam land laws as well as JICA social consideration policies are complied with in the Project planning and implementation. HRB will have the following tasks:

- Co-ordinate with the concerned District People’s Committees (DPCs) to prepare the Compensation, Support and Resettlement Plan (CSRP) and implement compensation, support and resettlement works;
- Participate with the concerned DPCs in the public disclosure of Compensation, Support and Resettlement Plan (CSRP); participate in the dissemination of project information; organize public consultation meetings with PAPs and other stakeholders;
- Secure the Socio-economic Data, Detailed Measurement and Survey Data, Resettlement Plan and Compensation Plan from concerned DPCs and hand over these data to the General Consultant for the preparation of the RAP;
- Secure JICA’s concurrence to the Resettlement Action Plan prepared for the project;
- Design and implement an internal monitoring system that shall capture the overall progress of the CSRP and RAP preparation and implementation; prepare quarterly progress reports for submission to HPC and JICA;
- Hire and closely coordinate with an External Monitoring Agency (EMA) that shall perform a third-party monitoring and evaluation of the RAP updating and implementation.

The CSRP and RAP preparation and implementation organizational framework is found in **Figure 6.1**.



- Confirmation on compensation, support and resettlement amount paid by the Project Owner to organizations, households and individuals for each project according to approved plan
- Cost estimate for compensation, support and resettlement as regulated by HPC
- Regulation for lot drawing and resettlement plan
- Revoke the certificates of land use right and house ownership for households and individuals with lands and houses totally recovered; modify certificates of land use right for households and individuals with lands and houses partly recovered; instruct people with recovered land to declare and perform financial responsibilities before receiving certificates of land use right and house ownership in case of entitlement for land allocation and resettlement housing purchase;
- Based on order and procedures for compensation, support and resettlement implementation stipulated at Chapter VI of Decision 108/2009/QĐ-UBND, DPC assigns tasks and stipulates rights and responsibilities of its Departments, boards, CPCs and civil servants in implementation;
- Settle claims and accusations of households, individuals and organizations; issue involuntary land decisions for households, individuals, organizations and communities in accordance with delegation and authority under Articles 69 and 70, Chapter VIII of Decision 108/2009/QĐ-UBND.

#### **6.4 COMMUNE/WARD PEOPLE’S COMMITTEE (CPC/WPC)**

The responsibilities of the CPC/WPC related to resettlement include the following:

- Co-ordinate with the project owner or organization tasked with land clearance works and associations to disseminate and propagandize people with recovered land conform to land recovery policy of the State: implementation plan and progress, policy and mechanism, resettlement, etc.
- Confirm in writing the contents stipulated at Point (b), Item (2), Article 53 of Decision 108/2009/QĐ-UBND; confirm limit on agricultural land allocation in area with land clearance to implement project;
- Implement decisions on approval of detailed compensation, support and resettlement plan of DPC to each land user/house owner;
- Co-ordinate with related agencies to implement compensation, support and resettlement order and procedures as regulated in Decision 108/2009/QĐ-UBND;
- Post publicly decisions on resolving claims and accusations and decision on approval of compensation, support and resettlement plan of related state authority.

#### **6.5 DISTRICT COMPENSATION, SUPPORT AND RESETTLEMENT COMMITTEE (DCSRC)**

The DCSRC is the representative of DPC in compensation, support and resettlement works. The main responsibilities of the Committee are as follows:

- Instruct the project owner in the following works:
  - Prepare land clearance implementation plan
  - Prepare and submit the CSRP to DPC for approval of
  - Implement the CSRP approved by DPC and organize the handover of the site
- Check the legal status of documents and necessary conditions for the organization of compensation, support and resettlement works to submit to DPC for the establishment of CSR Council;
- Direct and instruct the Task Force in investigating the data statements on land and assets of people with recovered land;

- Supervise the implementation of confirmation contents from CPC and related agencies according to approved progress plan;
- Based on actual situation, co-ordinate with people having land allocation or land leasing by the State to propose solutions for handling difficulties in compensation, support and resettlement works and report to CSR Council;
- Prepare and submit the regulation on resettlement lot drawing to DPC for approval, supervise and instruct the implementation of the regulation;
- Receive people, answer queries and guide the organization of compensation, support and resettlement works;
- File and manage documents and plans on compensation, support and resettlement in the area as regulated by laws;
- Consolidate and send monthly, quarterly, bi-annual and annual reports on land clearance works to City Land Clearance Board.

Besides, based on actual situation, DPC can assign other tasks to DCSRC.

## **6.6 DISTRICT COMPENSATION, SUPPORT AND RESETTLEMENT COUNCIL**

The main responsibilities of the District CSR Council are as follows:

- Research and propose timely to DPC to report to HPC for resolution of difficulties in application of compensation, support and resettlement policy based on actual situation and suitability to laws;
- Ask related agencies for confirmation documents for each land user/house owner as stipulated in Article 53 of Decision 108/2009/QĐ-UBND to have legal basis for the preparation, appraisal and approval of CSRP;
- Appraise and submit to DPC for approval and implement the CSRP; apply fully and correctly the policy on compensation, support and resettlement of HPC.

## **6.7 TASK FORCE**

The main responsibilities of the Task Force are as follows:

- Distribute declaration forms, instruct people having recovered lands and/or houses to fill the form; instruct time and place for form collection; disseminate survey plan and verify declaration data;
- Organize examination and re-examination and prepare reports on examination, re-examination and verification of land area, quantity and type and specification of assets on land within land recovery boundary of each land user/house owner; be responsible before law on the correctness of examination data;
- Send documents to related agencies for confirmation as stipulations in Article 53 of Decision 108/2009/QĐ-UBND;
- Co-ordinate with DPC in public posting; send compensation, support and resettlement draft plan, approved plan and collection of queries and opinions from people with recovered lands and/or houses and contributing opinions from other people to report to CSR Council;
- Sign the minutes on land or house handover with people having recovered land.

## **6.8 GENERAL CONSULTANTS (GC)**

The General Consultants will have the following tasks:

- Assist HRB in its role in the land clearance process for the UMRL2 project;
- Identify the training needs of, and design and conduct training for, concerned personnel of HRB, DCSRC on resettlement planning and implementation;
- Advise HRB on GOV land laws and JICA Social Consideration Policy and other relevant policies and operational guidelines;

- Prepare the Resettlement Action Plan (RAP) for consideration of HRB and JICA for use in monitoring the progress of land clearance work in UMRL2 and reference of the External Monitoring Agency;
- Liaise with the External Monitoring Agency (EMA), ensuring that the findings and recommendations are discussed the DCSRC for appropriate action;
- Assist in the preparation of quarterly progress reports on resettlement.

## 7. ELIGIBILITY

The implementation of the UMRL2 will entail the possible loss of houses, residential and agricultural lands, and livelihood. Appropriate compensation will be provided to the affected households based on existing GOV and HPC Decrees/Decisions as well as JICA social consideration policies. **Table 7.1** below provides the type of losses, areas of law/policy application, eligible persons/institutions, and the corresponding entitlements and other relevant information.

**Table 7.1. Eligibility and Entitlement Matrix**

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
<b>Compensation and support for land</b>				
1	Permanent loss of productive land	Land users with LURC; eligible land users according to regulations by law to receive LURC; having land allocation decision issued by state authority	Cash compensation for recovered land area with the price corresponding to land use purpose as stipulated by HPC	
		Land users without LURC or not eligible to receive LURC	<ul style="list-style-type: none"> <li>- Cash compensation based on HPC official unit price if the recovered land has no dispute and no violation of announced plan.</li> <li>- If the user doesn't meet the conditions for compensation, support can be considered depending on each case.</li> </ul>	
		Land users with temporary right or leasing public land	<ul style="list-style-type: none"> <li>- Cash compensation for all trees on land based on HPC official unit price.</li> <li>- Cash compensation for amount invested in land or the remaining value of land lease contract.</li> </ul>	
2	Permanent loss of	Land users with LURC; eligible	Similar to productive land recovery	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
	residential land	land users according to regulations by law to receive LURC; having land allocation decision issued by state authority		
		Land users without LURC or not eligible to receive LURC	Similar to productive land recovery	
3	Recovery of agricultural land and non-agricultural land from organizations	Organizations with land allocation or land lease by the State that have paid land use money or received transfer from lawful land users	Compensation when the State recovers land if the money paid for land use or transfer doesn't originate from State budget	
		Organizations with land allocation or land lease by the State	No compensation when the State recovers land in case the money paid for land use or transfer originates from State budget. If the remaining investment cost on land doesn't originate from State budget, that cost will be compensated.	
		Organizations that are State administrative agency or State-owned enterprise having land allocation or land lease by the State without paying land use money or with land use money originating from	<ul style="list-style-type: none"> <li>- No compensation when the State recovers land but only compensation for investment cost on land if the investment money doesn't originate from State budget</li> <li>- Cash support according to the investment project approved by authority in case of relocation to new establishment</li> </ul>	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
		state budget		
		Economic organizations with land allocation before 01/7/2004 to build project infrastructure and allowed to use land in long-term for non-agricultural purposes without paying land use money when changing purpose to residential land	Compensation as residential when the State recovers land	
4	Compensation for renters with loss	Renters with land and house affected by project	<ul style="list-style-type: none"> <li>- Compensation for all assets on land based on HPC official unit prices</li> <li>- Movement support for renters</li> </ul>	
5	Compensation for recovered agricultural land in residential area	Land users with LURC; eligible land users according to regulations by law to receive LURC; having land allocation decision issued by state authority	<ul style="list-style-type: none"> <li>- Support equal to 30% average land price in the area beside compensation according to agricultural land price with the same land use purpose. The support area is based on actual recovered area but doesn't exceed 5 times local land allocation limit.</li> <li>- No support for job change or job creation</li> </ul>	
6	Support for agricultural land or garden and pond land	Land users with lawful right to agricultural land or garden and pond land	<ul style="list-style-type: none"> <li>- Support equal to 70% land price of the lot with houses for households or individuals using before 15 October 1993</li> <li>- Support equal to 40% land price of the lot with houses for households or individuals using from 15 October 1993 to before 01 July 2004</li> <li>- No support for job change or job creation</li> </ul>	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
7	Support when the State recovers land with time limit	Land users with lawful use right according to state regulations	<ul style="list-style-type: none"> <li>- Compensation for assets and structures on land</li> <li>- Support of 50.000 VND/m<sup>2</sup> for rice-growing land and 50.000 VND/m<sup>2</sup> for other agricultural land</li> <li>- Exemption of all land lease money and land use tax in temporary recovered time and the next 3 years to for land restoration</li> </ul>	
<b>Compensation and support for assets on land</b>				
8	Houses, shops and structures totally affected or partly affected but the rest is not usable	Owners of houses, shops and structures with permits or houses, shops and structures without permits before 01/7/2004 on land with lawful use right according to state regulations	Compensation of 100% value based on HPC official unit prices for new construction of houses and structures at the time of compensation	
9	Houses, shops and structures partly affected but the rest is usable	Owners of houses, shops and structures with permits or houses, shops and structures without permits before 01 July 2004 on land with lawful use right according to state regulations	<ul style="list-style-type: none"> <li>- Compensation of 100% value for affected part based on HPC official unit prices for new construction of houses and structures</li> <li>- Compensation of restoration cost for the house front</li> </ul>	
10	Houses, shops and structures built on agricultural, forestry, aqua-cultural land or land ineligible for	Owners built the structures before 01/7/ 2004.	<ul style="list-style-type: none"> <li>- Support of 80% value of compensation in items (8) and (9) above for structures not violated land use planning, not violated structure protection corridor or built when planning wasn't available; structures built before 15/10/1993 in violation of planning but confirmed</li> </ul>	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
	compensation		by CPC of not having any prevention and handling documents from authority - Support of 50% value of compensation in items (8) and (9) above for structures built from 15/10/1993 to 01/7/2004 in violation of planning but confirmed by CPC of not having any prevention and handling documents from authority	
11	Support for demolition and movement of assets	Owners of structures or assets not in regulation for compensation	- Support equal to 10% current value of the assets	
12	Support for grave relocation	Households with affected graves	- All relocation expenses including excavation, movement and re-burial will be compensated based on latest HPC official unit rates; relocation location will be decided by authority. - Additional land support of 3,000,000 VND/grave in case the State can't arrange relocation location	
13	Compensation and support for cultivated plants and livestock	Lawful owners of affected subjects	- DPCs stipulate compensation level for cultivated plants and livestock not exceeding prices stipulated by Department of Finance. - For cultivated plants and livestock that can be moved to new location, based on actual situation, DPCs stipulate the level of support for loss and movement expense but not exceeding 30% compensation level. - No compensation or support for livestock on land or water surface that are in harvest time - For affected crops, PAPs will be notified about construction schedule at least 3 months earlier. - PAPs are still allowed to cultivate on the recovered land by the State	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
			until construction is ready to be started.	
<b>Other support policies</b>				
14	Relocation support	Households and individuals having to relocate	<ul style="list-style-type: none"> <li>- 3,000,000/HH in case of relocation within the same city and 5,000,000/HH in case of relocation to other city/province</li> <li>- Additional support of 3,000,000/HH in case having enough conditions to arrange resettlement but volunteering to hand over the land and self-arrange temporary residence.</li> <li>- Support for renting temporary houses of 500,000/household member or 1,000,000/single household but not exceeding 3,000,000/HH/month. Support time is calculated from handing over the land until having notification to receive resettlement houses or until receiving resettlement land plus 6 month for housing construction. In case of partly recovered land but the land user doesn't have resettlement arrangement, if the land handover is on schedule, households will get support for 6 months with total house demolition and 3 months with partial house demolition.</li> </ul>	
		Organizations having to relocate to new establishment	<ul style="list-style-type: none"> <li>- Support for leasing of headquarter, workshop, office, warehouse if the city haven't arranged new establishment</li> <li>- Support level equal to lease area (not exceeding current area) multiplying with HPC official unit rate at lease time.</li> <li>- Support time is calculated from handing over the land until receiving notification of HPC on new location but doesn't exceed 12 months.</li> </ul>	
15	Support for	Households	- Support for stabilization of life if	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
	stabilization of life and production	directly participating in agricultural production	<p>being recovered 30-70% agricultural land. Support time is 6 months if not having to change residence and 12 months if having to change residence.</p> <p>- Support for stabilization of life if being recovered more than 70% agricultural land. Support time is 12 months if not having to change residence and 24 months if having to change residence.</p> <p>- Support level for each household member is 30 kg rice/month converted to cash.</p>	
		Households having recovered land with resettlement arrangement or totally demolished houses	<p>- Support for 6 months for households having recovered land with resettlement arrangement or totally demolished houses</p> <p>- Support for 3 months for households having partly demolished houses or partly recovered land</p> <p>- Support level for each household member is 30 kg rice/month converted to cash.</p>	
		Economic organizations, households and individuals participating in business and production or leasing business and production location with business registration and fulfilment of financial responsibility to the State	<p>- Support of 30% annual after-tax income based on average income in the last 3 years</p> <p>- Support for employees with social security of organizations having disrupted operations due to project impact. Support level equals to minimum salary multiplying with corresponding profession rank. Maximum support time is 6 months.</p>	
16	Support for job change	Households and individuals	- Cash support for job change and job creation equal to 5 times	

Table 7.1. Eligibility and Entitlement Matrix

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
		directly participating in agricultural production	<p>agricultural land price corresponding with recovered agricultural land area</p> <p>- One-time support for job learning expenses for PAPs in working age and having job learning need. Maximum support is 6,000,000 VND/person and not paid directly to supported person.</p>	
17	Support for policy families and families with difficulties	Households with difficulties	<p><b>Government policy:</b></p> <p>- According to the Decree No. 67/2007/ND-CP dated 13/4/ 2007 of GOV:</p> <p>+ HHs with heads in retirement age and registered as poor at CPC: 120,000 VND/HH/month;</p> <p>+ HHs with elderly heads of age 85 or over that have no retirement pension or social insurance: 120,000 VND/HH/month;</p> <p>+ HH with disabled heads and registered as poor: 120,000 VND/HH/month</p> <p>+ Women-headed HHs that are registered as poor and have children under age 16: 120,000 VND/HH/month; In addition, the children of these households can get other support such as free tuition fee, reduced tuition fee and support for books or other school supplies when they attend school or vocational training.</p> <p>- Decree No. 105/2008/ND-CP dated 16/9/2008 provides monthly allowances of 329,000 VND to 1,665,000 VND/HH/month for wounded soldiers whose strength has declined 21% to 100%.</p> <p><b>Ha Noi policy:</b></p> <p>Allowance for families with wounded soldiers:</p> <p>Pursuant to Decision No. 108/QĐ-UBND, these families can get the</p>	

**Table 7.1. Eligibility and Entitlement Matrix**

No.	Type of loss	Eligible Persons	Entitlements	Implementation Issues
			<p>allowances as follows:</p> <ul style="list-style-type: none"> <li>- Support for wounded soldiers whose strength has declined:              &gt;81%: 7,000,000 VND/HH              61% - 81%: 6,000,000 VND/HH              41% - 61%: 5,000,000 VND/HH              21% - 41 %: 4,000,000 VND/HH</li> <li>- Affected households eligible for social support from government such at 3,000,000 VND as follows:              + HHs with heads in retirement age and registered as poor;              + HHs with elderly head of age 85 or over that have no retirement pension or social insurance;              + HHs with disabled heads and registered as poor;              + Women-headed HHs that are registered as poor</li> <li>- In case the households have many difficult conditions, they only get the highest support level.</li> <li>- For elderly people (regardless of gender), they will be provided with Medical Insurance equivalent to 6,000,000 VND.</li> </ul>	

*Based on Decision 108/2009-QĐ-UBND dated 29/9/ 2009; Decree 197/2004/ND-CP; Decree 69/2009/ND-CP; Decision 108/QĐ-UBND; and Decree 105/2008/ND-CP dated 16/9/2008.*

## **8. VALUATION, COMPENSATION AND SUPPORT**

The valuation of the preliminary inventoried affected assets is based on official unit rates issued by HPC. These rates include prices for lands, new construction of houses and architectural structures and compensation and support for trees and crops. For this report, HPC Decision No. 35/2011/QĐ-UBND dated 05/12/2011 is used for affected structures (please refer to Appendix 2). Similarly, Decision No. 50/2011/QĐ-UBND dated 30/12/2011 of HPC provides the values of the affected lands and Notification No. 6323/STC-BG dated 29/12/2011 of Department of Finance issues compensation and support unit prices for trees and crops in Hanoi. The rates used for the other supports are based mostly in Decree No. 108/2009/QĐ-UBND. For more details on rates of other supports please refer to Chapter 7.

## **9. RESETTLEMENT ACTION PLAN**

The project affected persons that will be severely affected by the implementation of the project such as the acquisition of their land and/or structures to allow the construction of the

project facilities will be entitled to relocation support in addition to compensation for the loss assets. The guidelines governing the provision of relocation support as well as other benefits for physically displaced persons are provided for in Decision 108/ 2009/QĐ-UBND dated 29/9/2009.

The preparation and implementation of resettlement projects are based on current regulations of HPC. For projects that serve defence, security, national benefit, public benefits and economic growth from state budget, HPC will consider and decide on the preparation and implementation of projects for resettlement areas.

After the approval of the project basic design as well as the ROW drawings, HPC will issue the necessary order to its concerned departments and DPCs to pursue the land clearance of the affected areas. In connection to this, the appropriate offices will be instructed to handle the relocation requirements of the displaced persons.

As part of the Detailed Measurement and Survey (DMS), the affected persons are to be consulted and allowed to choose the preferred relocation mode. These modes include:

- a) Land for land: This option calls for the replacement of the affected land with a plot of similar conditions or productivity and support facilities as in case of agricultural lands;
- b) Relocation to concentrated resettlement site: This option entails HPC to establish a resettlement site complete with basic social infrastructure needed by a new community (i.e. graded ground, access roads, potable water supply connection, electric power connection, communication line connection, drainage and sewerage, garbage collection, health center, school and other community facilities)
- c) Self-relocation: There are instances where the affected persons opt to resettle on their own and as such would only prefer receiving cash support.

In the case of UMRL2 project, discussions with affected persons reveal that most prefer the “land for land” mode of relocation. Majority of the PAPs are from Xuan Dinh Commune (Depot area) where the dominant livelihood is farming and pastry making. It is expected that these affected households would want to continue their original livelihood which they have been accustomed. However, in the fast urbanizing District setting where available agricultural land is fast dwindling to give way to residential, commercial, institutional and transport facilities, replacement land is a difficult commodity to find.



Figure 9.1. Two-hectare plot proposed by Xuan Dinh CPC for Resettlement Site

The second option calls for PAPs shifting to government relocation facility, which in the case of Hanoi are high rise apartments. The cost for the units will be paid by the shifting PAPs from the compensation received for their affected land and assets. In the event the resettlement apartment is not yet ready for occupation at the time of PAPs displacement, then

rental allowance will be provided to the affected households until the apartment is available, but not exceeding 6 months period.

Displaced persons that opt to do self-relocation will be provided with support for their physical transfer to the desired destination in accordance to existing HPC Decision 108/2009/QĐ-UBND dated 29/9/2009. The support level depends on where their destination will be (i.e. within Hanoi or Province). This option is normally taken by project displaced persons owning other properties or having relatives that can accommodate them within their area.

## 10. COMMUNITY PARTICIPATION

### 10.1 INTRODUCTION

During the conduct of basic design works, the participation of the District People's Committee, Commune/Ward People's Committee, community representatives and other stakeholders in the resettlement planning was focused on public consultation meetings (PCM). During these public gatherings, the participants were informed on the project's general features and requested to give their comments which would guide the project owner and GC in the basic design works. To help insure a more meaningful participation, advance information was provided to the stakeholders for them to review and formulate their respective comments, clarifications, and suggestions. There are different approaches applied, which would be the subject of the next section. Other forms of community participation has not yet been pursued (i.e. participation in the ROW boundary staking, Detailed Measurement Survey, Socio-economic surveys, etc.) as of the report writing time as the Basic Design and ROW drawing has just been completed and will be the subject to review and approval by HRB and other concerned HPC Departments.

### 10.2 METHODOLOGY

The GOV and JICA have a transparency policy that prescribes the disclosure of information to the public, especially to the people that will be most affected by its implementation. There are several types of consultation meeting conducted which include the following:

- a) Technical coordination involves discussions with the client, government agencies and other stakeholders with the end in view of coordinating project activities as it relates to the concerns of the other parties and seeking agreements to resolve issues and concerns. Examples of these meetings include discussions with government agencies such as the Academy for Science and Technology and the Military Academy (Cau Giay District) requesting these agencies to allow the project to install the generator and ventilation shaft (ancillary facility) to be placed inside their compound. Since the project will be following basically the GOV policy framework, there is no need to discuss and secure agreements with the concerned HPC and DPC Officials with respect to the land acquisition and resettlement policy framework to be adopted in the project, as this is already defined by existing laws/decrees/decisions.
- b) Public Consultation Meeting involves the holding of an activity with broader stakeholder participation which is intended to relay information and at the same time seek general consensus. The activity can be further classified as: a) first level consultation where general information are relayed and request for support to the project is solicited; b) second-level or disclosure meeting where the results of the social impact study and mitigation measures in the form of the Compensation, Support and Resettlement Plan (CSR) is presented to the PAPs and comments are sought to further refine the conclusions and recommendation; and c) final consultation meeting where the approved CSR is presented, compensation and support packages announced, relocation plan presented and implementation schedules revealed.

All proceedings of technical coordination and public consultation meetings are to be documented. The documentation may take the form of the standard "Minutes of Meeting" or Official Meeting Conclusion to be issued by the concerned District People's Committee and other local government units. All proceeding documentation is to be summarized and appended to the RAP.

### 10.3 PUBLIC CONSULTATION MEETINGS HELD

A number of technical coordination and public consultation meetings were held. These activities were conducted with the participation of concerned HRB officials as well as GC consultants and supporting staff. The meetings were participated by ranking DPC and CPC/WPC officials, concerned government institution representatives, non-governmental organizations, support groups of disabled persons and private developers. During the meetings, leaflets were distributed to the participants to provide them with basic information on the project (refer to Appendix 3). **Table 10.1** contains a matrix of the meetings held, when conducted, persons met, highlights of the meeting and other relevant information.



Figure 10.1. Public consultation meeting at Ba Đình District People's Committee

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
Depot, C3	17/8/2011	Tu Liem District People's Committee Vice-Chairman, Heads of various key Departments	<ul style="list-style-type: none"> <li>General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>Discussions revolved around the progress of land clearance at Depot;</li> <li>Vice-Chairman of DPC extended his Office's cooperation with HRB/GC.</li> </ul>	<ul style="list-style-type: none"> <li>Depot ROW boundaries approved by HAUPA last March 2011;</li> <li>DPC unaware of land clearance work at Depot site. They claim staking had not yet been pursued.</li> <li>DPC senior officials responsible for information needed by GC to proceed with the Basic Design Study were introduced by the DPC Vice-Chairman;</li> </ul>
Depot	18/7/2011	Cao Dinh Water Supply Plant Director	<ul style="list-style-type: none"> <li>General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>Cooperation was established with the water company.</li> <li>Discussions revolved on the specifications of the water supply plant, location of wells, pipeline alignments and water quality of raw waters.</li> </ul>	<ul style="list-style-type: none"> <li>Water Company Director requested GC to ensure that their water pipelines across the Depot area are not damaged during the construction and operations phase of UMRL2.</li> </ul>
	22/9/2011	<ul style="list-style-type: none"> <li>Vice-Chairperson of Xuan Dinh Commune People's Committee;</li> <li>Cadastral Officer</li> </ul>	<ul style="list-style-type: none"> <li>General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>After discussions with WPC officials on project details, <u>an expression of support was made by WPC Vice-Chairperson to the project.</u></li> <li>Cadastral Officer shared some information requested by the GC team visitors.</li> <li>Depot ROW boundary approved by HAUPA March 2011.</li> </ul>	<ul style="list-style-type: none"> <li>PAPs include farmers, military personnel &amp; their families and high school employees;</li> <li>Affected farmers and pastry makers request "land for land" mode of relocation. WPC has recommended a 2-hectare agricultural land beside Depot for relocation site. However, HPC has not made any decision up to the present on the recommendation.</li> <li>Staking of ROW boundaries has not yet been done by HPC thru DONRE. WPC officials do not know the reason for delay.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
	30/9/2011	Cadastral Officer, Xuan Dinh Commune, Tu Liem District	<ul style="list-style-type: none"> <li>• Data gathering work. Emphasis was available maps (i.e. topographic map, cadastral map, existing land-use map, master plan for District/Ward)</li> <li>• Site visit to Depot site.</li> </ul>	Site visit was not completed due to strong typhoon that hit Hanoi at that time.
	14/10/2011	Cadastral Officer, Xuan Dinh Commune, Tu Liem District	<ul style="list-style-type: none"> <li>• Data gathering work with emphasis on existing land-use inside Depot, land ownership and tenure status and approved master plan for Depot area.</li> <li>• Field work pursued to do preliminary inventory of affected buildings and trees.</li> </ul>	<ul style="list-style-type: none"> <li>• Statistics on land use and area allocation were secured.</li> <li>• Visit to military camp not allowed.</li> <li>• High school campus likewise not accessible.</li> </ul>
	18/10/2011	Cadastral Officer, Xuan Dinh Commune, Tu Liem District	<ul style="list-style-type: none"> <li>• Tree inventory at Depot site</li> </ul>	Estimated number of timber and fruit trees in commune-owned orchards was secured.
Depot (Public Consultation Meeting)	21/11/2011	<ul style="list-style-type: none"> <li>• Tu Liem DPC Land Management officers;</li> <li>• Xuan Dinh People's Committee Officials</li> <li>• HRB PID2 Officials</li> <li>• Xuan Dinh High School Officials</li> <li>• Military Camp Officer</li> <li>• Project Affected Persons (from Craft Village, Military Housing, High School Housing and others)</li> </ul>	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• A number of Project Affected Persons (PAPs) expressed their objections to the establishment of the Depot in Xuan Dinh Commune as they would be displaced from their present residence. A request was made for the facility to be relocated elsewhere.</li> <li>• Concerns were raised by some participants about the negative environmental impact that maybe created as a result of the Depot construction and operation;</li> <li>• Xuan Dinh CPC Chairman said that compensation payments for loss assets</li> </ul>	<ul style="list-style-type: none"> <li>• Public consultation meeting aimed at securing the comments of stakeholders on the project is one of the requirements for securing a planning permit in compliance to the Urban Planning Decision.</li> <li>• The Depot area will be established within an area in Xuan Dinh Commune (Tu Liem District) where the current uses are agricultural, residential and institutional (i.e. military camp, and high school). In addition, the pipelines of the Cao Dinh Water Supply Company go under the Depot area.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			would follow HPC official unit rates and relocation site would be in high-rise apartments. However, he committed to coordinate with the concerned DPC and HPC to ensure that latest HPC rates are used in computing for compensation and suitable apartments are provided to displaced persons.	
Depot	21/11/2011	Xuan Dinh High School Principal; Tu Liem Land Management Officer, Xuan Dinh CPC Chairman	<ul style="list-style-type: none"> <li>Discussions revolve around the Depot boundary, which includes a portion of the High School. Mr. Maeda commented that the Depot ROW boundary had already been approved by HAUPA (March 2011) before GC was mobilized.</li> <li>Tu Liem Land Management Officer commented that the project did not follow proper procedures in securing the Depot boundary.</li> </ul>	
Station C1	13/9/2011	“Ciputra Hanoi International City” Construction Manager	<ul style="list-style-type: none"> <li>General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>Discussions revolved around the identification of Ciputra facilities (i.e. utility lines, drainage lines, hospital, etc.) within the project alignment that may be affected and assurances by the project to provide mitigation of possible impacts.</li> <li><u>Agreement for cooperation and pursuit of further technical coordination meetings to</u></li> </ul>	<ul style="list-style-type: none"> <li>Road ROW is privately owned. Agreements need to be made as to the arrangements for the installation of project facilities within the private ROW.</li> <li>Construction of the 800-bed hospital along road alignment will require installation of additional environmental mitigation measures (i.e. anti-noise walls, dust control, limiting construction works only during regular working hours, etc.).</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			<u>resolve all issues identified.</u>	
Viaduct between Stations C1 & C2	14/9/2011	Ta Ngan PMU Vice-Project Director and Senior Staff	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Technical discussions on acceptable configuration for UMRL2 viaduct crossing Nguyen Hoang Ton Road roundabout at its intersection with Nguyen Van Huyen Road Extension.</li> <li>• Contract packages for road construction will be tendered as soon as HAUPA approves ROW drawings.</li> </ul>	<ul style="list-style-type: none"> <li>• ROW drawings prepared by PMU for upgrading Nguyen Hoang Ton Road were rejected by HAUPA 3 times.</li> <li>• PMU not amenable for GC to put viaduct posts within roundabout as there will have a 20 m wide drainage channel at the middle of Nguyen Hoang Ton Road that intersects the roundabout, which may be affected by the proposed UMRL2 structure.</li> <li>• HRB/GC to secure its information requirements from HAUPA as the PMU had already sent HAUPA all drawings and technical data related to the Nguyen Hoang Ton Road upgrading.</li> </ul>
Stations C2 & C3	15/9/2011	<ul style="list-style-type: none"> <li>• “Investment and Development Management Unit for New Urban Areas in Hanoi” Planning Office Head and Senior Staff</li> <li>• Project Director of PMU of Road Package 1 &amp; 2 (construction of Nguyen Van Huyen Road Extension)</li> </ul>	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Discussions were related to the progress of the site development at the New Urban Area. Emphasis was on the status of the ROW of Nguyen Van Huyen Road, which serves as one of the major access roads to the area.</li> <li>• <u>HAUPA had given instructions to PMU and developers of the New Urban Areas to coordinate with HRB/GC with regards to the technical aspects of their respective projects.</u></li> <li>• ROW drawings for Package 2 (Nguyen Van</li> </ul>	<ul style="list-style-type: none"> <li>• HRB/GC to coordinate with the developers of the Tay Ho Tay and Diplomatic Compound to resolve the utilities issue.</li> <li>• HRB/GC to coordinate with the developer of the property between C1 and C2 to help resolve the land clearance issue;</li> <li>• Drawings and other technical information can be provided by the PMU for Road Packages 1 &amp; 2. Other information is with the developers of Tay Ho Tay and Diplomatic Compound.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			<p>Huyen Road Extension segment covering C3 up to transition) already approved by HAUPA;</p> <ul style="list-style-type: none"> <li>• ROW drawings for Package 1 (Nguyen Van Huyen Road Extension segment covering C2 up to C3) approved in principle by HAUPA pending resolution of utility conflicts between UMRL2 and Diplomatic Compound.</li> <li>• ROW drawings for segment between C2 to C1 unapproved. Unresolved relocation issue of PAPs residing in Craft Village directly along road alignment. Portion of said village also affected by Depot.</li> <li>• Informal agreement on cooperation on resolving technical matters reached.</li> </ul>	
Station C2	24/9/2011	Diplomatic Compound PMU – Hanoi Construction Corporation, Deputy Director and key senior staff	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Discussions focused on buildings and facilities planned for installation within the Diplomatic Compound which GC needs to take into consideration when preparing the Basic Design of project structures.</li> <li>• <u>Agreement was made between Diplomatic Compound PMU and HRB/GC for exchange of technical information/drawings to ensure complementarity in both project's plans and specifications.</u></li> </ul>	<ul style="list-style-type: none"> <li>• Diplomatic Corporation PMU to comment on project Basic Designs and relay these to HAUPA, who in turn will have the final decision.</li> <li>• A number of Diplomatic Compound facilities near Station C2 and viaduct needs to be taken into consideration when preparing the Basic Design report, including: a) 5-story recreation building near lake; b) a 28-story building near ROW fronting Station C2, embassies to be relocated within the compound and others.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
Station C3	21/9/2011	Tay Ho Tay/THT Development Co. Ltd.	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• <u>Korean developer representative expressed their company's cooperation with HRB/GC for the Basic Design planning of the UMRL2 in terms of information sharing.</u></li> <li>• Discussions revolved around resolving technical issues such as relocation/ protection of utility lines and street lighting arrangements that will be affected by the project.</li> <li>• Request was made by Korean developer for HRB/GC to resolve environmental problems such as noise, dust and vibrations during construction and operations phases.</li> <li>• <u>Agreement to pursue further coordination meeting to resolve technical issues.</u></li> </ul>	Agreement was reached for friendly exchange of technical information such as project layout, site development plan, utility plans, drainage plans, etc.
Station C4	24/10/2011	Vietnam Academy of Science and Technology	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• VAST expressed their objection to the installation of ancillary building within their campus grounds. They cited environmental issues (i.e. noise, dust, vibrations) which will affect their students; and that the building of the ancillary facility at their tree park will affect their electric power substation.</li> </ul>	<ul style="list-style-type: none"> <li>• Site inspection showed that the electric sub-station is located at a distance away from proposed ancillary building site.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
	31/10/2011	Vietnam Military Technology Academy	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• The General in charge of the Academy of Military Technology is not in favor of <u>allowing the construction of the ancillary building within their school grounds</u>. He cited state security as reason. He suggested the acquisition of private lands instead.</li> </ul>	The General incharge of the Military Academy said below their school is a secret bunker where important state meetings are held. So any structures that may affect access to this facility, such as the ancillary building, are not allowed.
Stations C5 and C8	21/10/2011	Ba Dinh District People's Committee (DPC) and concerned WPC Officials	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• <u>Most DPC and WPC Officials expressed their support in principle for the project</u>, saying it will help relieve traffic congestion in their District. However, <u>they relayed their concern about the possible impact by the tunnelling works to the houses and historical relics on the ground above the alignment</u>.</li> <li>• The Vice Chairman cited his concern on the impact of Station C5 construction to the existing buildings at the intersection of Van Cao Road and Hoang Hoa Tham Road. He requested HRB/GC to find ways to save the 26 possible affected buildings.</li> <li>• DPC ViceChairman requested further public consultation meetings at ward level to be pursued in order that the people will</li> </ul>	<ul style="list-style-type: none"> <li>• The DPC Vice-Chairman said that the people living along the Van Cao and Hoang Hoa Tham Road intersection had been affected by the implementation of 3 City road improvement projects built one after the other in the same area. In view of this, it is difficult to request the people in the area to again bear the impact of another project.</li> <li>• HRB Deputy Director, Dr. Hung, assured the participants of the meeting that the GC had exhaust all options inorder to minimize the impact of the Station C5 construction to the existing buildings at the intersection of Van Cao and Nguyen Hoa Tham Roads.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			be informed on the project.	
Station C5	01/12/2011	VinhPhuc Ward (Ba Dinh District) People's Committee and other concerned sectors	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Discussion revolved around the tunnel construction method and possible environmental and safety related impact of the project on residential and business areas along the alignment at the Ward</li> <li>• VinhPhuc Ward People's Committee expressed their support to the project and will issue a letter containing this conclusion.</li> </ul>	<ul style="list-style-type: none"> <li>• There is no involuntary resettlement impact along the alignment within VinhPhuc Ward.</li> <li>• VinhPhuc Commune is found between Stations C4 and C5, and is traversed by the tunnel mostly under the Hoang Hoa Tham Street.</li> </ul>
Station C6	02/8/2011	Green Tree Company Deputy Director	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Green Tree Company will implement whatever instructions of HPC and DOC as far as the affected trees are concerned.</li> </ul>	<ul style="list-style-type: none"> <li>• Green Tree Company is under the supervision of Department of Construction (DOC), which is a line agency under HPC.</li> <li>• Green Tree Company was tasked to cut the trees affected by Metro Lines 1 &amp; 3.</li> </ul>
	8/11/2011	Green Tree Company Technical Staff and Enterprise Deputy Director	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Discussion revolved around what to do with the affected trees within the underground station location, whether to cut or transfer; as well as the cost to do such work.</li> <li>• Green Tree Company Staff requested GC to provide a copy the approved FS, tree inventory and location map of all affected</li> </ul>	<ul style="list-style-type: none"> <li>• Green Tree Company staff claimed that a formal request be sent to them before they can consider to provide a copy of their guidelines governing the cutting and transfer of trees, as well as cost for such services.</li> <li>• Since the officials of the company were not available, the staff present couldn't make any commitment. Another coordination meeting was agreed where the responsible official of the Green Tree Company should be present.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			trees for use of their company to estimate the amount they will charge HRB.	
	18/11/2001	Green Tree Company's Director	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• The Director said HRB to secure approval with HPC and DOC for acquiring their land for use in the installing the ancillary facility as well as approval for cutting affected trees.</li> </ul>	<ul style="list-style-type: none"> <li>• Green Tree Company is under the supervision of the Department of Construction (DOC). It is DOC that is authorized to approve any transfer of land under its ownership as well as authorize tree cutting or transfer.</li> <li>• In UMRT Lines 1 and 3, DOC issued instructions to Green Tree Company to cut trees affected by those projects.</li> </ul>
		Center for Women and Development (CWD)	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• CWD has no comment on the C6 Station location as this has been approved by HPC.</li> <li>• Discussions revolved around the location of the station entrance at the CWD parking lot. It was agreed that follow-up discussions be made to finalize the entrance location.</li> </ul>	<ul style="list-style-type: none"> <li>• One of the C6 entrance is located at the parking lot of the IWU fronting</li> <li>• IWU officials do not want the C6 station entrance to block the drive-way of their nearby underground parking.</li> </ul>
Stations C6 & C7	08/9/2011	Urban Management Planning, Ho Tay District People's Committee	<p>Data gathering work on:</p> <ul style="list-style-type: none"> <li>• Implementation Schedule for the Thuy Khue road improvement;</li> <li>• Details on the environmental improvement project that includes dredging of To Lich River and installation of box culvert over it.</li> <li>• The head of the Urban Management Planning office is not aware of the above road improvement project schedule nor</li> </ul>	<ul style="list-style-type: none"> <li>• The Thuy Khue Road upgrading project entails the widening of the existing road that includes land acquisition for ROW that will include portions of the Station C6 area. If the road project will be further delayed, the UMRL2 will have to acquire the ROW for the road in order to construct the underground station.</li> <li>• The To Lich River and proposed box culvert</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			has details on the drainage improvement plans.	cover alignment coincides with the Station C6 entrances, so details on this facility is needed for a better planning of the station layout.
Station C7	10/10/2011	Vietnam Institute of Architecture, Urban & Rural Planning (VIAP)	<ul style="list-style-type: none"> <li>• <u>VIAP has no objections to the project. Discussions revolved around VIAP's comments on ancillary facilities to make it compatible with their Master Plan.</u></li> <li>• Entrance and related facilities (ventilation shaft etc.) were adjusted based on the advice from VIAP, who designed the Government Office Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>• GC has revised its ancillary building location based on VIAP's advice, and has submitted the plan officially to VIAP through HRB. The plan will be added to VIAP's Master Plan after MOC's approval.</li> </ul>
Station C8	24/11/2011	Quan Thanh Ward People's Committee and Other Stakeholders	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• Discussions focused on the stations construction method, safety measures to avoid accidents. Issue on compensation for possible loss income of two hotels fronting station C8 will be relayed to HPC as the project has no authority to grant such request.</li> <li>• Quan Thanh WPC and other participants expressed their support for the project.</li> </ul>	<ul style="list-style-type: none"> <li>• Some of the meeting participants attended the earlier public consultation meeting at the Ba Dinh DPC and asked for HRB and GC representatives to answer detailed questions raised in the meeting.</li> </ul>
Stations C8, C9 & C10	28/9/2011	Urban Management Planning, Hoan Kiem District People's Committee	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• DPC agree in principle to the project. However, they were worried that the tunneling works along the present</li> </ul>	<ul style="list-style-type: none"> <li>• HRB has requested another general meeting with the DPC. Confirmation of meeting schedule is awaiting return of DPC officials from overseas visit.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			alignment will have severe impact to the houses and historical relics on the ground. DPC requested for another meeting with wider public participation be held to discuss project details.	
Station C9	09/11/2011	Hanoi Power Corporation(EVN Hanoi), Economic Police	<ul style="list-style-type: none"> <li>• General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>• <u>EVN supported the project, participated in the planning of the UMRL2 and committed to provide electric power for its operations.</u></li> <li>• ENV and Economic Police do not agree with the latest Station C9 location and suggested that it be relocated for security consideration.</li> <li>• HAUPA Director said Station C9 location has already been approved by HPC, HAUPA and the Party Standing Committee. He requested EVN to submit formally their comments on the latest C9 location and cite the reason why they object to its location, as HRB and GC had been requested by HAUPA to study the Station C9 location taking into consideration security issues.</li> </ul>	<ul style="list-style-type: none"> <li>• EVN had participated in the planning process for the UMRL2 and was familiar with the Station C9 location recommended in the approved Feasibility Study. However, they were not aware that Station C9 had been moved 60m towards their office as per the recommendations in the HAIMUD study which had been approved by HAUPA and HPC.</li> <li>• A letter was sent by EVN to HPC in 2010 requesting that security considerations be taken into account in siting the Station C9 location. HRB didnot respond to the letter.</li> </ul>
Station C10	17/11/2011	Traffic Police	<ul style="list-style-type: none"> <li>• Traffic Police Officials conclude that the ancillary facilities of Station C10 will not affected their 5-story building.</li> <li>• Traffic Police Officials have no objections</li> </ul>	<ul style="list-style-type: none"> <li>• The 5-story building within the Ministry of Public Safety compound affected by the UMRL2 houses the traffic control center of Hanoi;</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			<p>to the project station location and ancillary facility location. They will report to higher authorities on the result of the meeting.</p> <ul style="list-style-type: none"> <li>Affected land is owned by Hanoi Police so HRB needs to get their opinion on the land acquisition for ancillary building location.</li> </ul>	<ul style="list-style-type: none"> <li>HPC has granted the Traffic Police Division the budget to build a new Traffic control center in another location.</li> </ul>
Project in General	24/10/2011	Hanoi Urban Environment One Member Limited Company (URENCO), Deputy Chief of Planning Department	<ul style="list-style-type: none"> <li>General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>Discussions revolved around the acceptable handling procedures of construction waste, and capacity of URENCO to handle project waste.</li> <li>URENCO can handle construction and operations waste of project.</li> </ul>	<ul style="list-style-type: none"> <li>Most of project alignment are within the service area of URENCO (i.e. Tay Ho District – URENCO's Enterprise; Hoan Kiem District – URENCO2; and Ba Dinh District – URENCO1 Enterprise)</li> <li>Owner of waste registers with DONRE, then signs contract with URENCO to collect, transport and process industrial wastes.</li> <li>URENCO is the authorized government entity to dispose of waste in the city landfill.</li> </ul>
	25/10/2011	DOLISA, Disabled Persons Association, and Other Support Organizations	<ul style="list-style-type: none"> <li>General Project Information was presented, which includes components, alignment, and implementation schedule.</li> <li>Emphasis of presentation was on Barrier Free and Universal Design (BF &amp; UD) standards to be adopted in the basic design and construction of the Project.</li> <li><u>Representatives of DOLISA and Disabled Persons Association and Support Organization expressed their appreciation for the consideration made by HRB and GC for the welfare of their sector and placed their full support to the project and</u></li> </ul>	<ul style="list-style-type: none"> <li>HRB &amp; GC will hold another meeting with DOLISA and the Disabled Persons Association and other Support Organization to discuss the UMRL2 Basic Design report after its approval by HRB.</li> <li>After project construction is completed, the same group above will be invited to review the project's conformity to BF &amp; UD guidelines.</li> </ul>

**Table 10.1. Highlights of Meetings Held**

Project Component	Meeting Date	Persons/Office Met	Highlights of Meeting/Visit	Remarks
			<u>extended their hand of cooperation for the monitoring and field testing of project facilities.</u>	

## **11. GRIEVANCE PROCEDURES**

Grievances related to any aspects of UMRL2 Project will be handled through negotiation aimed at achieving consensus. Complaints will pass through 3 stages before these could be elevated to a court of law as a last resort to ensure that all grievances of those affected on any aspects of land acquisition, compensation, relocation, and determination and payment of entitlements are resolved in a timely and satisfactory manner.

The affected individuals will be made fully aware of their rights (both verbally and in writing) during consultations and at each phase of the resettlement process. Detailed procedures for hearing and redressing grievances, including appeal processes, will be made public through an effective public information campaign.

A four-stage procedure for redress of grievances is proposed:

- (i) Stage 1: Complaints from PAPs on any aspect of compensation, relocation or unaddressed losses are first presented verbally or in written form with the Commune's People's Committee (CPC). The complaint will be discussed in an informal meeting with the PAPs and the CPC. It will be the responsibility of the CPC to resolve the issue within 15 days from the date the complaint is received.
- (ii) Stage 2: If no agreement or amicable solution can be reached or if no response is received from CPC within 15 days of filing the complaint, the PAPs can appeal to the District People's Committee (DPC) in the presence of the district-level Compensation, Support and Resettlement Committee (CSRC). The PAPs must lodge the complaint within 30 days of registering the original complaint, and must produce documents that support his/her claim. The DPC will provide a decision within 1 month of receiving the appeal.
- (iii) Stage 3: If the PAPs are not satisfied with the decision of the DPC or in the absence of any response, the PAPs can appeal to the Hanoi People's Committee (HPC). The HPC together with the City's Compensation Support and Resettlement Committee will provide a decision on the appeal within 30 days from the day it is received by the HPC.
- (iv) Stage 4: If the APs are still not satisfied with the decision of HPC on appeal, or in the absence of any response within the stipulated time, the PAPs as a last resort, may submit his/her case to the District Court.

The procedure described in these four steps complies with the legal process for resolution of disputes in Viet Nam which include: a) Article 138 of Land Law 2003, Article 63, Article 64 of Government Decree 84/2007/NĐ-CP, b) Clause 2, Article 40 Decree 69/2009, and c) regulation on grievance at Government Decree 136/2006/ND-CP dated 14/11/2006.

The External monitoring Agency (EMA) contracted for external monitoring and evaluation will be responsible for checking the procedures for and resolutions of grievances and complaints. The EMA may recommend further measures to be taken to redress unresolved grievances.

As part of the Project internal monitoring and evaluation, each DPC and PID2 will keep a written record of all grievances and complaints brought forward by PAPs, as well as their final resolution. The concerned DPCs will be responsible to ensure that the grievance redress procedures and timeframes are explained clearly to each level of People's Committees. As the Project owner, HRB will retain the overall responsibility for the resolution of all grievances and can follow up resolution of outstanding cases in the Project level, especially those that are policy related.

## 12. ORGANIZATIONAL RESPONSIBILITIES

Following the legal framework contained in Chapter 5, the respective District People's Committee, through a "Compensation, Support and Resettlement Committee" and a "Compensation, Support and Resettlement Council" (to be created) will pursue the project's land acquisition works. Since the Feasibility Study for the UMRL2 have already been approved by the HPC with the issuance of Hanoi Decision No. 2054/QD-UBND dated 13/11/2008, what needs to be done is to move to the next step for land acquisition and final handover of ROW to HRB by the concerned DPC. The following matrix contained in **Table 12.1** indicates the land acquisition and resettlement activities, the responsible parties and tasks assigned to each of them.

**Table 12.1. Institutional Arrangements for UMRL2 Land Acquisition and Resettlement Work**

Activities	Responsible Parties	Remarks
1 Preparation of Project Feasibility Study	HRB	<b>UMRL2 Feasibility Study approved by HPC under Decision 2054/QD-UBND dated 13 November 2008</b>
2 Preparation of Basic Design and ROW drawings; preparation and update of RAP	General Consultants	<ul style="list-style-type: none"> <li>• Basic Design Report for HRB to review and submit to HPC;</li> <li>• <b>ROW Drawings of Depot approved by HAUPA (March 2011);</b></li> <li>• ROW Drawings for Elevated Section (From Stations C1-C3) was appraised and submitted to HPC for approval in Statement No. 1457/QHKT-TTr-P7 dated 31 May 2012 by HAUPA;</li> <li>• ROW Drawings for Underground Section (From Stations C3-C10) for review and consideration by HRB and HAUPA;</li> <li>• RAP to be prepared and updated for HRB to review and submit to HPC and JICA.</li> </ul>
3 Appraise and approval of ROW drawings	HRB, HAUPA, HPC	<ul style="list-style-type: none"> <li>• HBR to do initial review of ROW drawings and submit to HAUPA for appraisal;</li> <li>• HAUPA to appraise ROW drawings and submit to HPC for approval;</li> <li>• HPC to approve ROW drawings.</li> </ul>
4 Verification of the ROW boundaries, staking and handover	DONRE	<ul style="list-style-type: none"> <li>• Staking of Depot ROW boundaries not yet pursued.</li> <li>• Staking of Underground Station red line awaiting approval of UMRL2 ROW drawings.</li> <li>• Staking of Elevated Station ROW to be done by other projects (Tay Ho Tay, New Urban Development Area)</li> </ul>
5 Implementation of land acquisition, creation of CSR Council and Task Force	HPC, DPC, CSRC	<ul style="list-style-type: none"> <li>• HPC to assign concerned DPCs to pursue land clearance work.</li> <li>• CSRC to prepare general plan on compensation, support and resettlement and submit to DPC for approval;</li> <li>• DPC to issue decision on the creation of CSR Council and Task Force;</li> <li>• DPC to approve implementation cost of land acquisition</li> </ul>

**Table 12.1. Institutional Arrangements for UMRL2 Land Acquisition and Resettlement Work**

Activities	Responsible Parties	Remarks
		work.
6 Holding of Public Consultation Meetings (PCM)	CSRC, WPC/CPC, HRB, GC	<ul style="list-style-type: none"> <li>• CPC to organize consultation meetings;</li> <li>• HRB to participate and introduce about the project;</li> <li>• GC to assist HRB through provision of presentation materials, resource persons and public information brochure; answering questions raised during meetings;</li> <li>• CSRC to announce Resettlement policy framework of the project and answer related questions.</li> </ul>
7 Conduct of Detailed Measurement Survey (DMS)	CSRC, CPC, HRB	<ul style="list-style-type: none"> <li>• CSRC to implement DMS through technical support group and provide HRB with results of DMS;</li> <li>• CPC to support CSRC during DMS;</li> <li>• HRB to receive DMS data and send to GC for update in RAP report.</li> </ul>
8 Preparation, review and approval of General Detailed CSRP	CSRC, DPC	<ul style="list-style-type: none"> <li>• CSRC to prepare General detailed compensation, support and resettlement plan and submit to DPC for approval.</li> </ul>
9 Holding of Disclosure Meeting with PAPs	CPC/WPC	<ul style="list-style-type: none"> <li>• CPC/WPC to organize disclosure meetings with PAPs.</li> </ul>
10 Issuance of Decision for Land Recovery	DPC	<ul style="list-style-type: none"> <li>• DPC to issue decision for land recovery based on General CSRP and request of CSRC.</li> </ul>
11 Payment of Compensation and Other Support	CSR Council, CPC, Task Force	<ul style="list-style-type: none"> <li>• CSR Council in co-ordination with CPC and Task Force to pay compensation and other support per approved CSRP.</li> </ul>
12 Handover of Recovered Land	PAPs, CSRC	<ul style="list-style-type: none"> <li>• PAPs, after accepting compensation and other benefits, to hand over affected land and other fixed assets to CSRC for implementation of land acquisition work.</li> </ul>
13 Review and Approval of RAP	HRB, HPC, JICA	<ul style="list-style-type: none"> <li>• GC to submit RAP update report to HRB for review;</li> <li>• HRB to submit to HPC for approval and then provide JICA a copy of RAP update report for review and concurrence.</li> </ul>
15 Monitoring	HRB, EMA, JICA	<ul style="list-style-type: none"> <li>• HRB to subcontract a third party to do independent external monitoring of RAP implementation.</li> <li>• PID2 to do internal monitoring of resettlement work and provide JICA/HPC copy of periodic report;</li> <li>• GC to provide assistance to PID2 for monitoring through:               <ul style="list-style-type: none"> <li>a) orientation of HRB staff on monitoring work for social impact and resettlement;</li> <li>b) prepare periodic progress report of resettlement work;</li> <li>c) provide EMA a copy of RAP and SES and respond to questions raised by EMA;</li> </ul> </li> <li>• External Monitoring Agent (EMA) to do a third party</li> </ul>

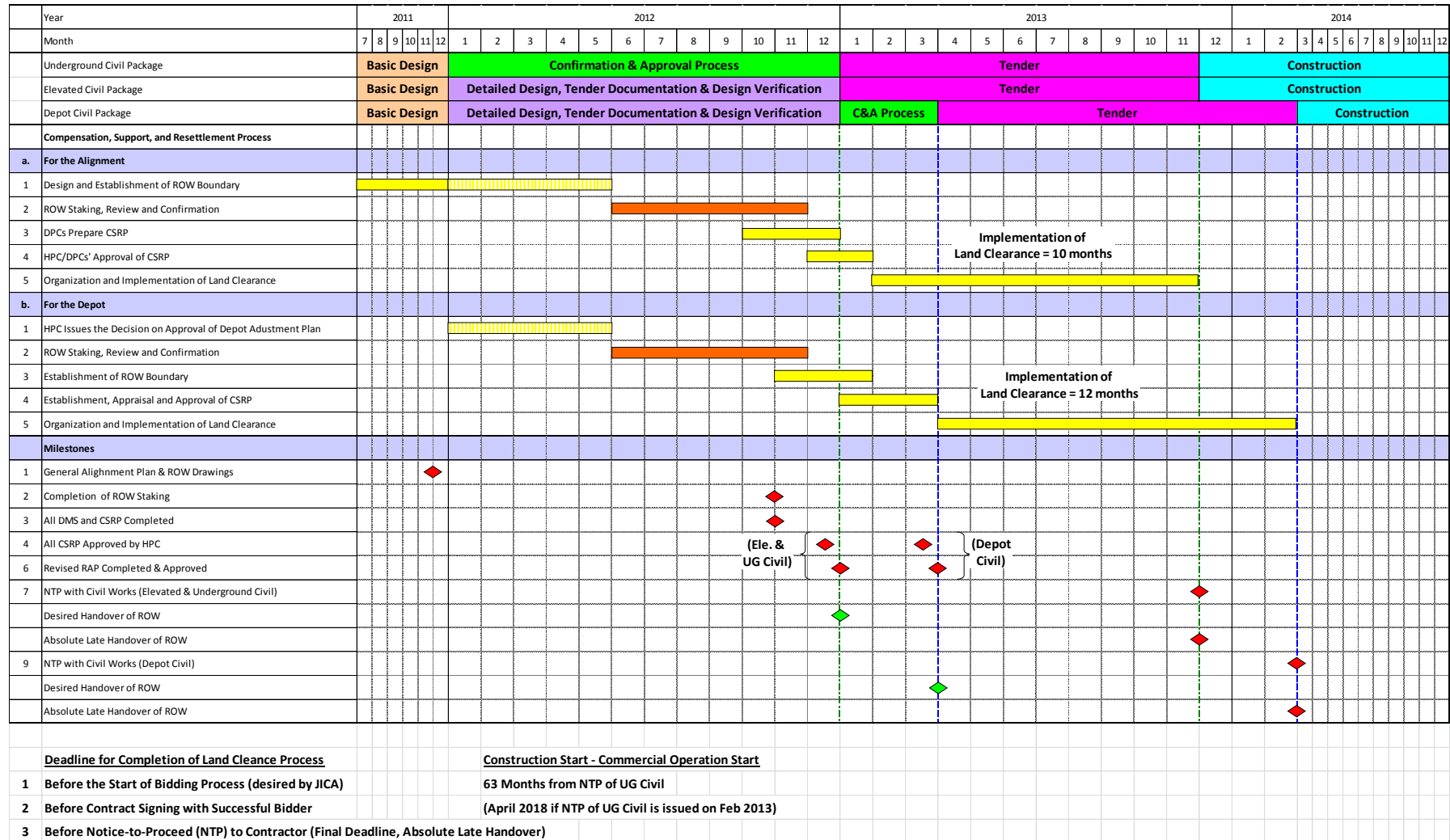
**Table 12.1. Institutional Arrangements for UMRL2 Land Acquisition and Resettlement Work**

<b>Activities</b>	<b>Responsible Parties</b>	<b>Remarks</b>
		monitoring of resettlement work and do post project social impact assessment. Coordinate with PID2 and GC for their monitoring work including project site visits and interviews with project affected households and institutions.

### **13. IMPLEMENTATION SCHEDULE**

Under ideal condition, the pursuit of land acquisition and resettlement for UMRL2 is planned to be completed within the period of a year from the approval of the basic design report. It is desirable that the ROW lands be already handed over to HRB before the issuance of the “Notice to Proceed” to the winning contractors tasked to do the detailed design and construction of the railway facilities. As mentioned in previous chapters, review and approval of the ROW drawing by HRB and HAUPA and staking of the boundaries by DONRE (by end of 2011) will trigger the conduct of subsequent land clearance activities (i.e. DMS, preparation of compensation, support and resettlement plan, consultation meetings, RAP preparation and others). It is desired that all CSR activities be completed and corresponding approvals issued by the concerned DPC by the end of June 2012. Within the period of 4 months, it is desired that all compensation and relocation work has been completed by the respective DPCs such that the lands within the ROW can already be handed over by the respective DPCs to HRB for implementation of the project. In the event slippages are encountered in the implementation by the respective project traversed DPCs, it is hoped that the handover of the ROW not exceed the end of March 2013. Figure 13.1 contains the proposed implementation schedule.

Figure 13.1. Schedule of Land Acquisition and Resettlement



## 14. COST AND BUDGET

### 14.1 PRELIMINARY RESETTLEMENT COST

Based on the preliminary social impact assessment of the project, it is estimated that a total amount of 1.316 Trillion VND (US\$ 63.1 million) will be required as resettlement cost that shall be used to pay for loss land, loss of major structures (i.e. houses & buildings), loss trees; support, administrative and contingency costs. Valuation of affected properties used in the computations are based on official HPC and Department of Finance rates contained in the latest Decisions (No. 35/2011/QĐ-UBND dated 05/12/2011; No. 50/2011/QĐ-UBND dated 30/12/2011; and Notification No. 6323/STC-BG dated 29/12/2011).

An administrative overhead (9% of total resettlement cost) has been included to cover the cost of implementing surveys, consultation meetings and other administrative support cost. Contingencies which include physical (15%) and financial (15%) contingencies have been provided to cover any price increases brought about by delays in project implementation. **Table 14.1** contains the resettlement cost broken down into major cost categories.

**Table 14.1.Total Compensation, Support and Resettlement Cost**

No.	Item	Unit	Quantity	Amount (VND)
<b>A</b>	<b>COST OF COMPENSATION AND SUPPORT</b>			<b>947,216,919,124</b>
<b>I</b>	<b>Compensation and support for land</b>			<b>646,284,105,360</b>
1	Residential land	m <sup>2</sup>	12,955	268,178,501,200
2	Non-agricultural business and production land	m <sup>2</sup>	0	0
3	Land for government buildings and defense purposes	m <sup>2</sup>	15,823	316,086,200,000
4	Agricultural land	m <sup>2</sup>	73,006	14,718,009,600
5	Public land	m <sup>2</sup>	83,708	47,301,394,560
<b>II</b>	<b>Compensation and support for structures and architectures</b>			<b>150,510,965,764</b>
<b>1</b>	<b>Compensation for houses</b>	m <sup>2</sup>	<b>23,850</b>	<b>117,430,660,833</b>
1.1	Grade-4 houses	m <sup>2</sup>	18,389	85,275,321,517
1.2	Grade-3 houses	m <sup>2</sup>	5,461	31,611,776,256
1.3	Temporary houses	m <sup>2</sup>	336	543,563,060
<b>2</b>	<b>Compensation for other architectural structures</b>			<b>33,080,304,931</b>
<b>III</b>	<b>Plants, crops and domestic animals</b>			<b>575,850,000</b>
<b>IV</b>	<b>Other supports</b>			<b>142,108,998,000</b>
1	Stabilization of life and production	person	800	11,520,000,000
2	Movement	HH	2,579	7,737,000,000
3	Temporary house rent for resettled HHs	HH	271	4,878,000,000
4	Temporary house rent for HHs of temporary relocation	HH	2,308	41,544,000,000
5	Change of jobs (agricultural households)	m <sup>2</sup>	73,006	73,590,048,000
6	Vocational learning (for job-changers)	card	0	0
7	Grave movement	each	100	300,000,000

8	Other supports (policy and social families)	HH	363	2,539,950,000
<b>V</b>	<b>Rewards for land hand over progress</b>			<b>7,737,000,000</b>
<b>B</b>	<b>NUMBER OF RESETTLED AND TEMPORARILY RELOCATED HOUSEHOLDS</b>		<b>2,579</b>	
1	Temporary Relocation	HH	2,308	
2	Resettlement	HH	271	
<b>C</b>	<b>TOTAL COST</b>			<b>947,216,919,124</b>
<b>D</b>	<b>ADMINISTRATIVE COST (9% TOTAL COST)</b>			<b>85,249,522,721</b>
<b>E</b>	<b>CONTINGENCY COST (30% TOTAL COST)</b>			<b>284,165,075,737</b>
	Physical contingencies (15% total cost)			142,082,537,869
	Financial contingencies (15% total cost)			142,082,537,869
<b>F</b>	<b>TOTAL</b>			<b>1,316,631,517,582</b>

Table 14.1.Compensation, support and resettlement cost for Cau Giay District

No.	Item	Unit	Quantity	Amount (VND)
<b>A</b>	<b>COST OF COMPENSATION AND SUPPORT</b>			<b>33,966,300,000</b>
<b>I</b>	<b>Compensation and Support for Land</b>			<b>30,609,600,000</b>
1	Residential land	m <sup>2</sup>		
-	Location 1	m <sup>2</sup>		
-	Location 2	m <sup>2</sup>		
-	Location 3	m <sup>2</sup>		
-	Location 4	m <sup>2</sup>		
2	Non-agricultural business and production land	m <sup>2</sup>		
3	Land for government buildings and defense purposes	m <sup>2</sup>		
4	Agricultural land	m <sup>2</sup>		
5	Public land	m <sup>2</sup>	911	30,609,600,000
<b>II</b>	<b>Compensation and support for structures and architectures</b>			
<b>1</b>	<b>Compensation for houses</b>	m <sup>2</sup>		
1.1	Grade-4 houses	m <sup>2</sup>		
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>		
-	Type 3	m <sup>2</sup>		
-	Type 4	m <sup>2</sup>		
1.2	Grade-3 houses	m <sup>2</sup>		
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>		
-	Type 3	m <sup>2</sup>		
-	Type 4	m <sup>2</sup>		

1.3	Temporary houses	m <sup>2</sup>		
<b>2</b>	<b>Compensation for other architectural structures</b>			
<b>III</b>	<b>Plants, crops and domestic animals</b>			
<b>IV</b>	<b>Other supports</b>			<b>2,954,700,000</b>
1	Stabilization of life and production	person		
2	Movement	HH	134	402,000,000
3	Temporary house rent for resettled HHs	HH		
4	Temporary house rent for temporarily relocated HHs	HH	134	2,412,000,000
5	Change of jobs (agricultural households)	m <sup>2</sup>		
6	Vocational learning (for job-changers)	card	20	140,700,000
7	Grave movement	each		
8	Other supports (policy and social families)	HH		
<b>V</b>	<b>Rewards for land hand over progress</b>			<b>402,000,000</b>
11	Residential land	HH	134	402,000,000
12	Agricultural land	m <sup>2</sup>		
13	Organizational land	m <sup>2</sup>		
<b>B</b>	<b>NUMBER OF RESETTLED AND TEMPORARILY RELOCATED HOUSEHOLDS</b>		<b>134</b>	
1	Temporary Relocation	HH	134	
2	Resettlement	HH		
<b>C</b>	<b>TOTAL COST</b>			<b>33,966,300,000</b>
<b>D</b>	<b>ADMINISTRATIVE COST (9% TOTAL COST)</b>			<b>3,056,967,000</b>
<b>E</b>	<b>CONTINGENCY COST (30% TOTAL COST)</b>			<b>10,189,890,000</b>
	Physical contingencies (15% total cost)			5,094,945,000
	Financial contingencies (15% total cost)			5,094,945,000
<b>F</b>	<b>TOTAL</b>			<b>47,213,157,000</b>

**Table 14.2.Compensation, support and resettlement cost for Ba Dinh District**

No.	Item	Unit	Quantity	Amount (VND)
<b>A</b>	<b>COST OF COMPENSATION AND SUPPORT</b>			<b>56,128,405,440</b>
<b>I</b>	<b>Compensation and Support for Land</b>			<b>24,006,277,200</b>
1	Residential land	m <sup>2</sup>	830	24,006,277,200
-	Location 1	m <sup>2</sup>	567	19,054,560,000
-	Location 2	m <sup>2</sup>	263	4,951,717,200
-	Location 3	m <sup>2</sup>		
-	Location 4	m <sup>2</sup>		
2	Non-agricultural business and production land	m <sup>2</sup>		
3	Land for government buildings and defense purposes	m <sup>2</sup>		
4	Agricultural land	m <sup>2</sup>		

5	Public land	m <sup>2</sup>		
<b>II</b>	<b>Compensation and support for structures and architectures</b>			<b>10,453,878,240</b>
<b>1</b>	<b>Compensation for houses</b>	m <sup>2</sup>		<b>10,453,878,240</b>
1.1	Grade-4 houses	m <sup>2</sup>	999	4,509,152,880
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>		
-	Type 3	m <sup>2</sup>	348	1,143,059,060
-	Type 4	m <sup>2</sup>	651	3,366,093,820
1.2	Grade-3 houses	m <sup>2</sup>	1,026	5,944,725,360
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>	1,026	5,944,725,360
-	Type 3	m <sup>2</sup>		
-	Type 4	m <sup>2</sup>		
1.3	Temporary houses	m <sup>2</sup>		
<b>2</b>	<b>Compensation for other architectural structures</b>			
<b>III</b>	<b>Plants, crops and domestic animals</b>			
<b>IV</b>	<b>Other supports</b>			<b>19,073,250,000</b>
1	Stabilization of life and production	person		
2	Movement	HH	865	2,595,000,000
3	Temporary house rent for resettled HHs	HH	33	594,000,000
4	Temporary house rent for temporarily relocated HHs	HH	832	14,976,000,000
5	Change of jobs (agricultural households)	m <sup>2</sup>		
6	Vocational learning (for job-changers)	card	130	908,250,000
7	Grave movement	each		
8	Other supports (policy and social families)	HH		
<b>V</b>	<b>Rewards for land hand over progress</b>			<b>2,595,000,000</b>
11	Residential land	HH	865	2,595,000,000
12	Agricultural land	m <sup>2</sup>		
13	Organizational land	m <sup>2</sup>		
<b>B</b>	<b>NUMBER OF RESETTLED AND TEMPORARILY RELOCATED HOUSEHOLDS</b>		<b>865</b>	
1	Temporary Relocation	HH	832	
2	Resettlement	HH	33	
<b>C</b>	<b>TOTAL COST</b>			<b>56,128,405,440</b>
<b>D</b>	<b>ADMINISTRATIVE COST (9% TOTAL COST)</b>			<b>5,051,556,490</b>
<b>E</b>	<b>CONTINGENCY COST (30% TOTAL COST)</b>			<b>16,838,521,632</b>
	Physical contingencies (15% total cost)			8,419,260,816
	Financial contingencies (15% total cost)			8,419,260,816
<b>F</b>	<b>TOTAL</b>			<b>78,018,483,562</b>

Table 14.3.Compensation, support and resettlement cost for Tay Ho District

No.	Item	Unit	Quantity	Amount (VND)
<b>A</b>	<b>COST OF COMPENSATION AND SUPPORT</b>			<b>227,040,699,890</b>
<b>I</b>	<b>Compensation and Support for Land</b>			<b>197,920,800,000</b>
1	Residential land	m <sup>2</sup>	1,595	63,162,000,000
-	Location 1	m <sup>2</sup>	1,595	63,162,000,000
-	Location 2	m <sup>2</sup>		
-	Location 3	m <sup>2</sup>		
-	Location 4	m <sup>2</sup>		
2	Non-agricultural business and production land	m <sup>2</sup>		
3	Land for government buildings and defense purposes	m <sup>2</sup>	3,403	134,758,800,000
4	Agricultural land	m <sup>2</sup>		
5	Public land	m <sup>2</sup>	0	0
<b>II</b>	<b>Compensation and support for structures and architectures</b>			<b>19,826,349,890</b>
<b>1</b>	<b>Compensation for houses</b>	m <sup>2</sup>		<b>19,826,349,890</b>
1.1	Grade-4 houses	m <sup>2</sup>	2,419	10,516,515,170
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>		
-	Type 3	m <sup>2</sup>	1,057	3,476,374,330
-	Type 4	m <sup>2</sup>	1,363	7,040,140,840
1.2	Grade-3 houses	m <sup>2</sup>	1,614	9,309,834,720
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>	1,294	7,502,864,040
-	Type 3	m <sup>2</sup>	319	1,806,970,680
-	Type 4	m <sup>2</sup>		
1.3	Temporary houses	m <sup>2</sup>	306	496,045,410
<b>2</b>	<b>Compensation for other architectural structures</b>			
<b>III</b>	<b>Plants, crops and domestic animals</b>			
<b>IV</b>	<b>Other supports</b>			<b>8,180,550,000</b>
1	Stabilization of life and production	person		
2	Movement	HH	371	1,113,000,000
3	Temporary house rent for resettled HHs	HH	53	954,000,000
4	Temporary house rent for temporarily relocated HHs	HH	318	5,724,000,000
5	Change of jobs (agricultural households)	m <sup>2</sup>		
6	Vocational learning (for job-changers)	card	56	389,550,000
7	Grave movement	each		
8	Other supports (policy and social families)	HH		

<b>V</b>	<b>Rewards for land hand over progress</b>			<b>1,113,000,000</b>
11	Residential land	HH	371	1,113,000,000
12	Agricultural land	m <sup>2</sup>		
13	Organizational land	m <sup>2</sup>		
<b>B</b>	<b>NUMBER OF RESETTLED AND TEMPORARILY RELOCATED HOUSEHOLDS</b>		<b>371</b>	
1	Temporary Relocation	HH	318	
2	Resettlement	HH	53	
<b>C</b>	<b>TOTAL COST</b>			<b>227,040,699,890</b>
<b>D</b>	<b>ADMINISTRATIVE COST (9% TOTAL COST)</b>			<b>20,433,662,990</b>
<b>E</b>	<b>CONTINGENCY COST (30% TOTAL COST)</b>			<b>68,112,209,967</b>
	Physical contingencies (15% total cost)			34,056,104,984
	Financial contingencies (15% total cost)			34,056,104,984
<b>F</b>	<b>TOTAL</b>			<b>315,586,572,847</b>

Table 14.4.Compensation, support and resettlement cost for Hoan Kiem District

No.	Item	Unit	Quantity	Amount (VND)
<b>A</b>	<b>COST OF COMPENSATION AND SUPPORT</b>			<b>131,135,748,690</b>
<b>I</b>	<b>Compensation and Support for Land</b>			<b>98,516,284,000</b>
1	Residential land	m <sup>2</sup>	888	63,381,484,000
-	Location 1	m <sup>2</sup>	131	10,533,204,000
-	Location 2	m <sup>2</sup>	440	34,291,920,000
-	Location 3	m <sup>2</sup>	45	2,747,880,000
-	Location 4	m <sup>2</sup>	273	15,808,480,000
2	Non-agricultural business and production land	m <sup>2</sup>		
3	Land for government buildings and defense purposes	m <sup>2</sup>	437	35,134,800,000
4	Agricultural land	m <sup>2</sup>		
5	Public land	m <sup>2</sup>		
<b>II</b>	<b>Compensation and support for structures and architectures</b>			<b>6,342,014,690</b>
<b>1</b>	<b>Compensation for houses</b>	m <sup>2</sup>		<b>6,342,014,690</b>
1.1	Grade-4 houses	m <sup>2</sup>		
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>		
-	Type 3	m <sup>2</sup>	509.22	1,674,824,580
-	Type 4	m <sup>2</sup>	651	3,364,027,020
1.2	Grade-3 houses	m <sup>2</sup>		
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>	217	1,255,645,440

-	Type 3	m <sup>2</sup>		
-	Type 4	m <sup>2</sup>		
1.3	Temporary houses	m <sup>2</sup>	29	47,517,650
<b>2</b>	<b>Compensation for other architectural structures</b>			
<b>III</b>	<b>Plants, crops and domestic animals</b>			
<b>IV</b>	<b>Other supports</b>			<b>23,130,450,000</b>
1	Stabilization of life and production	person		
2	Movement	HH	1,049	3,147,000,000
3	Temporary house rent for resettled HHs	HH	25	450,000,000
4	Temporary house rent for temporarily relocated HHs	HH	1,024	18,432,000,000
5	Change of jobs (agricultural households)	m <sup>2</sup>		
6	Vocational learning (for job-changers)	card	157	1,101,450,000
7	Grave movement	each		
8	Other supports (policy and social families)	HH		
<b>V</b>	<b>Rewards for land hand over progress</b>			<b>3,147,000,000</b>
11	Residential land	HH	1,049	3,147,000,000
12	Agricultural land	m <sup>2</sup>		
13	Organizational land	m <sup>2</sup>		
<b>B</b>	<b>NUMBER OF RESETTLED AND TEMPORARILY RELOCATED HOUSEHOLDS</b>		<b>1,049</b>	
1	Temporary Relocation	HH	1,024	
2	Resettlement	HH	25	
<b>C</b>	<b>TOTAL COST</b>			<b>131,135,748,690</b>
<b>D</b>	<b>ADMINISTRATIVE COST (9% TOTAL COST)</b>			<b>11,802,217,382</b>
<b>E</b>	<b>CONTINGENCY COST (30% TOTAL COST)</b>			<b>39,340,724,607</b>
	Physical contingencies (15% total cost)			19,670,362,304
	Financial contingencies (15% total cost)			19,670,362,304
<b>F</b>	<b>TOTAL</b>			<b>182,278,690,679</b>

Table 14.5.Compensation, support and resettlement cost for Tu Liem District

No.	Item	Unit	Quantity	Amount (VND)
<b>A</b>	<b>COST OF COMPENSATION AND SUPPORT</b>			<b>472,193,911,803</b>
<b>I</b>	<b>Compensation and Support for Land</b>		<b>177,427</b>	<b>295,231,144,160</b>
1	Residential land	m <sup>2</sup>	9,641.7	117,628,740,000
-	Location 1	m <sup>2</sup>		
-	Location 2	m <sup>2</sup>	9,641.7	117,628,740,000
-	Location 3	m <sup>2</sup>		
-	Location 4	m <sup>2</sup>		
2	Non-agricultural business and production land	m <sup>2</sup>	0	0

3	Land for government buildings and defense purposes	m <sup>2</sup>	11,983	146,192,600,000
4	Agricultural land	m <sup>2</sup>	73,006	14,718,009,600
5	Public land	m <sup>2</sup>	82,797	16,691,794,560
<b>II</b>	<b>Compensation and support for structures and architectures</b>			<b>87,136,869,643</b>
<b>1</b>	<b>Compensation for houses</b>	m <sup>2</sup>		<b>86,606,869,643</b>
1.1	Grade-4 houses	m <sup>2</sup>	14,970	70,249,653,467
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>		
-	Type 3	m <sup>2</sup>	3,782	12,437,583,730
-	Type 4	m <sup>2</sup>	11,189	57,812,069,737
1.2	Grade-3 houses	m <sup>2</sup>	2,822	16,357,216,176
-	Type 1	m <sup>2</sup>		
-	Type 2	m <sup>2</sup>	2,822	16,357,216,176
-	Type 3	m <sup>2</sup>		
-	Type 4	m <sup>2</sup>		
1.3	Temporary houses	m <sup>2</sup>		
<b>2</b>	<b>Compensation for other architectural structures</b>			<b>530,000,000</b>
	Compensation for grave construction	each	100	530,000,000
<b>III</b>	<b>Plants, crops and domestic animals</b>			<b>575,850,000</b>
<b>IV</b>	<b>Other supports</b>			<b>88,770,048,000</b>
1	Stabilization of life and production	person	800	11,520,000,000
2	Movement	HH	160	480,000,000
3	Temporary house rent for resettled HHs	HH	160	2,880,000,000
4	Temporary house rent for temporarily relocated HHs	HH		
5	Change of jobs (agricultural households)	m <sup>2</sup>	73,006	73,590,048,000
6	Vocational learning (for job-changers)	card	0	0
7	Grave movement	each	100	300,000,000
8	Other supports (policy and social families)	HH	0	0
<b>V</b>	<b>Rewards for land hand over progress</b>			<b>480,000,000</b>
11	Residential land	HH	160	480,000,000
12	Agricultural land	m <sup>2</sup>		
13	Organizational land	m <sup>2</sup>		
<b>B</b>	<b>NUMBER OF RESETTLED AND TEMPORARILY RELOCATED HOUSEHOLDS</b>		<b>160</b>	
1	Temporary Relocation	HH		
2	Resettlement	HH	160	
<b>C</b>	<b>TOTAL COST</b>			<b>472,193,911,803</b>
<b>D</b>	<b>ADMINISTRATIVE COST (9% TOTAL COST)</b>			<b>42,497,452,062</b>
<b>E</b>	<b>CONTINGENCY COST (30% TOTAL COST)</b>			<b>141,658,173,541</b>

	Physical contingencies (15% total cost)			0
	Financial contingencies (15% total cost)			0
<b>F</b>	<b>TOTAL</b>			<b>656,349,537,406</b>

## 15. MONITORING AND EVALUATION

The implementation of resettlement will be monitored regularly to help ensure that the RAP is implemented as planned and that mitigating measures designed to address adverse social impacts are adequate and effective. Towards this end, resettlement monitoring will be done by an internal body and by an external organization.

### 15.1 INTERNAL MONITORING

The Project Implementation Department 2 (PID2) of HRB will serve as the Project's internal monitoring body. As such, PID2 will maintain a file of all data gathered in the field, including a data base on the affected households. PID2 will submit quarterly monitoring report to HRB starting from the commencement of the land clearance work by the concerned District People's Committee. HRB in turn will include updates on resettlement in its regular Project reports to HPC and JICA. Social monitoring reports will be made available to the affected households.

Internal monitoring and supervision will have the following objectives:

- Compensation and other entitlements are computed at rates and procedures as provided in the approved RAP and CSRP with no discrimination according to gender, membership in an ethnic group or other relevant factors;
- Affected households are paid their compensation and other entitlements as per approved RAP and CSRP, ensuring that all entitlements are delivered as planned and agreed, including compensation in cash or in kind, allowances, replacement land, resettlement sites developed and people moved into them;
- Public information, public consultation and grievance redress procedures are followed as described in the approved RAP;
- Affected public facilities and infrastructure are restored promptly; and
- The transition between resettlement and commencement of civil works is smooth and that sites are not handed over for civil works until affected households have been satisfactorily compensated, and resettled.

### 15.2 EXTERNAL MONITORING

The general objective of the external monitor is to provide a third party periodic review and assessment of: (i) achievement of resettlement objectives; (ii) changes in living standards and livelihoods; (iii) restoration of the economic and social base of the affected people; (iv) effectiveness, impact and sustainability of entitlements; and (v) the need for further improvement and mitigation measures. Strategic lessons for future policy formulation and planning will also be drawn from the monitoring and evaluation of resettlement.

The external monitoring agency or EMA, to be selected from interested academic institutions or development companies with experience in such work, will be mobilized 1 month before the commencement of DMS work. The EMA will submit to HRB quarterly monitoring reports, including an inception report one month following its mobilization. The EMA will likewise conduct a Post-Resettlement Implementation Evaluation Study following completion of resettlement activities. All external monitoring reports will be made available to the affected households by placing reports in communes/wards and field offices.

The methods for external monitoring and evaluation of land acquisition, compensation and resettlement activities include:

- (i) **Review of Detailed Measurement Survey (DMS):** As soon as the Basic Design is finalized, approved and the ROW drawings approved and staked on the ground, DMS will be undertaken by the District CSRC to collect data from all PAPs to establish their eligibility and entitlements. The data that will be entered into a database by GC to document the following: a) socio-economic status of affected households; b) nature and extent of losses; and c) entitlements for compensation and other assistance. These data will be made available to the EMA, to enable them to establish a baseline for monitoring and evaluating project benefits. During the conduct of the DMS, the EMA will also monitor the DMS process to determine and assess if DMS activities are being carried out in a participatory and transparent manner.
- (ii) **Socio-Economic Survey (SES):** The SES is designed to provide a clear comparison of the success and/or failure of the resettlement program to restore their livelihoods and living standards. Special attention will be paid to the inclusion of women, the very poor, the landless and other vulnerable groups, with set questions for women and other target groups; and the database disaggregates information by gender, vulnerability and ethnicity. The SES will be integrated in the DMS survey to be conducted by the respective DPCs.

The EMA will maintain a computerized database of resettlement monitoring information that will be updated every six months. It will contain certain files on each affected household and will be updated based on information collected on successive rounds of data collection. All monitoring databases will be fully accessible to the PID2 and CSRCs.

Every 6 months, the EMA will submit an external monitoring report to the PID2 and HRB. The report will summarize the findings of the EMA, including: (i) progress of land clearance work, citing any deviations from the provisions of the RAP; (ii) identification of problem issues and recommended solutions so that implementing agencies are informed about the ongoing situation and can resolve problems in a timely manner; and (iii) status of resolution of issues and problems identified in previous reports.

The external monitoring reports will be discussed in a meeting between the EMA, PID2 and CSRCs after submission of the reports. Necessary remedial actions will be taken and documented.

**Table 15.1. Monitoring and Evaluation Indicators**

Type	Indicator	Examples of Variables
<b>Process Indicators</b> (by district and commune)	Staffing	Number of PID2 and field staff on Project by job function; and Number of other line agency officials available for tasks
	Consultation, Participation and Grievance Resolution	Number of consultation and participation programs held with various stakeholders; Separate consultation with women, female headed households and ethnic minority women; Grievances by type and resolution; Number of field visits by PID2 staff; and Number of local organizations participating in project.

Type	Indicator	Examples of Variables
	Procedures in Operation	Joint DMS and asset verification/quantification procedures in place; Effectiveness of compensation delivery system; Number of land transfers effected; and Coordination among PID2, HPC departments, and City and district officials.
<b>Output Indicators</b> (by district and commune)	Acquisition of Land	Area of productive land assets acquired (crop land, aquaculture ponds, garden land, etc.); Area of residential and other non-agricultural lands acquired; Area of communal/government lands acquired; and Area of other lands acquired.
	Structures	Number, type and size of private structures acquired; Number, type and size of community structures acquired; and Number, type and size of government structures acquired.
	Trees and Crops	Number and type of private crops and trees acquired; Number and type of government/community crops and trees acquired; and Crops destroyed by area, type and number of owners.
	Compensation and Rehabilitation	Number of households affected (for land, buildings, trees, crops); Number of owners compensated by type of loss; Amount compensated by type and owner; Number and amount of allowances paid; Number of replacement houses constructed by concerned owners; Number of replacement businesses constructed by concerned owners; Number of owners requesting assistance to purchase replacement land, and number of purchases effected; Number of individual sites and levels of development of sites; Number of entitlements delivered; Number of entitlements used by PAPs; Suitability of entitlements to affected households as per RAP objectives; Number of Female Headed Households that are relocated in the same village and communes; Houses in the relocation sites that are built by the affected Female Headed Households according to their choices;
		Number of non-titled affected households receiving replacement land; and Number of severely affected, very poor or other vulnerable households receiving special assistance and participating in income restoration programs.

Type	Indicator	Examples of Variables
<b>Impact Indicators</b> (by district and commune)	Household Earning Capacity	Employment status of economically active members; Landholding size, area cultivated and production volume by crop; Selling of cultivation land; Changes to income-earning activities (farm and off-farm) pre- and post-disturbance; and Amount and balance of income and expenditures.
	Changes to Status of Women	Commune/Village Resettlement Committees include Women's Union and Women from affected households; Involvement of women in the process of preparation of IOL; Number of grievance complaint filed by women and resolution; Number of women (including female headed households and ethnic minority women) negotiated compensation effectively; Joint registration of land in the name of husband and wife; Number of meetings held with women from affected households in planning of livelihood activities; Number of women engaged in gainful livelihood activities/income earning activities/employment in Industrial zones (including female headed households and ethnic minority women); Number of women participated in capacity building workshop/training; Number of women understanding the process of resettlement activities (entitlement, compensation process, etc.); Number of women participated in discussion of resettlement site selection; Participation in commercial enterprises; and Participation in community decision-making
	Changes to Status of Children	School attendance rates (male/female);
	Settlement, Community and Population	Growth in number and size of settlements; Growth in market areas; Influx of new settlers, including those with and without land rights; Changes in economic activities and income-generation opportunities; and Changes in social, cultural and community conditions.

## **APPENDICES**

## **APPENDIX 1**

### **Compensation and Future Development Policy for Underground Works of the Hanoi Urban Railway Construction Project Line 2 (Draft)**

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May 2012

## **Hanoi Urban Railway Construction Project Line 2**

### **Nam Thang Long (C1) to Tran Hung Dao Section (C10)**



## **1. DRAFT POLICY ON COMPENSATION FOR UNDERGROUND WORKS**

### **1.1 Rationale**

The construction of the UMRL2 Project will require the acquisition of land on which the surface facilities will be laid, thereby affecting the households and organizations/institutions owning, residing or operating in structures established within the Right-of-Way (ROW). Also, the construction of the underground facility may significantly affect structures on the surface directly over the underground works.

There are current comprehensive Government of Vietnam (GOV) and Hanoi People's Committee (HPC) laws and decrees that govern land acquisition, resettlement and compensation for affected surface structures, agricultural productive lands and other lands. These laws include Decree No. 197/2004/ND-CP dated 03/12/2004 (Compensation, support and resettlement when land is recovered by the state); Decision 108/2009/QĐ-UBND (Promulgation of regulation on compensation, support and resettlement in Hanoi); Decision No. 2/2010/QĐ-UBND (Regulation on land recovery, land allocation, land lease, and change in land-use purpose for implementation of investment projects and residential housing construction in rural residential zones in Hanoi area) and Decision No. 48/2011/QĐ-UBND (Modification and supplementation of some articles in the regulation promulgated with Decision No. 2/2010/QĐ-UBND).

In contrast to regulations on ground surface works, only Decree No. 39/2010/ND-CP dated 07/4/2010 on Urban Underground Facilities Management was issued by the government to provide general guidelines regulating subterranean works. This national decree provides an initial list of allowable works that can be pursued underground, directs the relevant government agencies to regulate underground activities through the issuance of licenses, prescribes the establishment of a database for such works, and prescribes the content of studies to be performed by investors seeking government permit to implement such works.

A recent initiative by DONRE (Official Letter No. 1608/STNMT-KHTH dated 20/5/2011) calling for an inter-government agency workshop for the purpose of developing a mechanism for the management, usage and regulation of underground civil works underscores the importance of developing the appropriate policy for underground works. Already, several development initiatives are being pursued by government agencies like MOT and HRB in developing mass transit systems that also use the subterranean areas, thereby avoiding impacts to surface infrastructures and utilizing underground space that has lain idle for years.

In connection with the DONRE request, HRB issued instructions to the UMRL2 Project GC to prepare a draft Policy Paper for underground works for presentation in the above-mentioned workshop. This section has been developed in line with HRB's instructions and seeks to propose general policies for land acquisition, compensation and resettlement to regulate future implementation of underground works projects based on existing GOV laws and experiences in other countries with similar mass transit facilities. It is important to state at this point, however, that the project impacts and resettlement issues discussed here have been identified in the context of the UMRL2 Project.

Within the framework of existing GOV and HPC regulations on land acquisition, compensation and resettlement, a review of these international experiences was used as basis for the general compensation policy proposed in the following section of this report. The policy focus on the surface structure/land use impacts of the subsurface components of underground works projects and potential implications on any future subterranean developments. The draft policy also propose the adoption of land acquisition, resettlement and compensation practices described in relevant existing GOV and HPC regulations such as HPC Decision No. 108/2009/QĐ-UBND, Decision No. 50/2011/QĐ-UBND, Decision No. 35/2011/QĐ-UBND and Notification No. 6323/STC-BG of Department of Finance.

Despite this report's focus on compensation linked to the physical/structural impacts of underground works projects, it is important to keep in mind that land acquisition activities and/or the clearing of land necessary for project implementation may also involve displacement of people from non-material assets (e.g. sources of employment; community ties, support and organization; communal properties; ancestral domain), which increases their risk of impoverishment. Thus, in the implementation of underground works projects, measures must also be taken to avoid and mitigate such impacts as much as possible, and compensate and provide rehabilitation assistance to those affected in these ways in accordance to existing GOV and HPC laws.

## **1.2 Survey of International Experience in Compensation for Underground Works**

The following is a brief description of several land acquisition, compensation and resettlement activities that have been carried out in other countries with underground mass transit facilities. It must be stressed that although a general policy may be used as a framework for involuntary resettlement and compensation activities linked with underground development projects, each situation must be approached on a case-to-case basis, taking into account conditions relevant to each underground works project and the specific impacts on affected property owners.

Each of the featured country's underground compensation policies has been developed based on the conditions prevalent in their respective area. Land policies issued in densely populated, highly urbanized and built-up cities such as Tokyo (Japan) that established on relatively soft soil would significantly differ to guidelines promulgated in relatively lesser populated and flood-prone City of Metro Manila (Philippines) that rests mostly on hard adobe volcanic rock. Therefore it is not appropriate to compare these policies, but rather learn how they evolved given the situation specific to the countries studied and, from their experience, formulate guidelines adoptable in UMRL2 Project.

The experiences mentioned below are divided into four categories: a) non-payment of compensation for use of underground space by government metro rail projects; b) compensation when the subterranean area is owned or leased by private sector; c) compensation when the underground works will affect the integrity of surface structures (associated with shallow tunnels); and d) compensation when limitations are created by the underground works on the land use and/or utilization of buildings/structures on the surface. The examples cover only the design, construction and defects liability period of the operations phase. The rest of the operations phase is not taken into account in the discussions.

### **1.2.1 Case 1: Non-Payment of Compensation for Use of Underground Space by Government Metro Rail Built Deep Underground**

A number of countries that lay host to transport projects maintain their sovereignty over the use of their national territory that includes the underground space. Under this policy, government projects such as railways that traverse subterranean areas can be constructed without the need to compensate citizens or foreign investors owning properties on the surface directly above these transport projects. Only when the introduced developments would have significant impact on the stability of the surface structures and safety of its occupants will appropriate mitigation be applied. Mitigation of such impacts will be done on a case-to-case basis, and a careful assessment will be done by the project contractor or its representatives prior to consideration of compensation/mitigation.

In the case of India and Singapore, the subterranean areas belong to their respective State. As such, proponents of the metro railway facilities built deep underground are not obligated to pay royalties to owners of surface lands directly above tunnel alignments for the use of underground space. In terms of land ownership, the condition in these two countries is similar to the case of Vietnam where all lands are owned by the state, and rightfully government need not pay its citizens or foreign investors owning properties on the ground surface any amount for the use of the underground strata which GOV owns.

### 1.2.2 Case 2: Compensation for Use of Underground Space when Underground Strata is Owned or Leased by Private Sector

There are countries where their respective governments allow the private ownership of lands, both surface and underground, or lease portions of it to the private sector. In view of this type of extended land ownership that goes below the ground surface, any underground works installed by other parties within the “owned or leased area” may require payment of compensation to the “underground substrata owner or lessee”. The amount paid (if any) depends on the results of negotiations between the land owner/lessee and the underground works investor or its representative. It should be noted that landownership conditions in Vietnam resides with the State, and unless Decrees/Decisions are issued by GOV to allow owners of structures on the land surface to claim royalties from developers of works built directly under their surface properties will they be eligible to claim payments.

Private landowners in the United States are compensated for the use of the underground space below their surface property. For example, in the State of California, the Los Angeles County Metropolitan Transportation Authority (Metro) had to purchase subsurface easement from the private property owners to allow their tunnels and portions of its subway stations and other underground facilities to be located underneath existing homes and businesses. Compensation payments are done only once through negotiations (after thorough assessment and valuation of private underground strata by independent property appraisers).<sup>2</sup> This subsurface easement was described as similar to underground easements that utility or cable companies obtain for underground technical works (i.e. fiber optic cables, water lines, gas lines).

Tunnels in the Los Angeles area are generally 15-21 meter below the surface between subway stations, although certain projects have built even deeper tunnels. Accordingly, in the majority of cases, subway operations are said to have little or no impact on surface property; and since subway tunnels are usually constructed below existing utility easements, the tunnels do not impact existing rights or other easements associated with the property. However, existing utilities that stand to be impacted are relocated prior to tunnel construction.

### 1.2.3 Case 3: Compensation for Impact on Structural Integrity and Safety

The following are examples of practices related to land acquisition and compensation for impacts the underground works project may have on the structural integrity of surface property and safety of aboveground activities that arise during the project construction phase and defects liability period. The project’s potential and/or likely impacts should be taken into consideration as much as possible during design phase. The following land acquisition and compensation practices are also linked to the efforts taken by project owners to mitigate the impacts of the tunnels on aboveground structures and activities and also assure the stability of the underground facility.

In Malaysia, property on the surface above tunneling activities is acquired if relevant authorities determine that the underground project is likely to damage surface structures or jeopardize activities on the surface<sup>3</sup>. However, properties located above tunnels that are built deep underground, which have “minimal chance” of damage or other danger, are not acquired.

For the metro development in Hong Kong, extensive efforts are made by the project owner to select a railway alignment that would have the least impact on buildings above or adjacent to the railway tunnels. Construction of the metro would proceed only when engineering studies would ensure the structural integrity of the surface buildings<sup>4</sup>. However, in the event of damage to any surface buildings

<sup>2</sup>Westside Subway Extension, Los Angeles. See “Property Acquisition Fact Sheet” (2011).  
<http://www.metro.net/projects/westside/Westside-property-acquisition-fact-sheet/>

<sup>3</sup>Klang Valley Mass Rapid Transit (KVMRT) Sungai-BulohKajang Line in the greater Kuala Lumpur-Klang Valley National Key Economic Area

<sup>4</sup>Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways.(2011). Underground Strata Resumption for Railway Projects.[http://www.legco.gov.hk/yr10-11/english/panels/tp/tp\\_rdp/papers/tp\\_rdp0520cb1-2170-2-e.pdf](http://www.legco.gov.hk/yr10-11/english/panels/tp/tp_rdp/papers/tp_rdp0520cb1-2170-2-e.pdf)

that occur as a result of the project, MTR Corporation and the concerned contractor will take “immediate” and “appropriate” follow-up action.

The Istanbul Otogar-Ikitelli Rail Transportation System was built within the Marmara Region of Turkey which is a high-risk earthquake zone<sup>5</sup>. In view of the possible seismic risk that the project is exposed to, intensive scientific studies were pursued during the design phase to determine the risks involved and as well as assess the possible impact such development can create along the project alignment and its surroundings. Project construction techniques and designs incorporated the results of these tests given the goal to minimize land acquisition and resettlement, and prior to the start of construction works, buildings that were found to be unsound (by the tests) were demolished.

The compensation policy adopted in the case of the Otogar-ikitelli project included cash compensation for assets lost/affected as a result of project construction impacts triggered by earthquakes. Other cost incurred by project affected persons when emergency evacuations are necessary during the occurrence of said natural calamity is also included in the compensation package. Payments were chargeable to the Istanbul Metropolitan Municipality Electricity, Train and Tramways General Directorate (IETT), presumably after a thorough assessment of the claims filed by the affected persons.

#### **1.2.4 Case 4: Compensation for Change in Land Use or Valuation or Limitations on Surface Developments Linked with Underground Works**

Aside from general compensation for the use of the underground area, several countries also compensate surface private property owners for changes in land use or any restrictions/additional expenses for future development caused by the implementation of underground works. It should be noted that land-use changes and restrictions to surface structure use and/or development that is impacted by underground works are dependent on many factors (i.e. geology of underground strata, level of urban development, current land use, land values, etc.) specific to the respective project sites.

In Tokyo (Japan), private landowners are allowed by government to receive compensation (from owners of underground works) once it is determined, after a careful analysis, that the developments built below their (land owners) property limit the lands future use, as well as restrict the improvements of existing non-movable structures. Tokyo is highly developed built-up urban area where land is very expensive and high-rise buildings abound. This is in the case of underground construction project implementation such as subway tunnels.

Underground constructions projects implemented deeper than 40 m below the surface generally have minimal impact to structures on the surface. However, in the unlikely event of actual significant adverse impact of project construction on surface structures and activities that shall be confirmed by the project owner or its representative after a thorough assessment, appropriate mitigation measures shall be pursued to remedy the situation. Mitigation measure may include compensation or repair of damaged structures depending on negotiations between the landowner and the transport facility owner or representative.

In Hong Kong, the MTR Corporation states that the use of the subsurface area by the urban metro project has negligible effect on existing land use above ground or on the structure of buildings on the surface<sup>6</sup>. They also state, however, that in the event the metro construction will cause limitations on surface property redevelopment, private landowners who are proven to have reasonably suffer loss due to compliance with construction requirements (including extra expenditures linked with higher construction costs, additional measures put in place to protect railway facilities) may file payment claims on the Secretary of Transport and Housing, as per the Railways Ordinance (section 34), within

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<sup>5</sup>Environmental and Social Review Summary: Istanbul Otogar-Ikitelli Rail Transportation System [http://www.miga.org/documents/esrs\\_turkey\\_village\\_metro\\_nov16\\_2010.pdf](http://www.miga.org/documents/esrs_turkey_village_metro_nov16_2010.pdf)

<sup>6</sup>Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways. (2011). Underground Strata Resumption for Railway Projects. [http://www.legco.gov.hk/yr10-11/english/panels/tp/tp\\_rdp/papers/tp\\_rdp0520cb1-2170-2-e.pdf](http://www.legco.gov.hk/yr10-11/english/panels/tp/tp_rdp/papers/tp_rdp0520cb1-2170-2-e.pdf)

one year from the date of completion of building works. Presumably, all such claims are subject to detailed assessment and consideration by the concerned authorities and only legitimate cases will be eligible for mitigation or compensation. It should be noted that Hong Kong has similar highly developed urban built-up areas similar to Tokyo (Japan) where land values are expensive and surface land space is very limited.

In one case of a tunnel construction in Australia, specifically the establishment of the M5 East Motorway<sup>7</sup> tunnel under houses in the Kogarah District Section, resulting in significant reduction of market value for land and other fixed assets located directly over the project alignment. Presumably after a thorough review of the situation, the Roads and Traffic Authority (RTA) agreed to purchase the verified affected properties based on the pre-project market valuation. Upon the request of the affected persons, RTA also agreed to pay \$3,000 and other benefits to the affected households who opt to be relocated<sup>8</sup>.

#### 1.2.4 Understanding and Preparing for Specific Potential Impacts

For the Shatin to Central Link (SCL) of Hong Kong's Mass Transit Railway (MTR), which passes through some of the most densely-developed urban areas in Hong Kong, the MTR Corporation Limited (MTRCL) utilized their policy of reviewing buildings' foundation drawings and records provided by the Hong Kong Buildings Department in addition to conducting their own detailed surveys, accounting for the railway line's potential effect on adjacent buildings and including appropriate protective works in the railway design<sup>9</sup>. This was in view of their concern not only for the safety of the line's passengers but also for maintaining the structural integrity of the surrounding buildings.

Similarly, for land acquisition linked to the development of the Klang Valley Mass Rapid Transit (KVMRT) Sungai-BulohKajang Line in the greater Kuala Lumpur-Klang Valley National Key Economic Area, the Malaysian government stated that properties such as land/houses on the surface above tunneling activities would be acquired if relevant authorities determine that the underground tunnel is likely to damage these structures or endanger activities on the surface property. On the other hand, property located over tunnels built deep underground with "minimal chance" of damage or other danger will not be acquired<sup>10</sup>.

### 1.3 Project Boundaries

On UMRL2 Project, many residential structures are located along the tunnel alignment that will be provided with sufficient ground cover ranging from 2D to 4D. The thickness of the over burden will be maintained to mitigate adverse effects of underground construction works such as ground settlement, noise and vibrations to surface structures. The project boundary limit which will also define the extent of the proposed Protection Zone for the UMRL2 construction will be set along the project alignment as shown in **Figures 1.1** and **1.2** below.

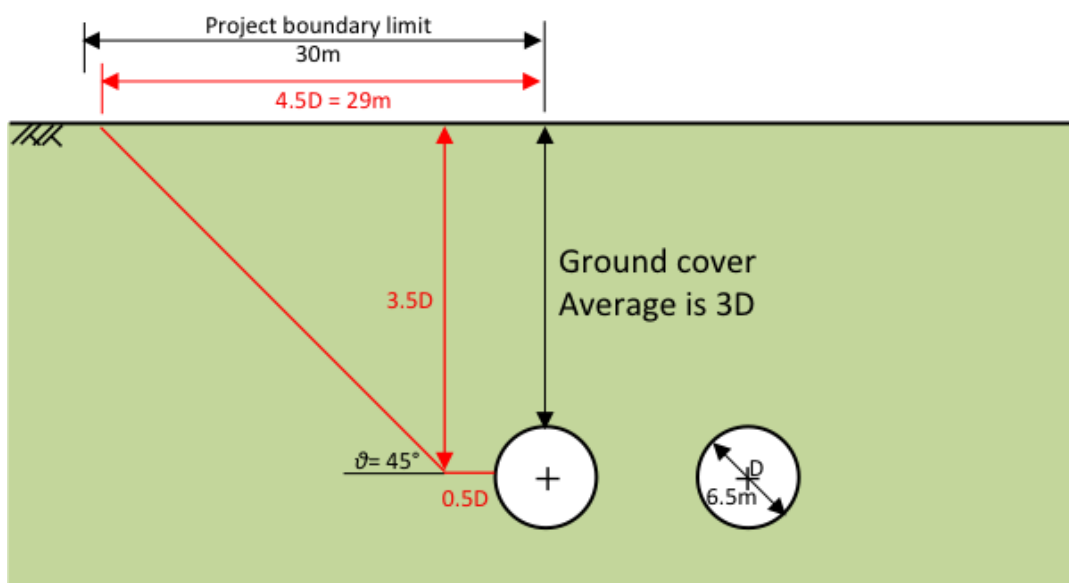
<sup>7</sup>In the case of the Paramatta Rail Link in Australia, valuation of surface property showed an assessed reduction in value linked with underground works construction, particularly in the shallower areas of the tunnels, which ranged in depth from 13 to 70 meters underground, as measured from the floor of the tunnel  
([http://www.parliament.nsw.gov.au/prod/parlment/nswbills.nsf/d6079cf53295ca7dca256e66001e39d2/968f58b4926720feca256d17003ae9af/\\$FILE/TAA%20\(Parra%20Rail%20Link\).pdf](http://www.parliament.nsw.gov.au/prod/parlment/nswbills.nsf/d6079cf53295ca7dca256e66001e39d2/968f58b4926720feca256d17003ae9af/$FILE/TAA%20(Parra%20Rail%20Link).pdf)).Transport Administration Amendment (Parramatta Rail Link-Property Guarantee) Bill, 2003

<sup>8</sup> Construction of tunnel under houses in the Kogarah district as part of M5 East motorway

<sup>9</sup> MTR Shatin to Central Link – Construction/Associated Work and Other Arrangements (2011)

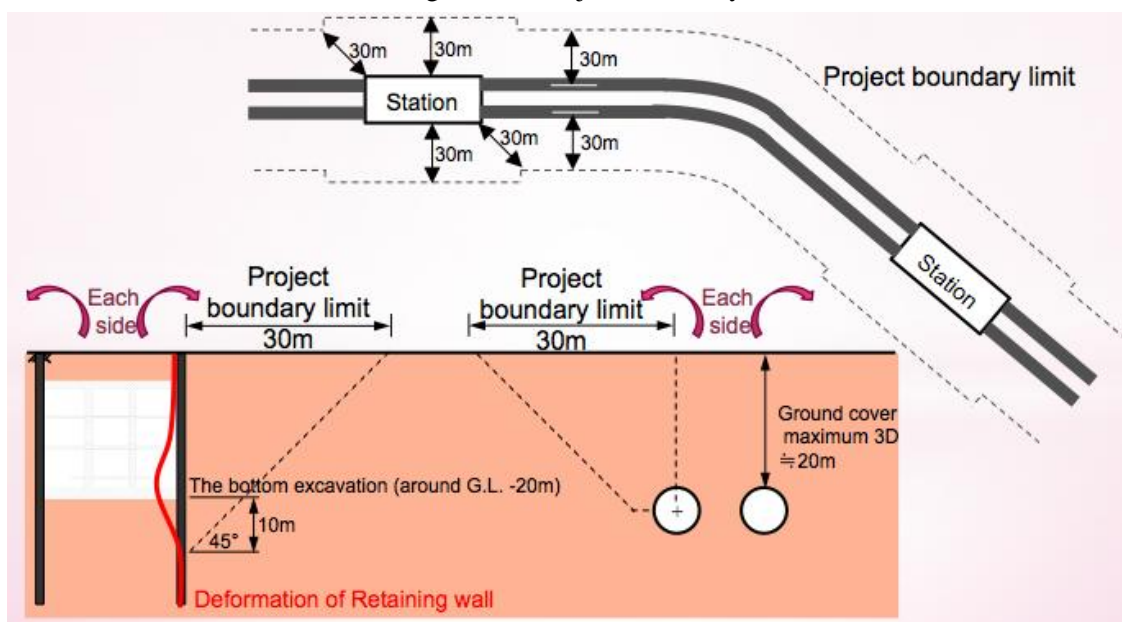
<sup>10</sup> JKPTG (n.d). "Land Acquisition". [http://kvmrt.com.my/pdf/Article%20-Land%20Acquisition\\_ENG.pdf](http://kvmrt.com.my/pdf/Article%20-Land%20Acquisition_ENG.pdf)

Figure 1.1. Project boundary limit under 3D soil cover



Tunnel construction will have some effects on the underground space on the tunnel's sides. The boundary of this space is defined by a line that starts 0.5 D from the side of the tunnel, drawn upwards at an angle of 45 degrees (from a vertical line) and extended to the ground surface (see Figure 2). For underground stations, the Protection Zone is defined by a line starting from the lowest point of excavation for the station drawn at an angle of 45 degrees (from a vertical line), extending to the surface (see Figure 3). Monitoring of surface impacts due to tunnel construction, such as ground and building settlements, building inclination and ground water drawdown, will be conducted during the after tunnel excavation.

Figure 1.2: Project Boundary Limit



## 1.4 General Compensation Policy for UMRL2 Project

Based on the expected layout and tunnel dimensions of UML2 Project and potential issues connected with these; a review of existing GOV and HPC regulations on land acquisition and

compensation, including those mentioned in Section I of this report; and consideration of the previously described international land acquisition, compensation, and resettlement experiences, a general compensation policy has been developed to guide acquisition, compensation, and resettlement activities linked to the structural/land use impacts of UMRL2 Project's underground components.

This compensation policy highlights the State's ownership over the land; thus, government underground works such as UMRL2 only necessitate compensation payment, rehabilitation assistance, or surface property acquisition when thorough assessments by the concerned project and/or government authorities determine that the structural integrity and/or safety of surface activities will be compromised by the underground construction project.

Basically, for UMRL2, any influences to surface structures can be minimized with minimum 2D ground cover (12m) along the tunnel. In addition, future developments such as basement construction and high-rise buildings with foundation avoiding the protection zone can be pursued along the tunnels even though with some limitations.

A building survey will be conducted by the contractor, in order to obtain detailed information on the condition of major structures (age of the building, number of stories, type of foundation, construction materials, etc.) along the project alignment/route. Such data will also help protect the Project from fraudulent claims of project-linked structural damage.

In the unlikely event that the results of said building condition survey indicate that there may be possible adverse impacts on the structural integrity and/or safety of activities on the surface above the underground works, appropriate mitigation activities shall be carried out by the contractor prior to the start of construction. In general, the Project will not compensate anyone who occupies or encroaches into the defined boundaries of the project area after the "Cut-off date". The contractor and its representative will be liable for any damages found, after careful assessment of claim(s), to be linked with tunnel construction works.

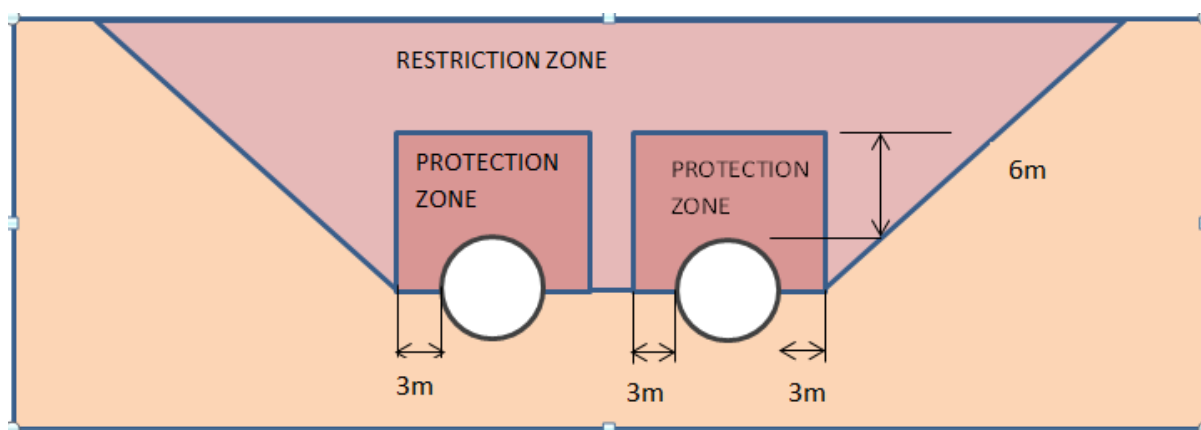
In cases where minor structural damage to surface property is determined to be project related after a thorough assessment by the concerned authorities, the tunnel contractor or its representative will be responsible to repair the damages or compensate the property owners for the actual cost of repairs. It must be emphasized that these claims will be subject to the careful and thorough review of concerned authorities to establish that the observed damage(s) are, in fact, linked with project construction and/or operations.

### **1.5 Proposed Regulation for Future Underground Development Initiatives**

It is recommended that a new regulation be issued by the Hanoi People's Committee that any future structures or projects planned over and/or below tunnels and within the Restriction Zone will need a permit from relevant authorities. The owners of these structures will have to ensure that these new interventions will not compromise the underground facility. The relevant authorities will be responsible for reviewing all applications for new underground works, taking note of their possible impact to the existing subterranean public facilities and issuing the appropriate permit for projects meeting international and national structural and safety standards.

It should be emphasized in the new regulation that no structure nor activities should be allowed to penetrate the tunnel's protection zone as this may compromise the stability of the underground facilities, and may even pose as a risk to the safety of the train passengers and crew. **Figure 1.3** shows the proposed layout of Protection and Restriction Zones vis-à-vis the project tunnel layout.

Figure 1.3: Restriction and Protection Zones



### 1.6 Underground Works Policy Summary and Recommendations

The recommended compensation policy for the project is designed to cover actual impacts to surface structures by project construction and or/operations, based on the project's detailed engineering drawings, a comprehensive building survey of surface structures located along the project route/facilities, and the Inventory of Losses and Detailed Measurement Survey carried out as part of the Project land acquisition and resettlement activities. In the case of unforeseen project impacts, affected property owners whose claims are found to be validly linked to project construction and/or operations, after careful analysis by concerned project and/or government authorities, will receive due compensation and rehabilitation assistance as per existing GOV and HPC regulations.

## APPENDIX 2

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**HANOI PEOPLE’S  
COMMITTEE**

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No. 35/2010/QĐ-UBND

**SOCIALIST REPUBLIC OF VIETNAM  
Independence – Freedom – Happiness**

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Hanoi, 5<sup>th</sup> December 2011

### DECISION

ON COSTS FOR NEW CONSTRUCTION OF RESIDENTIAL HOUSING, TEMPORARY  
HOUSING AND STRUCTURES AS BASIS FOR DETERMINING COMPENSATION AND  
SUPPORT VALUES WHEN THE STATE RECOVERS LAND IN HANOI AREA

#### HANOI PEOPLE’S COMMITTEE

*Pursuant to Law on Organization of People’s Council and People’s Committee dated 26/11/2003;*

*Pursuant to Construction Law No.16/2003/QH11 dated 26/11/2003 on National Assembly Delegation  
IX Session 4;*

*Pursuant to Law No. 38/2009/QH12 dated 19/6/2009 on amending and supplementing some articles  
of laws related to basic construction investment;*

*Decree No.209/2004/ND-CP dated 16/12/2004 of the Government on Quality management of  
construction works and Decree No.49/2008/ND-CP dated 18/4/ 2008 of the Government amending  
and supplementing some articles of Decree No.209/2004/ND-CP of the Government; Decree No.  
112/2009/ND-CP dated 14/12/2009 of the Government on Management of work construction  
investment expenses;*

*Pursuant to Decree No.197/2004/ND-CP dated 03/12/2004 of the Government on compensation,  
support and resettlement when the State recovers land; No.69/2009/ND-CP dated 13/8/2009 of the  
Government on supplementing regulation for Land use planning, land prices, land recovery,  
compensation, support and resettlement;*

*Considering the inter-industry’s proposal of Department of Construction, Department of Finance  
and Hanoi Site Clearance Steering Committee in Statement No.6998/TTr-LN: XD-TC-BCĐ dated  
28/11/2011; Department of Justice in Appraisal Report No. 3770/STP-VBPQ dated 9/11/2011,*

### DECIDED

**Article 1.** Issuance of costs of new construction of residential housing, temporary housing and  
structures to be basis for determining compensation and support values when the State recovers land  
in Hanoi area (*details in Appendix 1 and Appendix 2 attached with this Decision*).

**Article 2.** This Decision shall take effect after 10 days from signing date and replace Decision  
No.32/2001/QĐ-UBND dated 04/8/2010 of Hanoi People’s Committee.

**Article 3.** Office Manager of HPC; Directors of Departments and line agencies; Chief of Steering Committee of Land Clearance ; Chairmen of People’s Committees of District, Communes and Townships and relevant organizations and individuals to undertake the implementation of this Decision./.

**Received by:**

- As mentioned in Article 3;
- City Standing Committee of the Party;
- City Standing People’s Council;
- Chairman of HPC;
- Government Office;
- Ministries: Natural Resources & Environment, Finance, Construction, Justice;
- Vice Chairmen of HPC;
- Government’s website;
- Legal normative documents management division – MOJ;
- The Office of City Committee of the Party;
- Office of People’s Council and Delegation of National Assembly in Hanoi;
- Office Managers, Administration, Natural Resources & Environment (9 copies), Functional Departments;
- OfficialJournalCenter;
- Filing: Admin (120b).

**ON BEHALF OF HPC  
SIGNED FOR CHAIRMAN  
VICE CHAIRMAN**

**VUHONG KHANH**

## APPENDIX 1

### COSTS FOR NEW CONSTRUCTION OF RESIDENTIAL HOUSING

*(Attached to Decision No.35/2011/QĐ-UBND dated 05/12/2011 of Hanoi People’s Committee)*

Grade, Level of Construction		HOUSING TYPE	Construction Unit Price (VND/m <sup>2</sup> of construction floor)
Grade	Level		
IV	1	One-storey house, tiled roof or metal sheet roof, wall 110 with attached column (brick or laterite), protection wall > 3m (excluding the height of gable wall), unroofed	1,761,000
	2	One-storey house, tiled roof or metal sheet roof, wall 220, protection wall > 3m (excluding the height of gable wall), unroofed	2,041,000
	3	One-storey house, flat roof (reinforced concrete-RC)	3,289,000
	4	Two- or three-storey house, brick wall, flat roof (RC); or RC flat roof with sheet metal on top; or tiled roof	5,167,000
III	1	Four- or five-storey house with RC flat roof or RC flat roof with sheet metal on top and foundation unconsolidated with RC piles	5,319,000
	2	Four- or five-storey house with RC flat roof or RC flat roof with sheet metal on top and foundation consolidated with RC piles	5,796,000
	3	Six- or eight-storey house with RC flat roof or RC flat roof with metal sheet on top and foundation unconsolidated with RC piles	5,662,000
	4	Six- or eight-storey house with RC flat roof or RC flat roof with metal sheet on top and foundation consolidated with RC piles	6,155,000

**Notes:**

- Costs for new construction of Grade IV – one-storey house (Level 1, Level 2) exclude septic tank and water tank. Costs for new construction of remaining types already include septic tank and water tank.
- For Grade IV- one-storey house with tiled or metal sheet roof (Level 1, Level 2), if having ceiling, then it shall be taken into account.

**APPENDIX 2**

**COSTS FOR NEW CONSTRUCTION OF TEMPORARY HOUSING AND STRUCTURES**  
*(Attached to Decision No.35/2011/QĐ-UBND dated 05/12/2011 of Hanoi People's Committee)*

<b>No.</b>	<b>Temporary Housing and Structures</b>	<b>Unit</b>	<b>Construction Unit Price (VND)</b>
<b>I</b>	<b>Temporary house</b>		
1	Brick wall 220 with the height $\leq 3\text{m}$ (excluding the height of gable wall), cement tile floor, bricks or mortar finishing with glossy color	$\text{m}^2$	1,619,000
2	Brick wall 110 with the height $\leq 3\text{m}$ (excluding the height of gable wall), cement tile floor, bricks or mortar finishing with color glossy		
a	House with ancillary area, tiled roof, asbestos cement or metal sheet, cement tile floor	$\text{m}^2$	1,228,000
b	House without ancillary area, tiled roof, asbestos cement or metal sheet, cement tile floor	$\text{m}^2$	1,016,000
c	House without ancillary area, tiled roof, asbestos cement or metal sheet, cement floor	$\text{m}^2$	936,000
d	House without ancillary area, asphaltic cardboard roof, cement floor	$\text{m}^2$	725,000
3	Temporary house with bamboo partition, asphaltic cardboard roof or reed roof	$\text{m}^2$	362,000
<b>II</b>	<b>Pent-roofhouse</b>		
1	Pent-roof house, brick wall 220 with height $\leq 3\text{m}$ (excluding the height of gable wall), tiled roof, asbestos cement or metal sheet	$\text{m}^2$	943,000
2	Pent-roof house, brick wall 110 with height $\leq 3\text{m}$ (excluding the height of gable wall)		
a	Tiled roof, asbestos cement or metal sheet	$\text{m}^2$	849,000
b	Asphaltic cardboard roof	$\text{m}^2$	667,000
<b>III</b>	<b>House on stilts</b>		
1	Ironwood with column's diameter $> 30\text{ cm}$	$\text{m}^2$	1,420,000
2	Ironwood with column's diameter $< 30\text{ cm}$	$\text{m}^2$	1,210,000
3	Rose-wood (or concrete column) with column's diameter $> 30\text{cm}$	$\text{m}^2$	1,112,000
4	Rose-wood (or concrete column) with column's diameter $< 30\text{cm}$	$\text{m}^2$	1,013,000
5	House on stilts by eucalyptus wood, timber floor, covered by palm leaf	$\text{m}^2$	494,000
<b>IV</b>	<b>Small shop</b>		

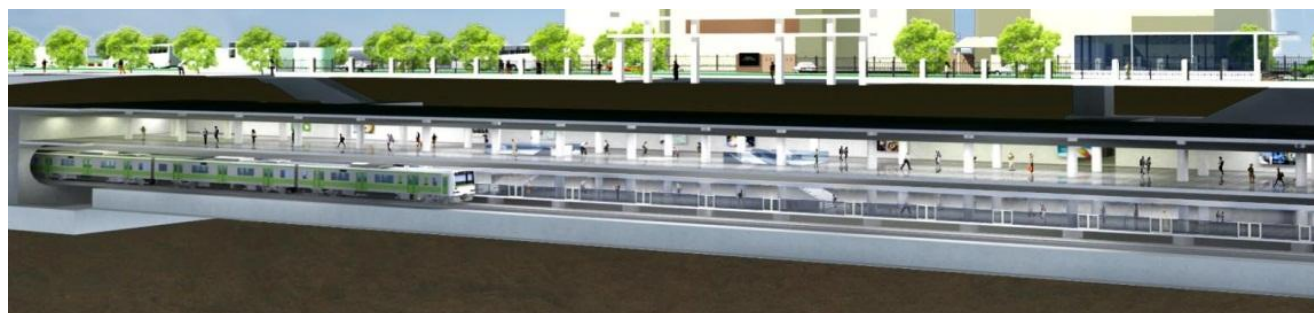
1	Bamboo column, reed roof, soil floor	m <sup>2</sup>	135,000
2	Bamboo column, reed roof, cement floor	m <sup>2</sup>	193,000
<b>V</b>	<b>Yard, road</b>		
1	Paved with baked clay 30x30	m <sup>2</sup>	232,000
2	Paved with brick	m <sup>2</sup>	133,000
3	Paved with concrete-cement brick	m <sup>2</sup>	165,000
4	Paved with coconut-leaf brick, baked clay 20x20	m <sup>2</sup>	149,000
5	Paved with flowery cement tile	m <sup>2</sup>	236,000
6	Concrete grade 150	m <sup>2</sup>	193,000
7	Aggregate road by laterite or rip-rap	m <sup>2</sup>	210,000
8	Cement (or poured with compo)	m <sup>2</sup>	43,000
9	Terrazzo floor	m <sup>2</sup>	84,000
<b>VI</b>	<b>Fence</b>		323,000
1	Tiled wall 110 with attached column	m <sup>2</sup>	
2	Tiled wall 220 with attached column	m <sup>2</sup>	691,000
3	Wall built, embanked with rubble stone	m <sup>2</sup>	1,005,000
4	Wall built with laterite	m <sup>2</sup>	804,000
5	Floral arrangement	m <sup>2</sup>	351,000
6	Angle iron frame B40	m <sup>2</sup>	358,000
7	Barbed wire (including piles)	m <sup>2</sup>	235,000
<b>VII</b>	<b>Scaly-roof</b>		92,000
1	Plastic sheet or asbestos cement (including steel support frame)	m <sup>2</sup>	
2	Tile or metal sheet (including steel support frame)	m <sup>2</sup>	218,000
<b>VIII</b>	<b>Other constructions</b>		340,000
1	Concrete mezzanine	m <sup>2</sup>	
2	Timber mezzanine	m <sup>2</sup>	694,000
3	Water tank	m <sup>3</sup>	684,000
4	Septic tank	m <sup>3</sup>	1,465,000
5	Deep well built of brick, concrete or rock	meter deep	1,782,000
6	Drilled well with the depth ≤ 25m	1 well	737,000
7	Drilled well with the depth > 25m	1 well	2,100,000
8	Brick drainage ditch with RC cover	ditch	2,594,000
<b>IX</b>	<b>Incense burner</b>	burner	470,000
<b>X</b>	<b>Grave moving</b>		
1	Earth-filled grave (Unit price already includes wages for excavation, carrying, movement, burial and cover.)	grave	4,020,000
2	Built grave		
2.1	Built grave by brick, cement plaster; size (L 2.4m – W 1.24m – H 0.8m)	grave	6,498,000
2.2	Built grave by brick, stone walling; size (L 2.4m – W 1.24m – H 0.8m)	grave	8,350,000
2.3	Built grave by brick, stone walling; size (L 1.44m – W 0.96m – H 1.6m)	grave	5,300,000

### APPENDIX 3



## General on Hanoi City Urban Railway Construction Project Line 2

*Towards a public transport oriented city to ensure mobility of the people and development of an environment-friendly society*



## Project Background

### What are UMRT and Hanoi Metro Line 2?

The **UMRT (Urban Mass Rapid Transit)** is an integrated public transportation system of urban railways and buses. The UMRT system is expected to provide people with reliable, convenient and safe transportation services within the city, as well as opportunities for urban development at and around the stations.

**Hanoi Metro Line2** is the urban railway which connects the new urban area and the traditional city center.

### Future UMRT Network in Hanoi City

In Transport Development Plan for Hanoi Capital until 2020(Decision No. 90/2008/QĐ-TTg dated 09/7/ 2008 approved by the Prime Minister), 5 UMRT lines, including Line1, 2, 3, 4 and 5, were approved.

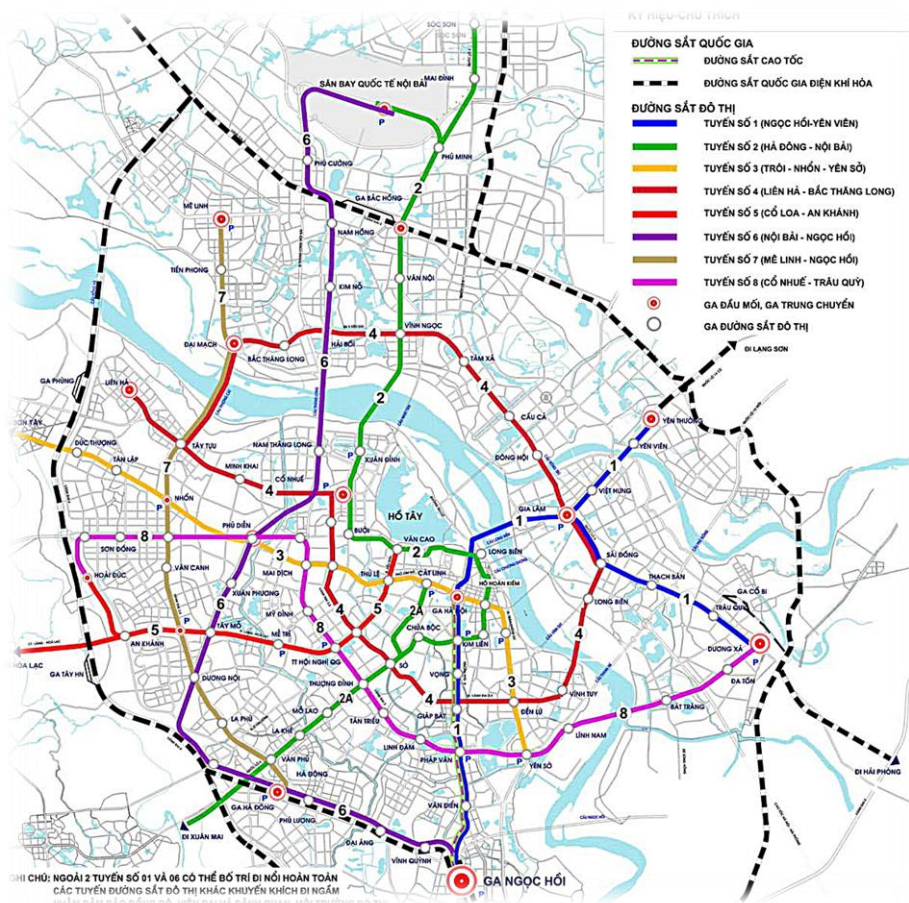
### List of UMRT Lines in Hanoi City

Name	Section	Length
Line1	Ngoc Hoi – Yen Vien	38.7 km
Line2	Noi Bai –Thuong Dinh	35.2 km
Line2A	Cat Linh – Ha Dong	14 km
Line3	Troi – Nhon – Yen So	21km
Line4	Lien Ha – Bac Thang Long	53.1 km
Line5	Southern West Lake – Ngoc Khanh –Hoa Lac	34.5 km
Line6	Noi Bai – Ngoc Hoi	47 km
Line7	Me Linh – Ngoc Hoi	35 km
Line8	Co Nhue –Trau Quy	28 km

Note: Line 4 is BRT or LRT.

Source: General Construction Plan of Hanoi Capital City until 2030, July 2011

### Orientation for Metro and Urban Railway Network



Source: General Construction Plan of Hanoi Capital City

## Hanoi Metro Line 2 Construction Project

**Hanoi Metropolitan Railway Transport Project Board (HRB)** was assigned as Project Owner of the **Hanoi City Urban Railway Construction Project (Nam Thang Long – Tran Hung Dao Section (Line2)) (I)** by Hanoi People’s Committee. The Feasibility Study Report of the Project was approved by Hanoi People’s Committee in Decision No. 2054/QĐ-UBND dated 13/12/2008.

The Government of Socialist Republic of Vietnam and Japan International Cooperation Agency (JICA) entered into a loan agreement (VNXVI-1) on 31/3/ 2009 for implementation of the Project. In April 2011, the General Consultants of the Project started to design and build activities.

### Scope of the Project

Route: Phase1 of Line2 (total length 11.5km) shall be implemented in Tu Liem, Tay Ho, Cau Giay, Ba Dinh and Hoan Kiem Districts. Starting at Nam Thang Long of CIPUTRA urban area, the line goes along extended Nguyen Van Huyen – Hoang Quoc Viet – Hoang Hoa Tham – Thuy Khue – Phan Dinh Phung – Hang Giay – Hang Duong – Hang Ngang – Hang Dao – Dinh Tien Hoang – Hang Bai – ending point at intersection of Tran Hung Dao Street.

Stations system: 3 elevated stations (C1-C3 and viaduct, 2.6km), 7 underground stations (C4-C10 and tunnel, 8.9km)

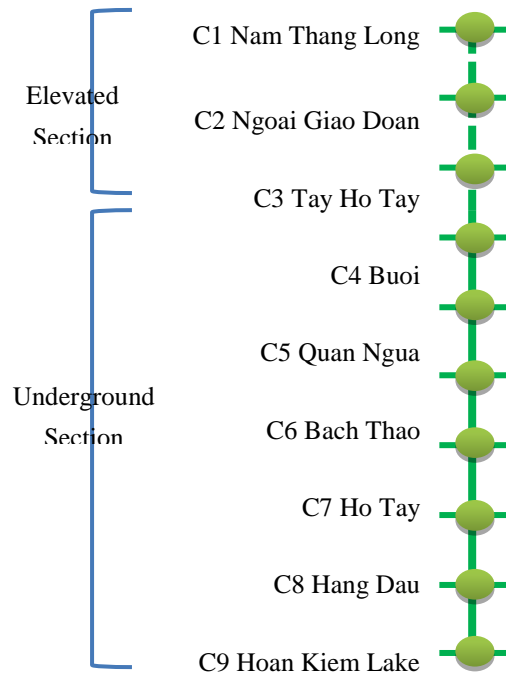
Dual gauge: 1.435 mm

Type of cars: proposed train with 4 cars in 2018, then increase to 6 cars in the future.

Depot: in Xuan Dinh Commune, Tu Liem District

Operation year: 2018 (planned)

Expansion plan: extension to link with Noi Bai Airport and Dong Anh new town areas at the Northern part of the city, and leading to Ha Dong at Southwestern of the city. Line2 stations are expected connectivity with Line5 station at Quan Ngua (C5), Line1 station at Hang Dau (C8) and Line 3 station at Tran Hung Dao (C10). Bus route network and bus terminals will also be improved.



### Expected Impacts

For People and Society:

- to enjoy reliable transport
- to promote smooth traffic
- to improve mobility and accessibility of daily life

For Safety and Security:

- to design station facilities of barrier-free
- to install equipment for safety and security inside station
- to promote easy transfer to other transport modes

For Environment and Culture:

- to maintain a green and preserve cultural and historical relics
- to blend with local landscape
- to create a modern society

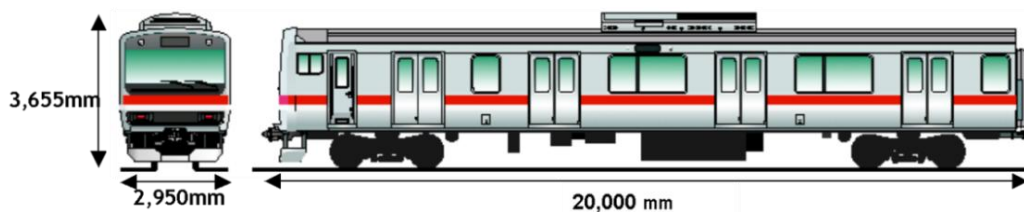
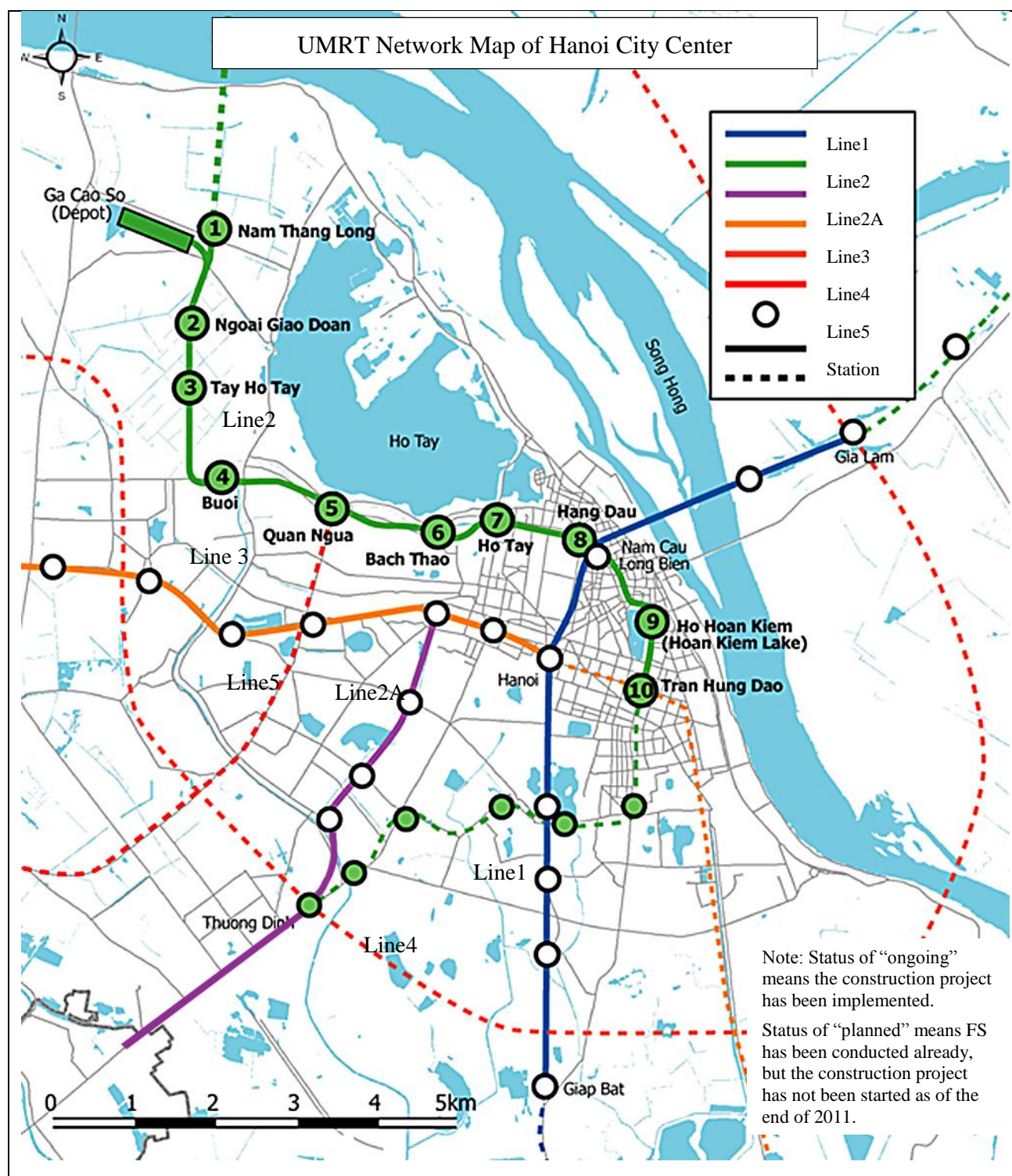


Image of Metro Train





Project Name	Hanoi City Urban Railway Construction Project (Nam Thang Long – Tran Hung Dao Section (Line2)) (I)	
Owner	Hanoi Metropolitan Railway Transport Project Board (HRB) of Hanoi City People's Committee Address: No. 8, Ho Xuan Huong, Hai Ba Trung District, Hanoi City, Vietnam Tel: +84-4-3943-5126, Fax: +84-4-3943-5126	
General Consultants (GC)	Joint Venture of Oriental Consultants Company Limited Katahira & Engineers International Tonichi Engineering Consultants, Inc. PADECO Co. Ltd. ALMEC Corporation Transport Engineering Design Inc. Transport Investment and Construction Consultant JSC	Address of Project Office: 14F, Handi Resco Tower B, 521 Kim Ma Street, Ba Dinh District, Hanoi, Vietnam Tel: +84-4-3724-6425 Fax: +84-4-3724-6427