THE PRIME MINISTER	**SOCIALIST REPUBLIC OF VIET NAM**
----------	**Independence - Freedom - Happiness**

No. 621/QD-TTg	*Hanoi, May 23rd, 2008*

DECISION

APPROVING THE ADJUSTMENT TO THE MASTER PLAN ON CONSTRUCTION OF HOA LAC HI-TECH PARK OF A 1/5.000 SCALE

THE PRIME MINISTER

Pursuant to the December 25, 2001 Law on Organization of the Government;
Pursuant to the Prime Minister's Decision No. 274/QD-TTg of October 31,2005, approving the adjustment to the master plan on construction of Hoa Lac Hi-Tech Park;
Pursuant to the Government's Decree No. 08/ 2005/ND-CP of January 24, 2005, on construction planning;
At the proposal of the Ministry of Construction in Document No. 35/TTr-BXD of May 6, 2008 regarding approval of the adjustment to the master plan on construction of Hoa Lac Hi-Tech Park.

DECIDES:

Article 1.- To approve the adjustment to the master plan on construction of Hoa Lac Hi-Tech Park of a 1/5.000 scale with the following principal contents:

1. Scope of planning:

Construction of Hoa Lac Hi-Tech Park is planned on a total area of 1,586 ha (including Bac Phu Cat industrial park), covering Phu Cat commune of Quoc Oai district, and Tan Xa, Ha Bang, Thach Hoa, Binh Yen and Dong Truc communes of Thach That district, Ha Tay province. The park's boundaries are determined as follows:

- To the north, it borders on a residential quarter south of road 84 (provincial highway 420);

- To the south, it borders on an agro-forestry area (the resettlement area of Quoc Oai district);

- To the east, it borders on a planned road (perpendicular to Lang-Hoa Lac expressway);

- To the west, it borders on national highway 21.

2. Characteristics:

- Hoa Lac Hi-Tech Park is a national-level center for hi-tech research, development and application and a place to incubate hi-tech enterprises, train human resources and develop production and trading of hi-tech products. It comprises functional zones for hi-tech industry, research and development, software production, education and training, housing, offices and hi-tech services, focusing on development of hi-tech industries and domains such as information technology, telecommunications, electronics, biology, electronic engineering, machinery manufacture, new materials and new energy.

3. Population size:

- Current population: around 11,100;

- By 2015: estimated at around 143.500. including around 56,700 permanent residents; central zone, a sen ice complex, an apartment and office building area, a residential building area, a utility zone and an entertainment and sports center:

b/ Land use structure

No.	Functional zones	Area (ha)	Percentage (%)
1	Software zone	76	4.79
2	Research and development zone	229	14.44
3	Hi-tech industrial zone	549.5	34.65
4	Education and training zone	108	6.81
5	Central zone	50	3.15
6	Service complex	87.5	5.52
7	Apartment and office building area	42	2.65
8	Residential building area	26	1.64
9	Utility zone	110	6.93
10	Entertainment and sports zone	33.5	2.11
11	Land for infrastructure	115.5	7.28
12	Land for reservoirs and buffer area	117	7.38
13	Land for greeneries	42	2.65

	Total	1.586	100

- By 2020: estimated at around 229.000. including 99.300 permanent residents.

4. Land use planning:

a/ Division of functional zones

Hoa Lac Hi-Tech Park comprises an education and training zone, a software zone, a research and development zone, a hi-tech industrial zone, a

5. Spatial development planning: a/ Spatial arrangement

The above functional zones are spatially arranged and organized as follows:

- The 76-ha software zone on the peninsula on Tan Xa lake will accommodate software producers and traders:

- The 229-ha research and development zone, above the hi-tech industrial zone and surrounding the software zone, will accommodate hi-tech research, development and application establishments and establishments to train specialists for hi-tech industries;

- The 549.5-ha hi-tech industrial zone, south of Hoa Lac Hi-tech Park along the two sides of Lang-Hoa Lac expressway, will accommodate hi-tech product plants. It will have a bonded warehouse system for import-export activities:

- The 108-ha education and training zone, north of Hoa Lac Hi-tech Park by side of national highway 21, will accommodate colleges and education, training and vocational centers to supply skilled human resources;

- The 50-ha central zone, adjacent to the software zone, will accommodate public-service works such as office buildings, a conference center, an information center, a museum, a post office, hotels and restaurants:

- The 87.5-ha service complex will be a multifunctional service center for trade, business, supermarkets, restaurants, hotels and medical clinics, fully meeting demands inside and outside Hoa Lac Hi-Tech Park;

- The 42-ha apartment and office building area will be located south of Hoa Lac Hi-Tech Park at the intersection between Lang-Hoa Lac expressway and national highway 21;

- The 26-ha residential building area, by the side of national highway 21, will accommodate high-storey apartment buildings, villas and attached houses;

- The 110-ha utility zone, north of Hoa Lac Hi-Tech Park next to the education and training zone, will supply utility services such as golf courts and luxury villas:

- The 33.5-ha entertainment and sports zone will accommodate sports and physical training centers, cinemas, restaurants and recreational centers:

- Land for transport and technical infrastructure will cover 115.5 ha. including roads inside Hoa Lac Hi-Tech Park and trunk roads connecting Hoa Lac Hi-Tech Park with external roads:

- A 117-ha area of reservoirs and buffer areas will be for landscape, especially the Tan Xa lake landscape, to conserve and maintain natural elements:

- Land for greeneries will cover 42 ha, including strips of trees separating the park from Lang-Hoa Lac expressway and national highway 21 and along roads inside the Hi-Tech Park.

b/ Design of architectural view

- The entire Hoa Lac Hi-Tech Park will have a main spatial axis (main entrance) in the north-south direction from Lang-Hoa Lac expressway and two secondary axes in the east-west direction (sub-entrance on national highway 21);

- In addition, there will be feeder roads in parallel with the above two main roads. These feeder roads will link the central zone with other functional zones and intersect with collection roads or roads around Hoa Lac Hi-Tech Park;

- Architectural works in the central zone will be designed modernly in conformity with natural terrains. In this zone, high rises may be designed to create prominent points for the entire-Hoa Lac Hi-Tech Park:

- The research and development zone, the education and training zone, the service complex, the software zone and the residential building area each may study and build high rises whose maximum storey height, however, must not exceed that of the central zone.

6. Technical infrastructure planning:

a/ Transport

- Roads

+ Lang-Hoa Lac expressway is an important route running through Hoa Lac Hi-Tech Park, linking national highway 1A and Ho Chi Minh highway (national highway 21);

The Management Board of Hoa Lac Hi-Tech Park may manage 60 m of Lang-Hoa Lac expressway's road boundary section running through Hoa Lac Hi-Tech Park. When road expansion is required, the Management Board of Hoa Lac Hi-Tech Park shall hand over the section to the management agency.

+ Roads linking Hoa Lac Hi-Tech Park with national highway 21 and the eastern beltway.

+ Internal (feeder) roads linking functional zones of the Hi-tech Park will have a cross-section of 11-50m.

- Railway

The to-be-built internal railway connected with the Hanoi-Hoa Lac urban railway (route UMRT 3) will be an effective means to transport passengers between Hoa Lac Hi-Tech Park and Hanoi. The route will promote urban development along Lang-Hoa Lac expressway.

- Waterway

Son Tay port about 20 km away from Hoa Lac Hi-Tech Park, which belongs to an important waterway of the Red Riser delta, will be a regional-level port serving the entire western region of Hanoi, including Son Tay. Hoa Lac and Xuan Mai.

b/ Technical preparations:

- Ground leveling

To maintain natural terrains, to level ground areas partially, to organize ground areas at different heights, which will be connected and protected by a system of tunnels or walls.

The eastern and southeastern low-lying area will have a foundation level limited at > + 10m for civil works and offices and > +11m for industrial works.

To retain the height levels of existing roads already built in phase I.

- Water drainage

+ To have a separate rainwater drainage system. To make full use of operating systems of sewers built in phase I;

+ To divide the entire Hoa Lac Hi-Tech Park into 6 main rainwater drainage areas, with the main flow for drainage toward Tich river to the east:

Ÿ Four basins north of Lang-Hoa Lac expressway, namely Tan Xa reservoir. Dua Gai stream. Vuc Giang canal and a newly built reservoir.

Ÿ Two basins south of Lang-Hoa Lac expressway flowing toward streams inside Hoa Lac Hi-Tech Park.

- Other technical preparations:

+ To embank Tan Xa and other small reservoirs. To embank Tan Xa reservoir at three levels (to be studied under a separate project);

+To replace the eastern spillway with a B3,000 x 3.000 box culvert suitable to the research for this period.

c/ Water supply

- Water source: To be taken from the D 1,600 water pipeline running through Hoa Lac Hi-Tech Park under the Song Da water supply project invested by Vietnam Construction and Import-Export Corporation (VINACONEX);

- To supply water according to TCXDVN 33-2006 standards and some Japanese standards:

- To have two separate water supply systems for Hoa Lac Hi-Tech Park because the park is divided by Lang-Hoa Lac expressway into two areas north (northern area) and south southern area) of Lang-Hoa Lac expressway.

d/ Electricity supply

- Electricity supply norms:

+ For daily life: 0.2 KVA/person:

+ For functional zones: 120 KVA-200 KVA ha:

+ For the hi-tech park: 400 KVA/ha: + For road lighting: 0.6-1.2 Cd/m2

- The total electricity capacity required for the entire Hoa Lac Hi-Tech Park (including Bac Phu Cat industrial park):

- By 2015: 99,862 KVA;

- By 2020: 209,850 KVA.

e/ Power sources for Hoa Lac Hi-Tech Park:

- 220 kV power source: To build in phase II (from 2015 to 2020) a 220 KV station with a capacity of between 2 x 125 MVA and 2 x 250 MVA (depending on the actual capacity) in Hoa Lac Hi-Tech Park.

- 110 kV power source:

+ Bv 2015: To build 110/220 kV transformer station 1 with a capacity of 3 x 63 MVA (2 operating and one standby generators);

+ By 2020: To build 110 kV transformer station 2 with a capacity of 2 x 40 MVA.

f/ Wastewater drainage and environmental sanitation:

- Wastewater drainage:

+ Wastewater from all activities inside Hoa Lac Hi-Tech Park will be treated internally before being treated at a common wastewater treatment plant. After being treated at the plant, wastewater discharged into the environment must meet TCVN 5945-2005 standards for industrial wastewater, grade A.

+To raise the capacity of wastewater treatment plant 1 in hi-tech zone 1 from 6.000 m3/day to 26.000 m^3/day:

+ To build wastewater treatment plant 2 with a capacity of 8.000 m3/day in hi-tech zone 2.

- Environmental sanitation:

After being sorted and collected, solid wastes will be transported for treatment or hygienic burial.

g/ Communication:

- Designed norm:

Each household will be a telephone subscriber. The subscription capacity of works in Hoa Lac Hi-Tech Park such as the software zone, the research and development zone and the service complex is calculated on the basis of existing work items in each planned area. The total number of subscribers in Hoa Lac Hi-Tech Park is estimated at around 26,770.

- Solution:

To build a switchboard with around 30,000 numbers (estimated) to serve subscribers in Hoa Lac Hi-Tech Park, which may be expanded when regional demand increases.

h/ Environmental impact assessment and environmental protection measures:

Activities inside Hoa Lac Hi-Tech Park must strictly meet environmental requirements. Projects, depending on their scales and types, should have their environmental impacts assessed, register for environmental standards and take management measures to meet environmentally friendly and clean production standards:

- To encourage production activities using clean technologies and their management systems and environmentally friendly products. Industries in Hoa Lac Hi-Tech Park will enjoy cleantechnologies. Such industries as garment food processing and building will not be allowed in Hoa Lac Hi-Tech Park;

- To build an environmental treatment system to prevent wastes from daily life, production and research activities of Hoa Lac Hi-Tech Park from adversely affecting the environment;

- To invest in building an environmental observation and supervision system to conserve the eco-system and to regularly educate about environmental protection in the entire Hoa Lac HiTech Park.

Article 2.- This Decision takes effect on the date of its signing.

Article 3- The Ministers of Construction; Science and Technology; Information and Communication: Planning and Investment; Transport; Natural Resources and Environment; and Education and Training, the president of the People's Committee of Ha Tay province and concerned organizations shall implement this Decision.

THE PRIME MINISTER

Nguyen Tan Dung

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