E. Khuyen Luong Port

- 137. Development direction of Khuyen Luong Port is proposed as follows:
 - Khuyen Luong Port shall handle bulk and non-bulk cargoes as well as cargoes of SRV (2020), and serve mainly for districts located at the right bank of Red River as well as a part of Ha Tai Province making full use of its excellent location in terms of road network.
 - Length of newly planned berths shall be 760m (2020) and 160m (2010).
 - Extension area for port facilities shall be allocated at downstream side of existing facilities.
- 138. Master plan and short-term development plan of Khuyen Luong Port are shown in **Table VI-4**, **Table VI-5**, **Figure VI-9** and **Figure VI-10**.

Table VI-4 Master Plan of Khuyen Luong Port (2020)

	, -
Item	Description
Port Owner/Investor	MOT (small-scale investment: port operator)
Port Operator	Khuyen Luong Port, Vietnam Sea & River Transport
	Corporation under VINALINES
Facing IW Corridor	Corridor 1 (Quang Ninh - Hai Phong - Hanoi - Viet Tri)
	Corridor 4 (Sea - Hanoi)
Hinterland	Primary: Thanh Tri District
	Secondary: Citadel districts and Ha Tay Province
	SRV: whole city and Ha Tay Province
Design Capacity	3.3 million tons (Bulk: 2.2, Non-bulk: 0.5, SRV: 0.6)
Length of Waterfront	1.4km
Berth Property	Existing: 106m +60m (be completed before 2010)
	(2 mooring buoys be completed before 2010)
	Newly planned: 760m (+11.1m) @ -2.5m (-3.6m for SRV)
Land Area	14ha (Storage yard: 3.4ha, Warehouse: 1.9ha)
	(Newly planned Storage yard: 3.0ha, Warehouse:1.5ha)
Handling Equipment	Quay-side mobile crane: 18 units (8tons)
	Grab bucket: 10 units (3cu.m), Forklift: 27 units (3tons)
	Shovel loader: 7 units (2cu.m), Bulldozer: 3 units (5tons)
	Dump Truck: 18 units (10tons), Truck 18units (7tons)
	Pallet: 3,300 units (1.2mx1.8m)
Access Road	2 lanes to be linked to Dyke road (for Ring Road No.3)
	Planned: Access road improvement (L=2.7km)

Table VI-5 Short-term Development Plan of Khuyen Luong Port (2010)

Item	Description
Port Owner/Investor	MOT (small-scale investment: port operator)
Port Operator	Khuyen Luong Port, Vietnam Sea & River Transport
	Corporation under VINALINES
Facing IW Corridor	Corridor 1 (Quang Ninh - Hai Phong - Hanoi - Viet Tri)
	Corridor 4 (Sea - Hanoi)
Hinterland	Primary: Thanh Tri District
	Secondary: Citadel districts and Ha Tay Province
	SRV: whole city and Ha Tay Province
Design Capacity	1.1 million tons (Bulk: 0.9, Non-bulk: 0.2)
Length of Waterfront	0.8km
Berth Property	Existing: 106m +60m (be completed before 2010)
	(2 mooring buoys be completed before 2010)
	Newly planned: 160m (+11.1m) @ -2.5m
Land Area	4ha (Storage yard: 1.5ha, Warehouse: 0.4ha)
	(Newly planned Storage yard: 0.5ha, Warehouse:0.5ha)
Handling Equipment	Quay-side mobile crane: 6 units (8tons)
	Grab bucket: 4 units (3cu.m), Forklift: 6 units (3tons)
	Shovel loader: 3 units (2cu.m), Bulldozer: 1 units (5tons)
	Dump Truck: 8 units (10tons), Truck 4units (7tons)
	Pallet: 700 units (1.2mx1.8m)
Access Road	2 lanes to be linked to Dyke road (for Ring Road No.3)
	Planned: Access road improvement (L=2.7km)

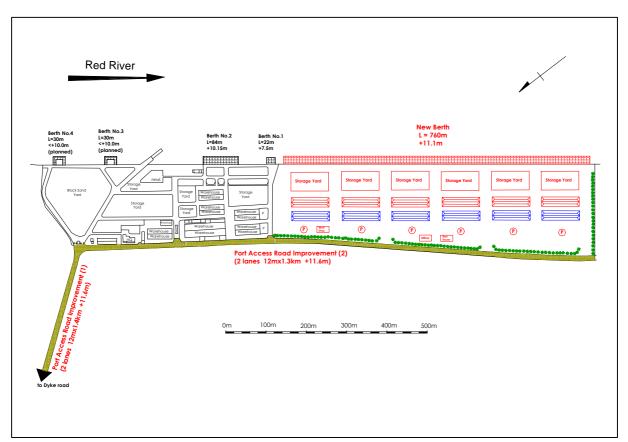


Figure VI-9 Master Plan of Khuyen Luong Port (2020)

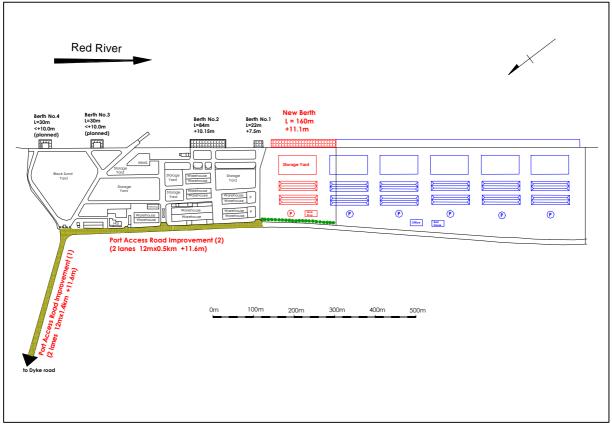


Figure VI-10 Short-term Development Plan of Khuyen Luong Port (2010)

F. New North Port

- 139. Development direction of New North Port is proposed as follows:
 - New North Port shall handle bulk and non-bulk cargoes, and serve mainly for Dong Anh and Soc Son Districts in order to contribute to urban and industrial development expected in these districts.
 - Required length of berth shall be 760m (2020) and 280m (2010).
 - Development area for port facilities shall be allocated at the left bank of the Red River, and between Thang Long Bridge and future Nhat Tan Bridge (Hai Boi Commune, upstream of the existing groin KT-1).
- 140. Master plan and short-term development plan of New North Port are shown in **Table VI-6**, **Table VI-7**, **Figure VI-11** and **Figure VI-12**.

Table VI-6 Master Plan of New North Port (2020)

Item	Description
Port Owner/Investor	MOT (small-scale investment: port operator)
Port Operator	Company (Not yet decided)
Facing IW Corridor	Corridor 1 (Quang Ninh - Hai Phong - Hanoi - Viet Tri)
Hinterland	Primary: Dong Anh and Soc Son Districts
	Secondary: Gia Lam District
Design Capacity	3.2 million tons (Bulk: 2.8, Non-bulk: 0.4)
Length of Waterfront	0.8km
Berth Property	760m@-2.5m, Crown elevation: +12.3m
Land Area	11ha (Storage yard: 4.3ha, Warehouse: 0.6ha)
Handling Equipment	Quayside mobile crane: 15 units (8tons)
	Grab bucket: 12 units (3cu.m), Forklift: 9 units (3tons)
	Shovel loader: 9 units (2cu.m), Bulldozer: 3 units (5tons)
	Dump Truck: 24 units (10tons), Truck: 6 units (7tons)
	Pallet: 1,100 units (1.2mx1.8m)
Access Road	2 lanes to be linked to the Connecting Road between
	Thang Long Bridge North Exit and Highway No.3

Table VI-7 Short-term Development Plan of New North Port (2010)

Item	Description
Port Owner/Investor	MOT (small-scale investment: port operator)
Port Operator	Company (Not yet decided)
Facing IW Corridor	Corridor 1 (Quang Ninh - Hai Phong - Hanoi - Viet Tri)
Hinterland	Primary: Dong Anh and Soc Son Districts
	Secondary: Gia Lam District
Design Capacity	1.1 million tons (Bulk: 1.0, Non-bulk: 0.1)
Length of Waterfront	0.3km
Berth Property	280m@-2.5m, Crown elevation: +12.3m
Land Area	4ha (Storage yard: 1.5ha, Warehouse: 0.2ha)
Handling Equipment	Quayside mobile crane: 5 units (8tons)
	Grab bucket: 5 units (3cu.m), Forklift: 3 units (3tons)
	Shovel loader: 3 units (2cu.m), Bulldozer: 2 units (5tons)
	Dump Truck: 8 units (10tons), Truck: 2 units (7tons)
	Pallet: 400 units (1.2mx1.8m)
Access Road	2 lanes to be linked to the Connecting Road between
	Thang Long Bridge North Exit and Highway No.3

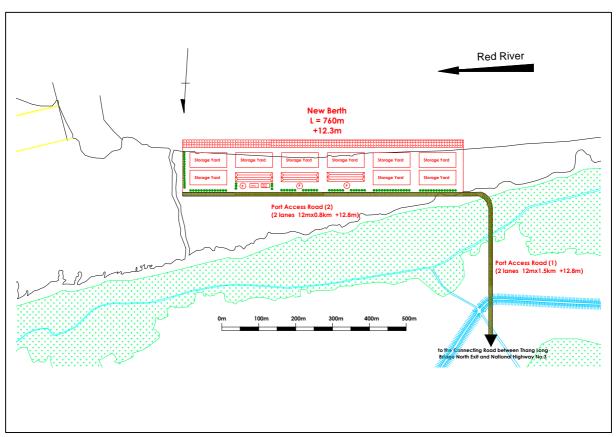


Figure VI-11 Master Plan of New North Port (2020)

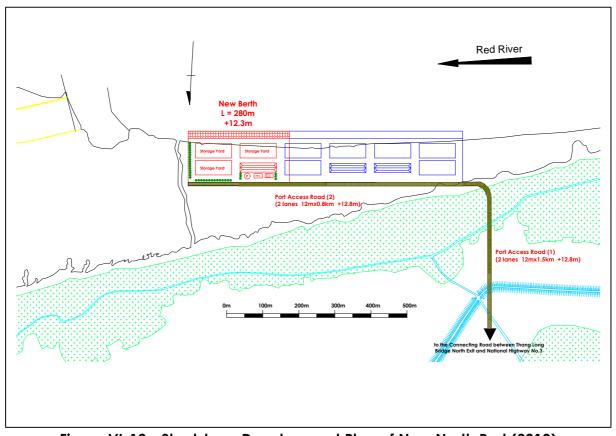


Figure VI-12 Short-term Development Plan of New North Port (2010)

G. New East Port

- 141. Development direction of New East Port is proposed as follows:
 - New East Port shall handle non-bulk and bulk cargoes as well as container from the Northern seaports of Cai Lan and Hai Phong, and serve mainly for Gia Lam District (container: for whole city) making full use of its excellent location as a primary gateway of Hanoi from the Northern seaports of Cai Lan and Hai Phong.
 - Required length of berth shall be 720m (2020) and 360m (2010).
 - Development area for port facilities shall be allocated at the right bank of the Duong River, and downstream of Phu Dong Bridge.
- 142. Master plan and short-term development plan of New East Port are shown in **Table VI-8**, **Table VI-9**, **Figure VI-13** and **Figure VI-14**.

Table VI-8 Master Plan of New East Port (2020)

Item	Description
Port Owner/Investor	MOT (small-scale investment: port operator)
Port Operator	Not yet decided (candidate: VINALINES+NOWATRANCO)
Facing IW Corridor	Corridor 1 (Quang Ninh - Hai Phong - Hanoi - Viet Tri)
Hinterland	Primary: Gia Lam District
	Secondary: Soc Son, Dong Anh and Thanh Tri Districts Container: whole city
Design Capacity	2.2 million tons (Bulk: 1.1, Non-bulk: 1.1) Container: 67 thousand TEUs
Length of Waterfront	0.8km
Berth Property	720m@-2.5m, Crown Elevation: +11.0m
Land Area	18ha (Storage yard: 1.8ha, Warehouse: 1.9ha, ICD (CY+CFS+DC): 6.7ha)
Handling Equipment	Quayside mobile crane: 15 units (2@30tons+13@8tons) Grab bucket: 5 units (3cu.m) Forklift: 32 units (4@37tons+28@3tons) Shovel loader: 3 units (2cu.m), Bulldozer: 2 units (5tons) Dump Truck: 9 units (10tons), Truck: 19Units (7tons) Tractor & Trailer: 6 units, Pallet: 3,400 units (1.2mx1.8m)
Access Road	2 lanes to be linked to Highway No.1 and Dyke road

Table VI-9 Short-term Development Plan of New East Port (2010)

Item	Description
Port Owner/Investor	MOT (small-scale investment: port operator)
Port Operator	Not yet decided (candidate: VINALINES+NOWATRANCO)
Facing IW Corridor	Corridor 1 (Quang Ninh - Hai Phong - Hanoi - Viet Tri)
Hinterland	Primary: Gia Lam District Secondary: Soc Son, Dong Anh and Thanh Tri Districts Container: whole city
Design Capacity	1.0 million tons (Bulk: 0.4, Non-bulk: 0.6) Container: 32 thousand TEUs
Length of Waterfront	0.4km
Berth Property	360m@-2.5m, Crown Elevation: +11.0m
Land Area	8ha (Storage yard: 0.7ha, Warehouse: 1.1ha, ICD (CY+CF\$+DC): 3.2ha)
Handling Equipment	Quayside mobile crane: 7 units (1@30tons+6@8tons) Grab bucket: 2 units (3cu.m) Forklift: 17 units (2@37tons+15@3tons) Shovel loader: 1 units (2cu.m), Bulldozer: 1 units (5tons) Dump Truck: 3 units (10tons), Truck: 10Units (7tons) Tractor & Trailer: 3 units, Pallet: 1,800 units (1.2mx1.8m)
Access Road	2 lanes to be linked to Highway No.1 and Dyke road

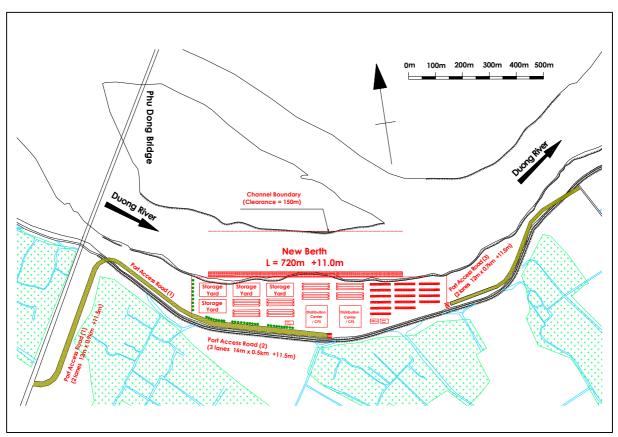


Figure VI-13 Master Plan of New East Port (2020)

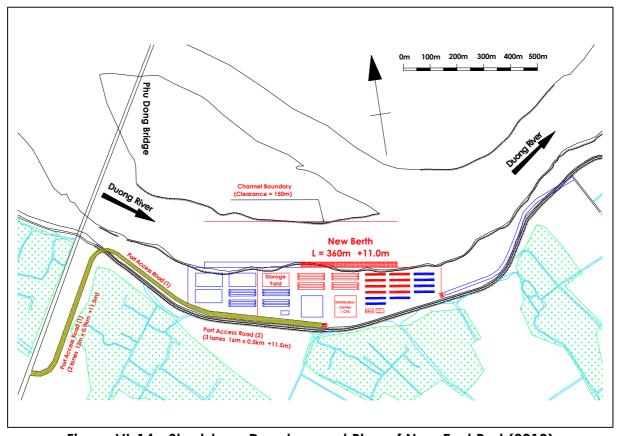


Figure VI-14 Short-term Development Plan of New East Port (2010)

H. Passenger Terminal and Satellite Berths

- 143. Development direction of new main passenger terminal is proposed as follows:
 - New passenger terminal shall serve for passenger boats and their passengers plying Hanoi - Hun Yen - Thai Binh and Hanoi - Viet Tri - Phu Tho as well as cruising boats and their passengers.
 - Development area for new passenger terminal shall be allocated at northern part of Hanoi Port.
- 144. Plan of new passenger terminal is shown in **Table VI-10** and **Figure VI-15**.

Item	Description
Port Operator	Not yet decided (candidate: HNPC)
Location	Northern part of Hanoi Port
Designed Capacity	0.8 million PAX (+ 0.3 million PAX for tourism)
Length of Waterfront	100m
Length of Berth	100m (2 pontoon)
Total Area	0.7ha
Passenger Terminal	0.1ha
Building	
Parking	0.3ha for bus, car and motorbike
Park & Open Space	0.3ha for passenger and others
Access to the Berth	Bus

Table VI-10 Plan of New Passenger Terminal (2010, 2020)

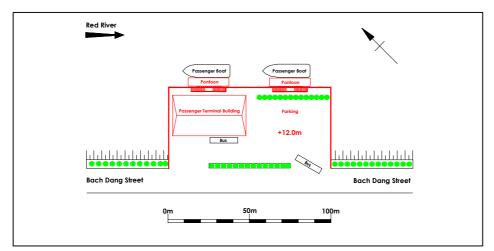


Figure VI-15 Plan of New Passenger Terminal (2010, 2020)

- 145. In addition to the main passenger terminal, the following satellite passenger berths at major tourist spots in the Hanoi segment are proposed for tourist purpose.
 - Chem (Red km+6 Right bank, 2010)
 - Bo De (Red km+20 Left bank, 2010)
 - Bat Trang (Red km+30 Left bank, 2010)
 - Phu Dong (Duong km+16 Left bank, 2010)