

Data Collection Survey on Urban Building Safety in the People's Republic of Bangladesh

Final Report (Appendices)

April 2015

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

**OYO International Corporation
Mohri Architect and Associates Inc.**

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Appendix 1 GIS Data & Map & Images

GIS Layer List Tables

(Tables are separated by data folders)

1. Administrative Boundary

Title	File Name	Major Attributes	Feature Type	Source
Dhaka City	CityBoundary.shp Dhaka_City_Boundary.shp	➤ Area: Area of the city (Double)	Polygon	MHRA CDMP
Union	Dhaka_Union_Boundary.shp Bangladesh Union.shp	➤ UNNAME: Name of the union (Text) ➤ UNCODE: Union Geo Code (Double) ➤ Zone: Zone for FS Terotory (Short Integer)	Polygon	MHRA
Upazila	Dhaka_Upazila_Boundary.shp Bangladesh Upazila.shp	➤ THANAME: Name of the Thana / Upazila (Text) ➤ UPZCODE: Upazila Geo Code (Long Integer)	Polygon	MHRA
Dhaka District	Dhaka_Zila_Boundary.shp	➤ DISTNAME: Name of the District (Text) ➤ DISTCODE: District Geo Code (Short Integer) ➤ DivCode: Division Geo Code (Short Integer)	Polygon	MHRA
Ward	Ward_Boundary.shp	➤ Area_km2: Area of the ward in sq. km (Double) ➤ WardID_Old: Old Ward Id before dividation (Text) ➤ WardID_New: New Ward Number after deviation (Text)	Polygon	CDMP
Division	Divisions.shp	➤ DIVNAME: Name of the Division (Text) ➤ DIVCODE: Geo Code of Division (Short Integer)	Polygon	MHRA

2. Population

Title	File Name	Major Attributes	Feature Type	Source
Dhaka Population in Ward level	Population_Ward.shp	➤ Area_km2: Area of the ward in sq. km (Double) ➤ WardID_Old: Old Ward Id before dividation (Text) ➤ WardID_New: New Ward Number after deviation (Text) ➤ HouseHold: Number of House Holds (Double) ➤ Population: Number of Population (Double) ➤ Pop_Densit: Population Density (Double)	Polygon	CDMP BBS Census2011

3. Buildings

Title	File Name	Major Attributes	Feature Type	Source
Educational Institute in DCC	Educational_Institute.shp	<ul style="list-style-type: none"> ➤ STRUCTYPE: Structure Types (Text) ➤ STRUCNAME: Name of the Structure (Text) ➤ LOCALITY: Location Name of the Institute (Text) ➤ Structural: Structural Typology of the Building Based on HAZUS types (Text) ➤ Occ_Day: Day time Occupant (Double) ➤ Occ_Night: Night time Occupant (Double) 	Point	CDMP
Hospital in DCC	Hospitals.shp	<ul style="list-style-type: none"> ➤ LOCALITY: Location Name of the Institute (Text) ➤ ROADNAME: Road Name (Text) ➤ FLOOR_1: Number of Floor of the Building (Text) ➤ STRUCNAM_1: Name of the Structure (Text) ➤ WardID: Ward Number (Short Integer) ➤ Year: Building Construction Year (Short Integer) ➤ TyFacility: Type of Facilities (Text) ➤ Owner: Ownership of the Medical Facilities (Text) ➤ Doctors: Number of Doctors (Short Integer) ➤ Nurses: Number of Nurses (Short Integer) ➤ Paramedics: Number of Paramedics (Short Integer) ➤ staff: Number of Staffs (Short Integer) ➤ Beds: Number of Beds (Short Integer) 	Point	CDMP
Police Station in DCC	Police_Stations.shp	<ul style="list-style-type: none"> ➤ LOCALITY: Location Name of the Institute (Text) ➤ ROADNAME: Road Name (Text) ➤ STRUCTYPE: Structure Types (Text) ➤ FLOOR: Number of Floor of the Building (Text) ➤ STRUCNAME: Name of the Structure (Text) ➤ Remark: Locality Name (Text) 	Point	CDMP
Fire Station	Fire_Stations.shp FSCD_Stations.shp	<ul style="list-style-type: none"> ➤ NAME: Name of the Fire Stations (Text) ➤ St_No: Station Id (Short Integer) ➤ constructio: Construction Year (Short Integer) ➤ Work_Force: Number of Manpower (Double) ➤ Equipment_: Number of Special Equipments (Double) ➤ Fire_Engin: Number of Fire Engine (Double) ➤ Area_of_Op: Operational / Territory of FS Station (Text) ➤ Area_sqkm: Area in sq.km. (Double) 	Point	FSCD
Territory of Fire Station	FSTerritory_Dissolv.shp	<ul style="list-style-type: none"> ➤ Zone: Zone Id (Short Integer) 	Polygon	FSCD

4. Base Map

Title	File Name	Major Attributes	Feature Type	Source
Embankment	Embankment.shp		Polyline	RAJUK
Land use	Existing_Landuse.shp Proposed_Landuse.shp	<ul style="list-style-type: none"> ➤ LAND_USE: Existing Lanuse (Text) ➤ LU: Proposed Landuse of DMDP Master Plan (Text) ➤ Area_Acre: Area in Acre (Double) ➤ Area_sq_ft: Area in Square Feet (Double) ➤ Area_Katha: Area in Katha (Double) 	Polygon	RAJUK
Open Space	Open_Space.shp	<ul style="list-style-type: none"> ➤ LAYER: Types of Open Space (Text) ➤ TEXT: Name of the Open Space (Text) 	Polygon	CDMP
Railway	RailWay.shp	<ul style="list-style-type: none"> ➤ LENGTH: lengh in km (Double) 	Polyline	CDMP
Restricted Area	Restricted_Area.shp	<ul style="list-style-type: none"> ➤ LAYER: Type of Lanuse (Text) ➤ TEXT: Name of the Area (Text) ➤ Area_km2: Area in Square Kilometer (Double) 	Polygon	CDMP
River	River.shp	<ul style="list-style-type: none"> ➤ LAYER: Landsue Type (Text) ➤ TEXT: Name of the Water Bodi (Text) 	Polyline	CDMP
Road Network	RoadNetwork.shp	<ul style="list-style-type: none"> ➤ LENGTH: Length of the road in km (Double) ➤ Pavement: Pavement types of the road (Text) ➤ Width: Road width in Meter (Short Integer) 	Polyline	CDMP

5. Geology

Title	File Name	Major Attributes	Feature Type	Source
Geology of Bangladesh	BangladeshGeology.shp	<ul style="list-style-type: none"> ➤ CLASS: Geological Class (Text) ➤ AREASQKM: Area in sq.km (Double) ➤ NAME: Name of the geological type (Text) 	Polygon	GSB
Boring Location	Borehole_CDMP_WGS84.shp	<ul style="list-style-type: none"> ➤ Easting: X of location in UTM (Double) ➤ Northing: Y of location in UTM (Double) ➤ Location: Name of address (Text) ➤ Elevation: Value of elevation (Double) ➤ Organizati: Name of organization (Text) ➤ Depth: Depth of borehole (Double) ➤ SPT: N value at bottom layer (Double) ➤ Geomorphi: Name of geomorphic unit at site (Text) 	Point	CDMP

6. Natural Hazard

Title	File Name	Major Attributes	Feature Type	Source
Flood Hazard in Bangladesh	BangladeshFlood.shp	<ul style="list-style-type: none"> ➤ DISTNAME: Name of the District (Text) ➤ THANAME: Name of the Thana / Upazila (Text) ➤ AREA_SQKM: Area in sq.km (Double) ➤ Flood_Type: Flood types (Text) 	Polygon	MHRA
Cyclone Hazard in Bangladesh	Cyclone.shp	<ul style="list-style-type: none"> ➤ Layer: Zone rank (Text) 	Polygon	MHRA

Sources

- CDMP: CDMP Project, Ministry of Disaster Management and Relief
- BBS: Bangladesh Bureau of Statistics
- MHRA: MHRA Project Department of Disaster Management (DDM) under the Ministry of Disaster Management and Relief
- GSB: Geological Survey of Bangladesh
- FSCD: Fire Service and Civil Defence
- RAJUK: Rajdhani Unnayan Karttripakkha

Examples of Map Image

Map List

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- ✧ Figure A3: Police Station, Hospital and Educational Institute
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- ✧ Figure A5: Detailed Area Plan (DAP) [Proposed Land use map]
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- ✧ Figure A9: Boring Location by CDMP 1 Data
- ✧ Figure A10: Epicenters of Historical Catalogue and Recent Record
- ✧ Figure A11: Cyclone Risk Area
- ✧ Figure A12: Flood Hazard Map

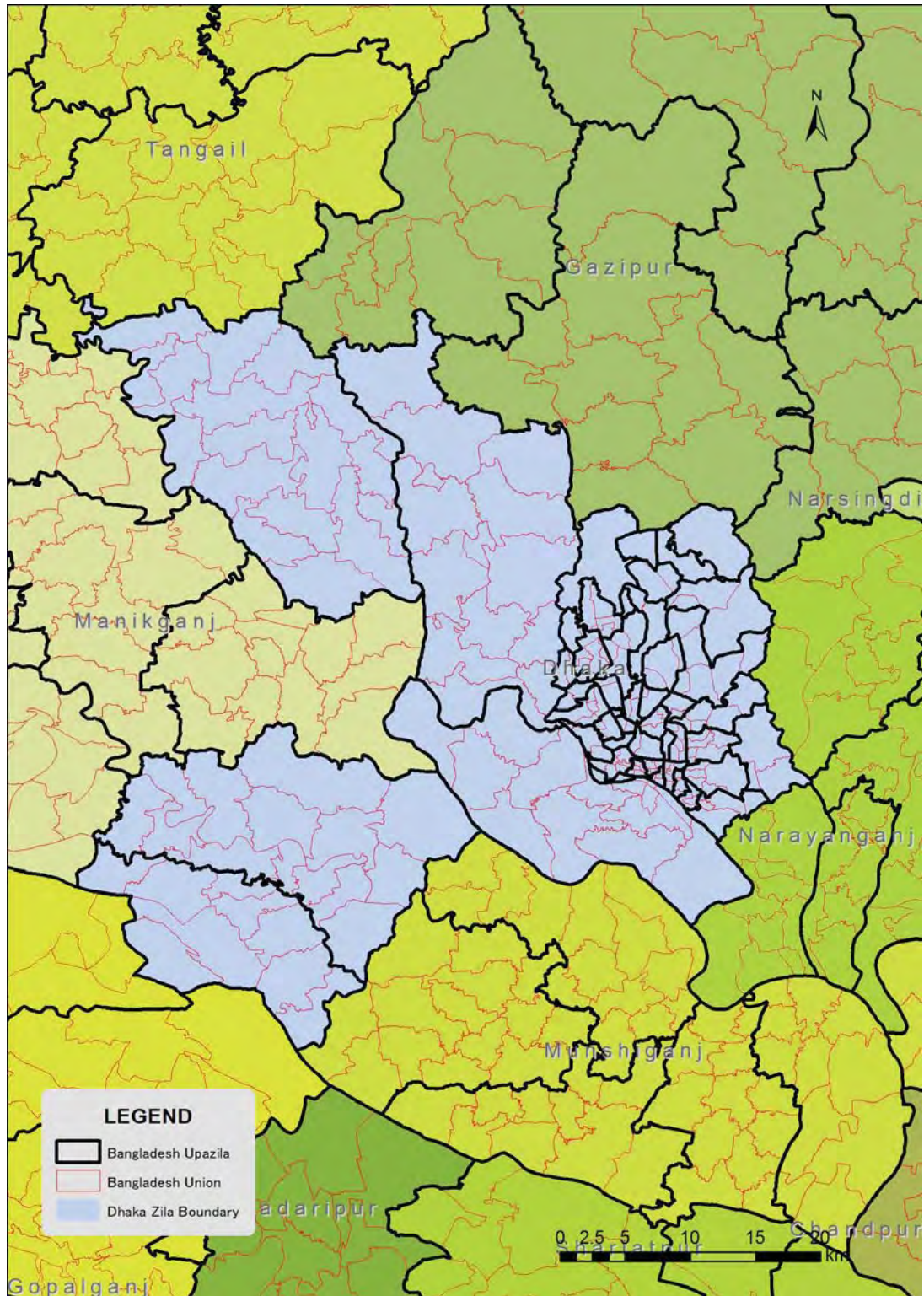


Figure A1 Political Boundaries (Upazila, Union and Dhaka Zila)

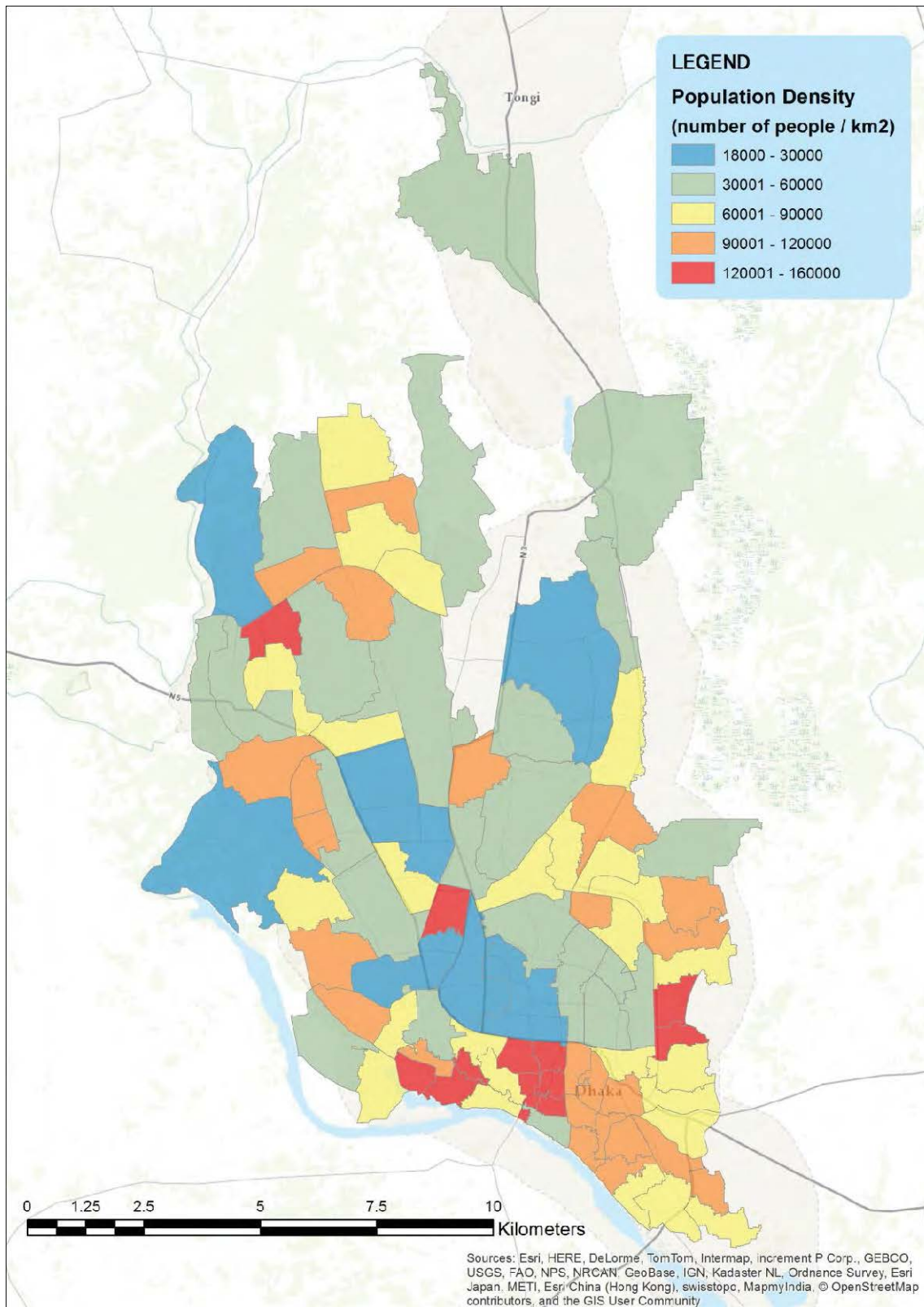


Figure A2 Population Density in the unit of Ward

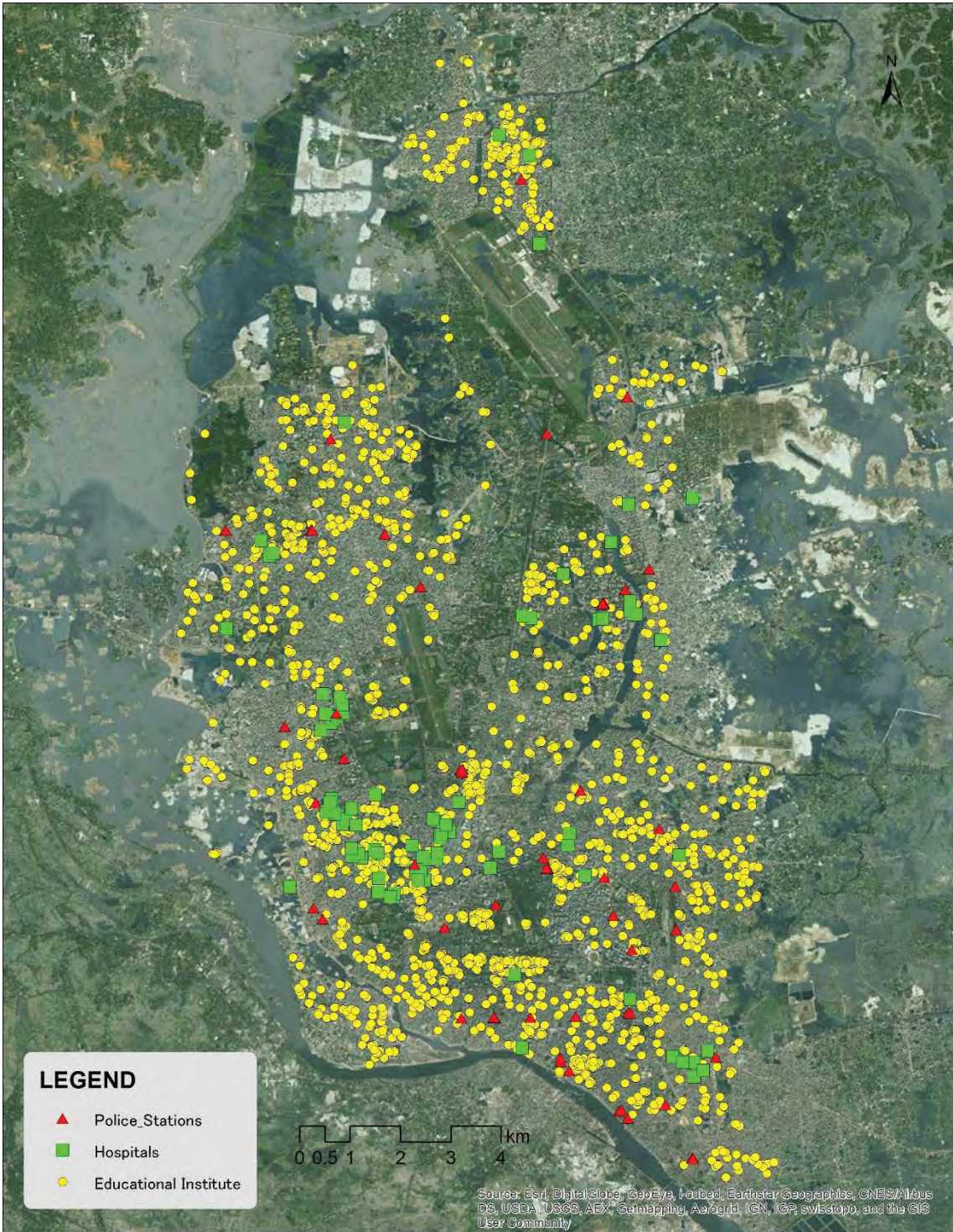


Figure A3 Police Station, Hospital and Educational Institute

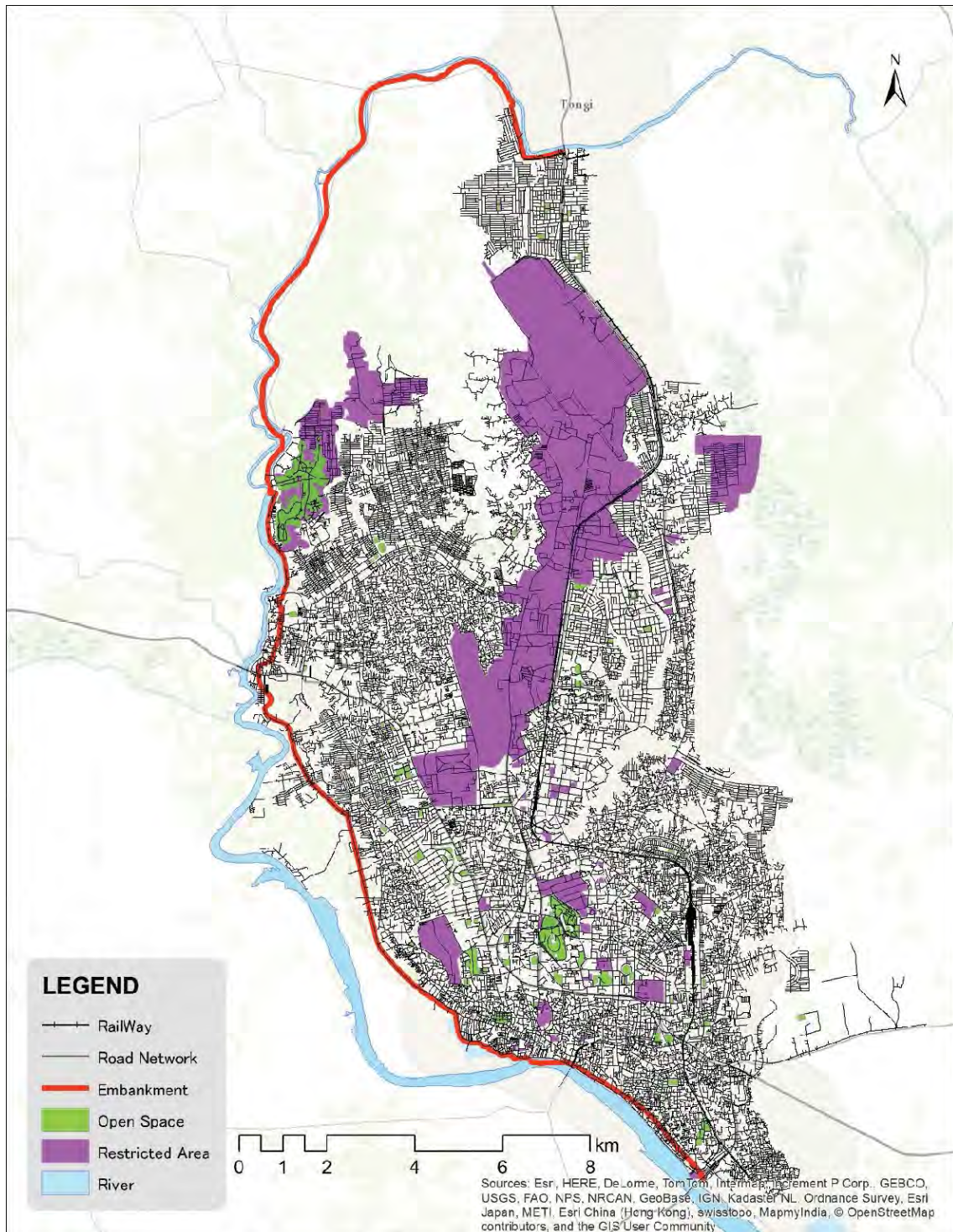


Figure A4 Road Network, Railway, Open Space, Restricted Area, Embankment and River

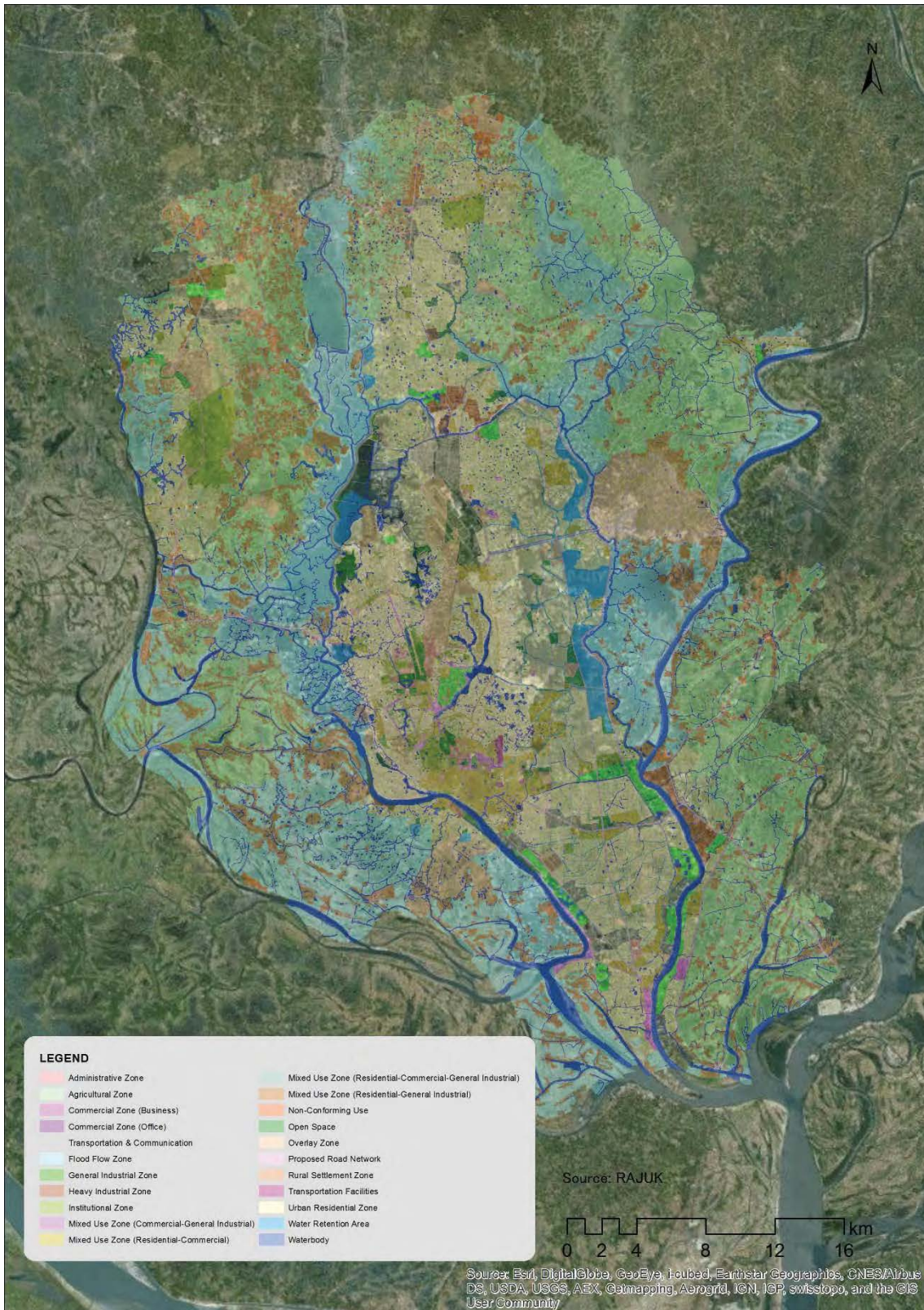


Figure A5 Detailed Area Plan (DAP) [Proposed Land use map]

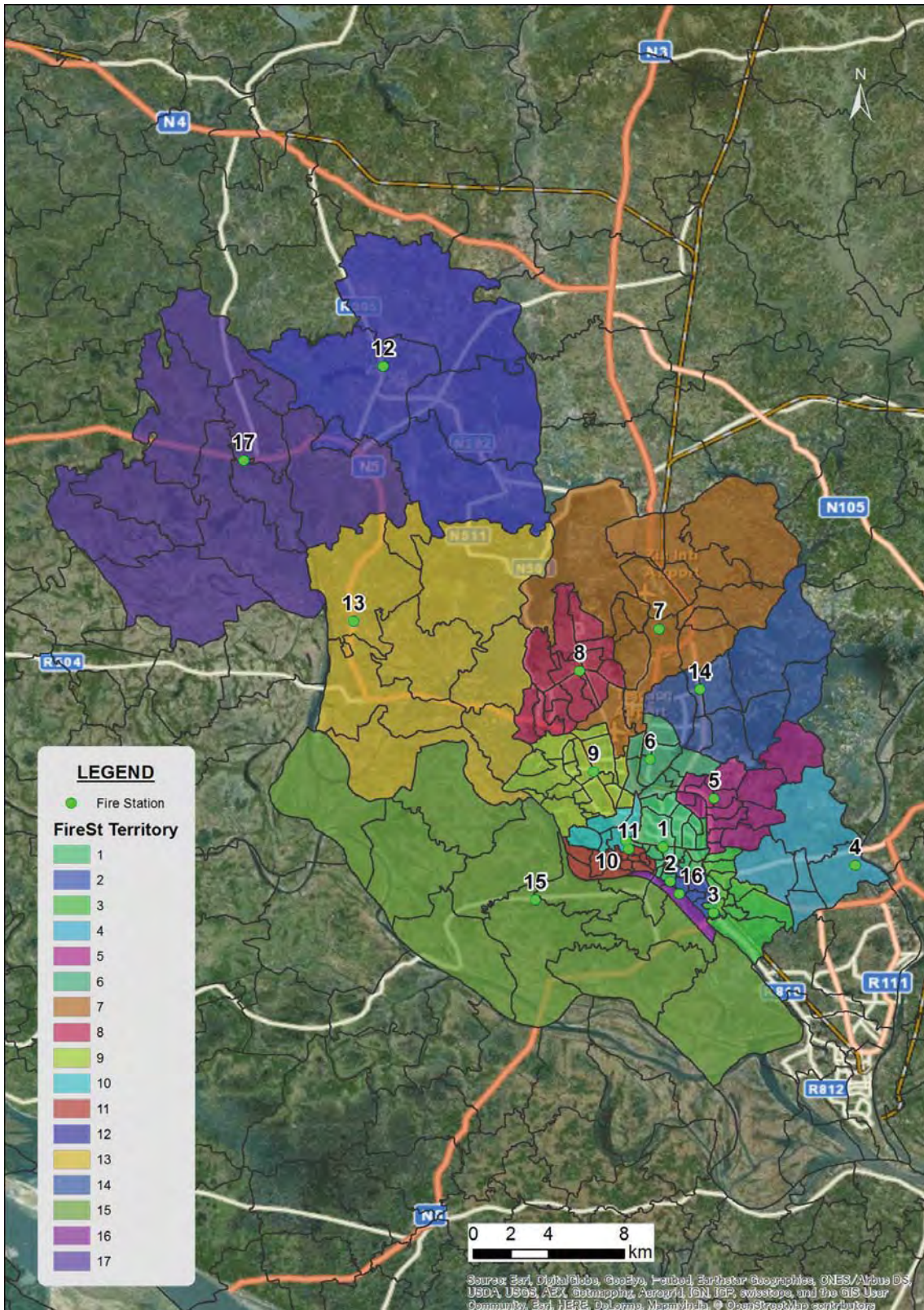


Figure A6 FSCD Fire Station and the Territory
 (Territories were revised in this project based on FSCD information.)

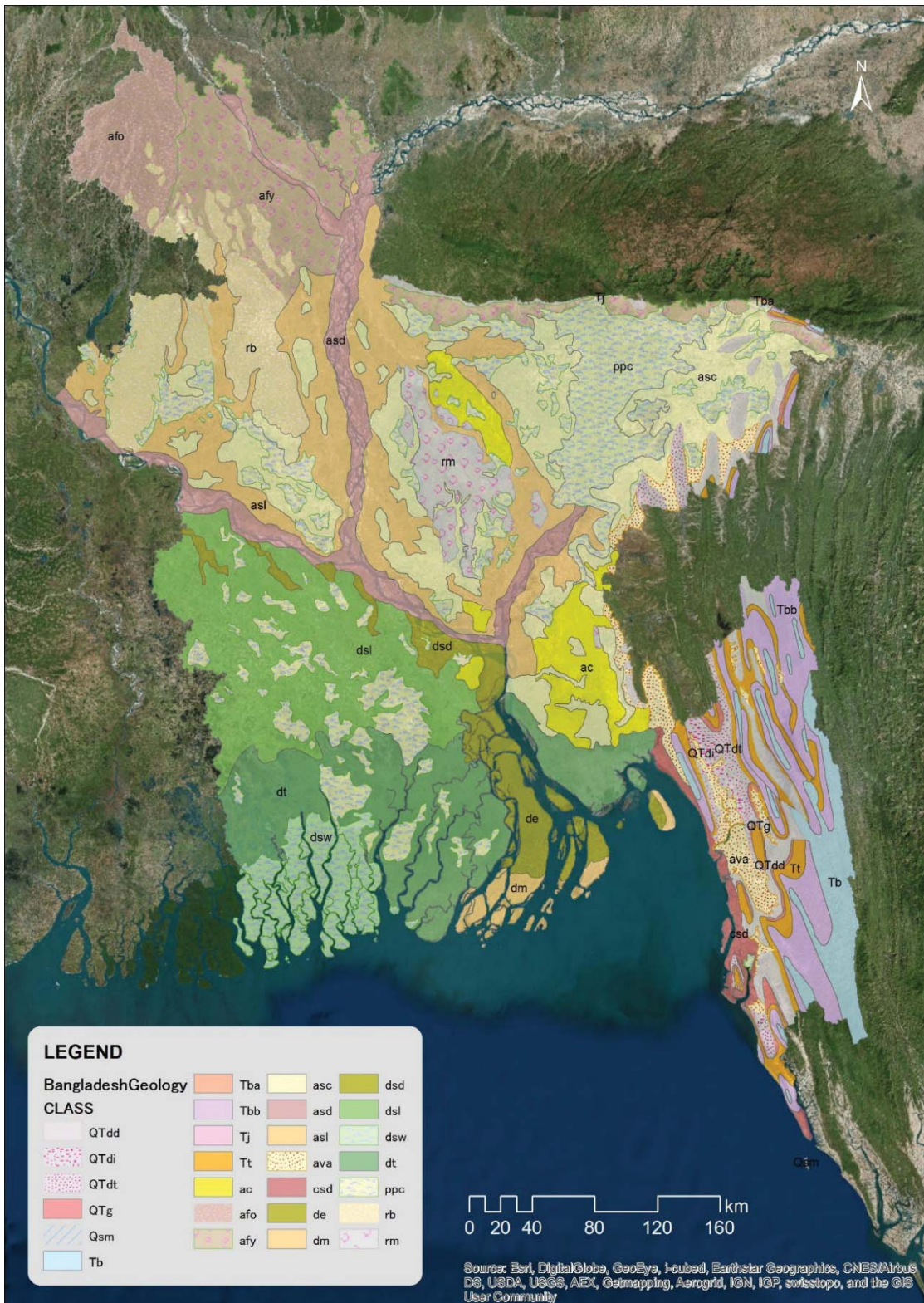


Figure A7 Geological Map of Bangladesh
(GIS Map Image)

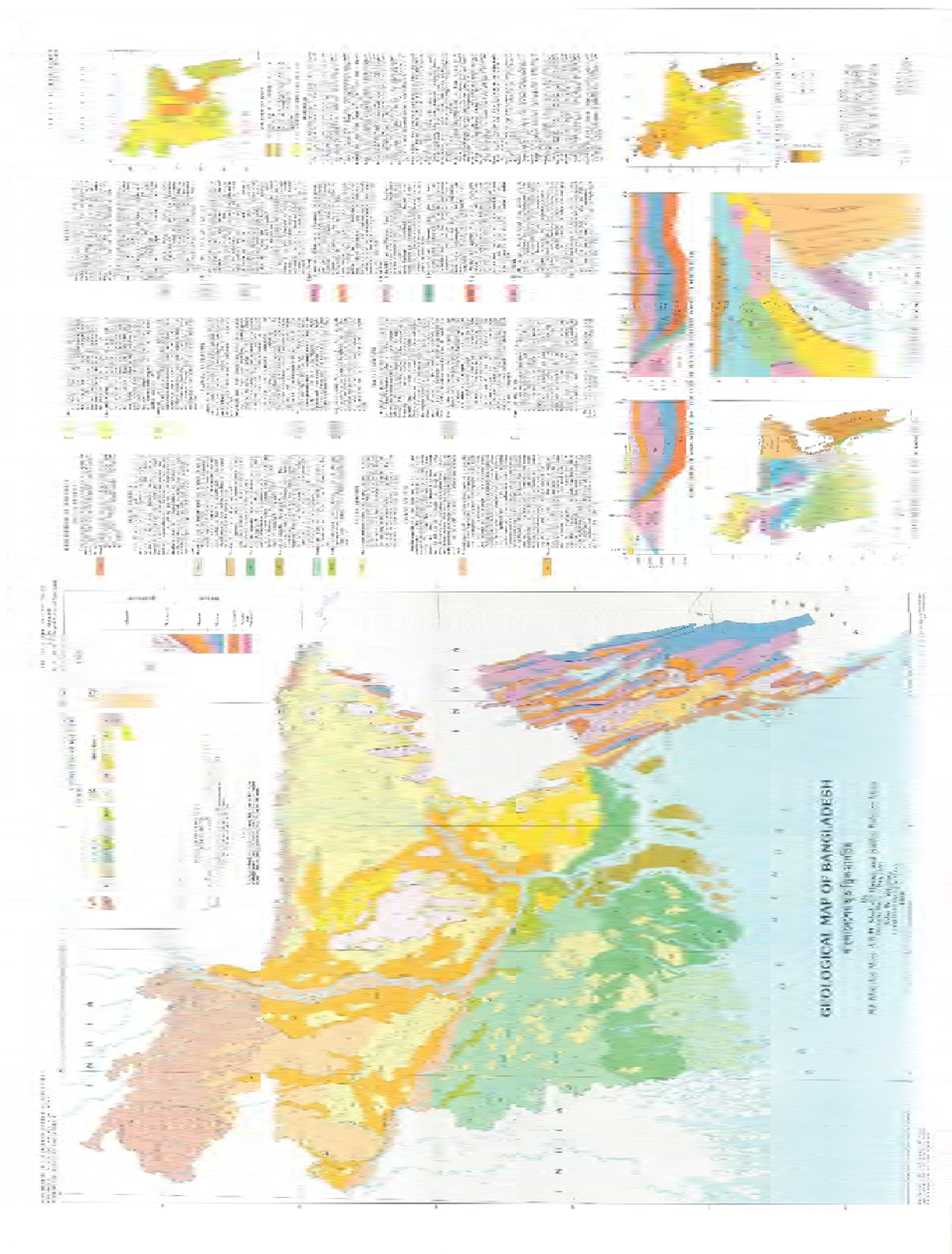


Figure A8 Geological Map of Bangladesh (GSB)
 (Image of Published Map)

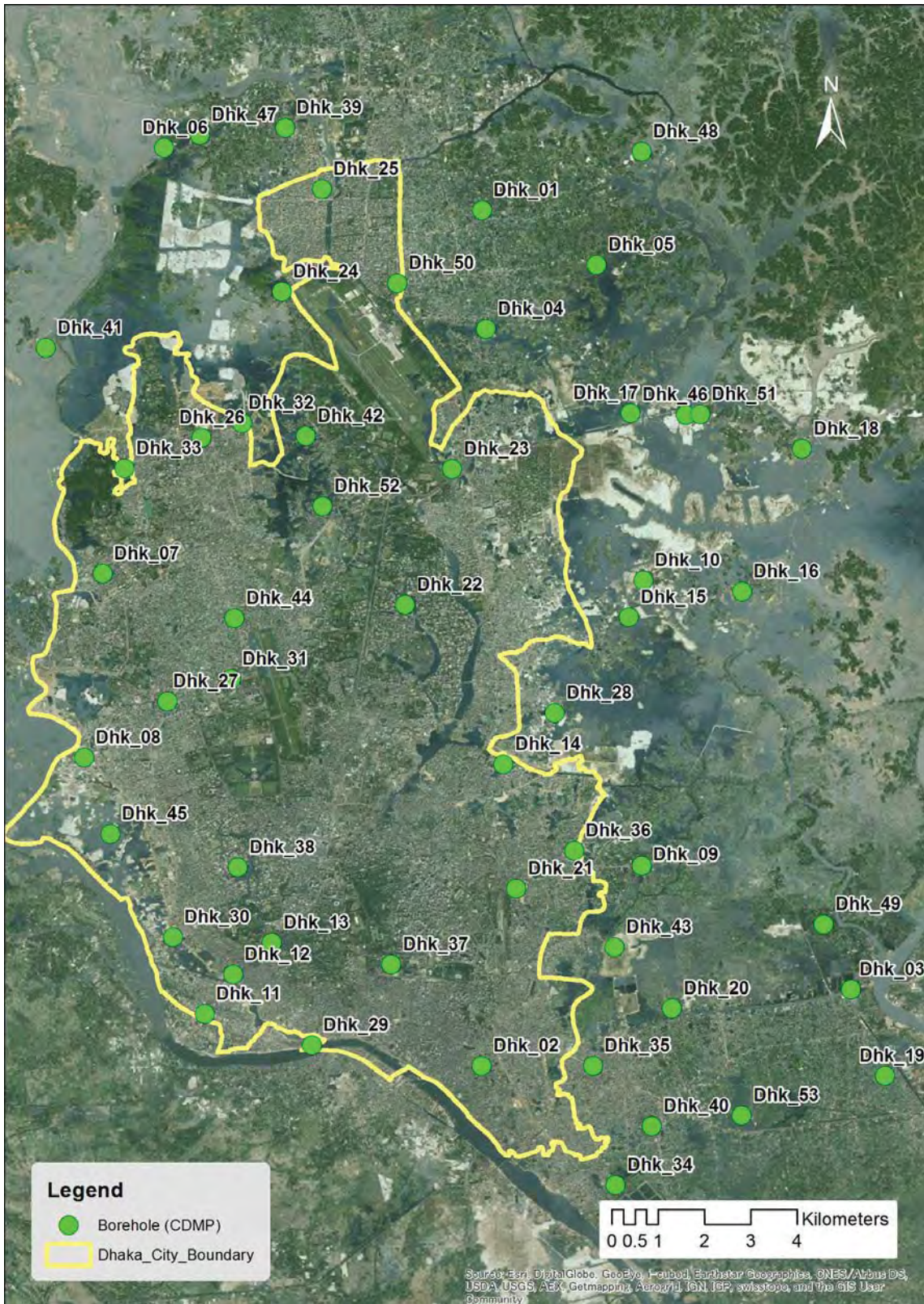


Figure A9 Boring Location by CDMP 1 Data

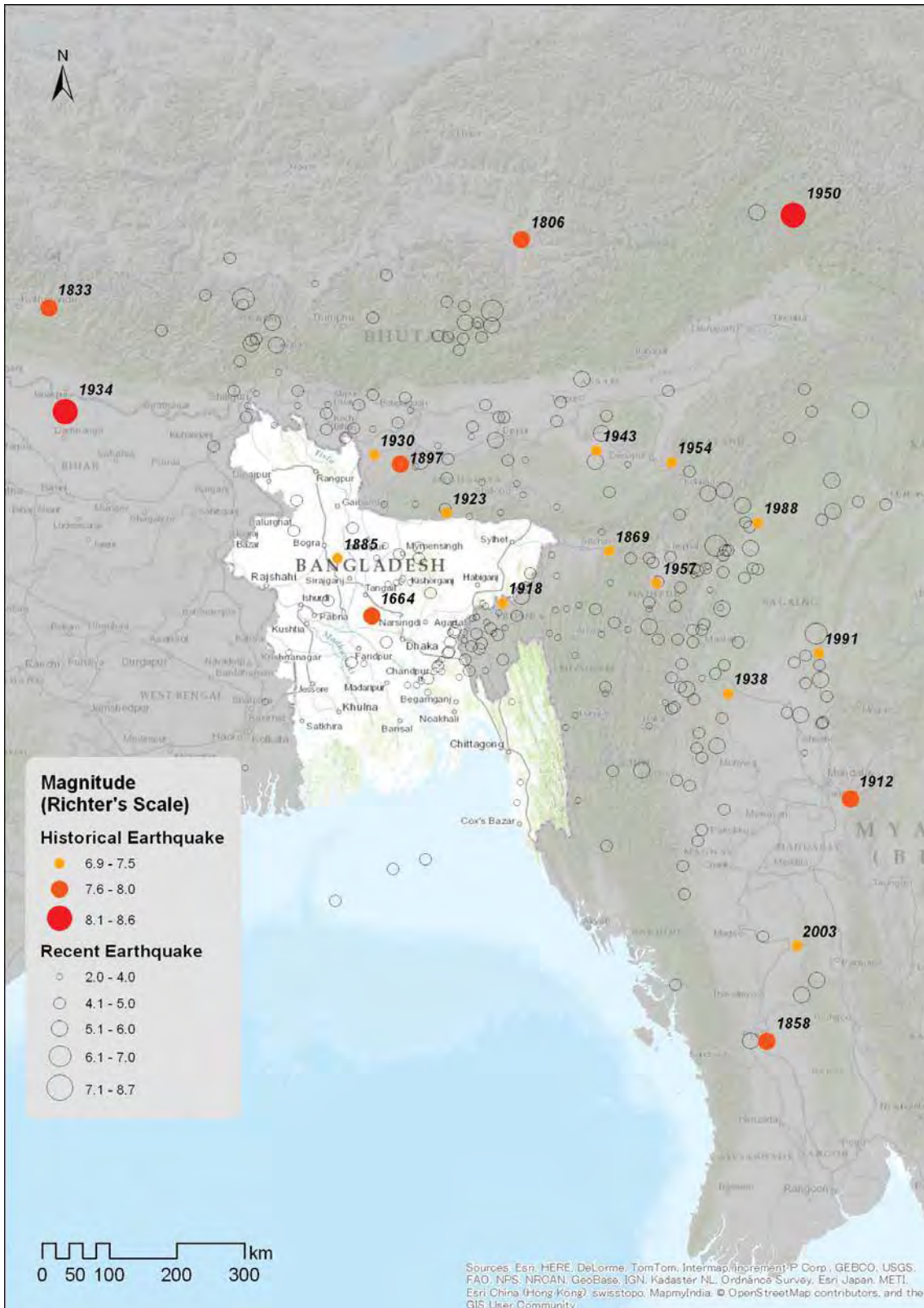


Figure A10 Epicenters of Historical Catalogue and Recent Record

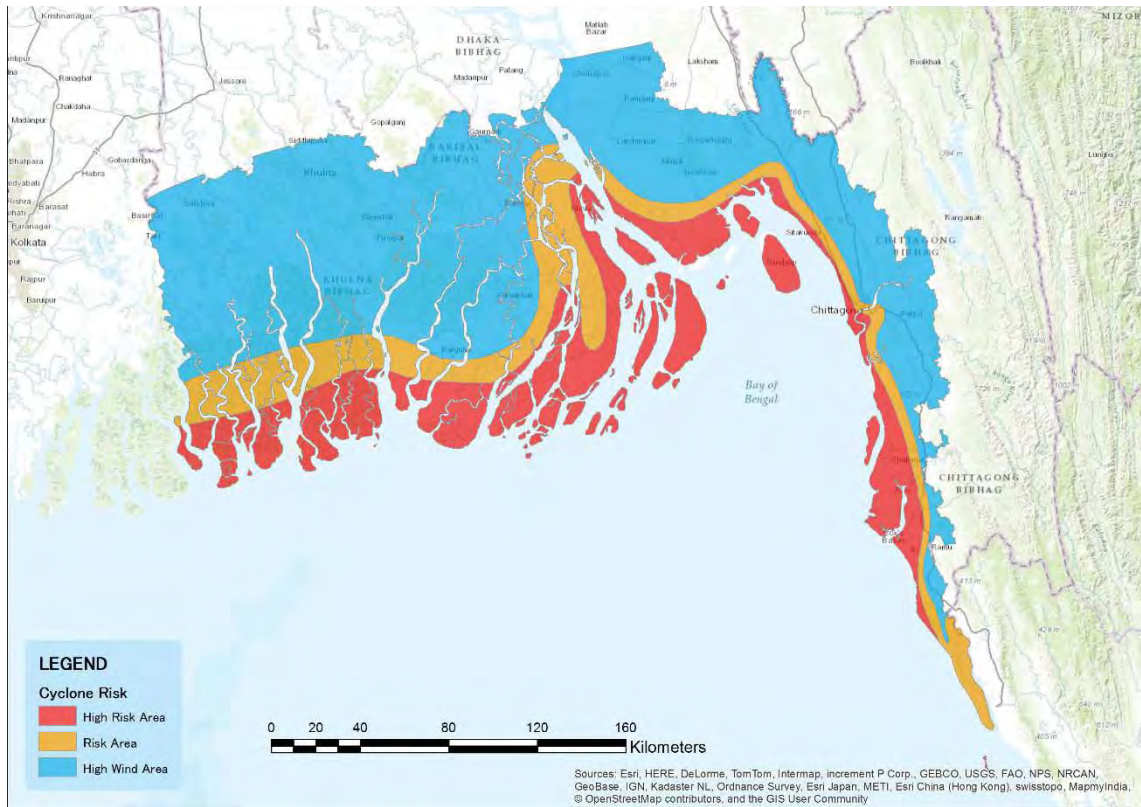


Figure A11: Cyclone Risk Area

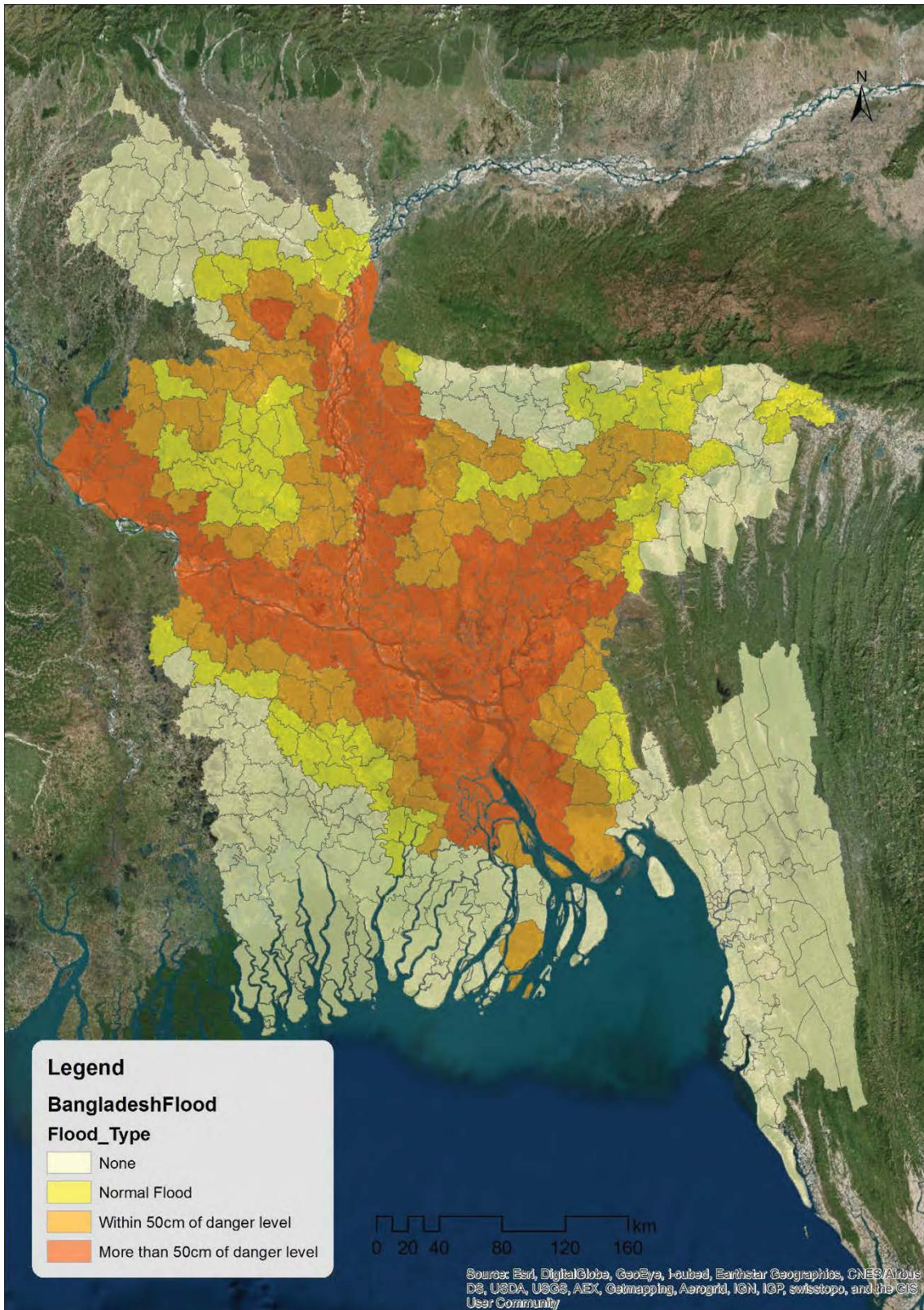
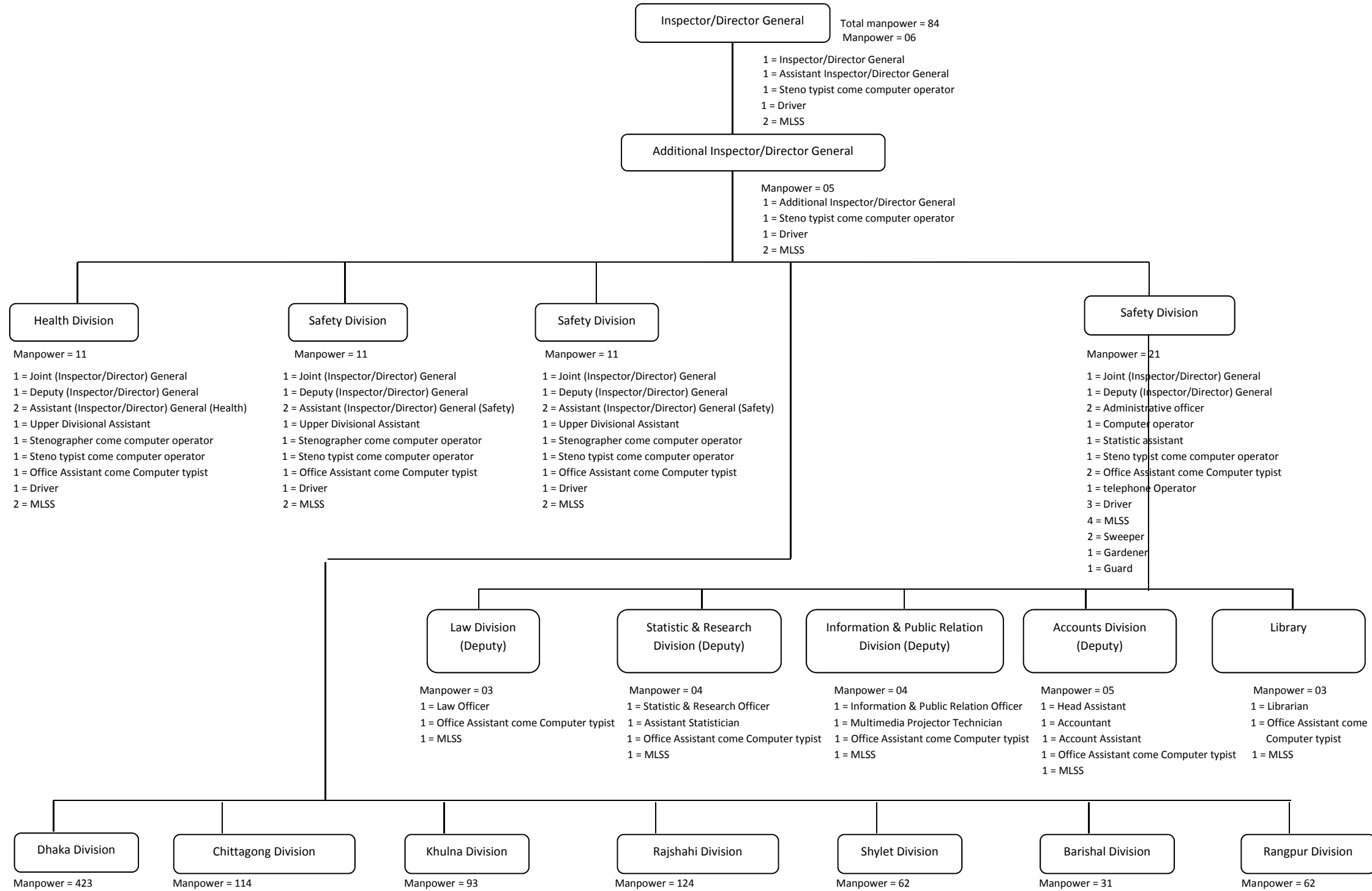


Figure A12 Flood Hazard Map

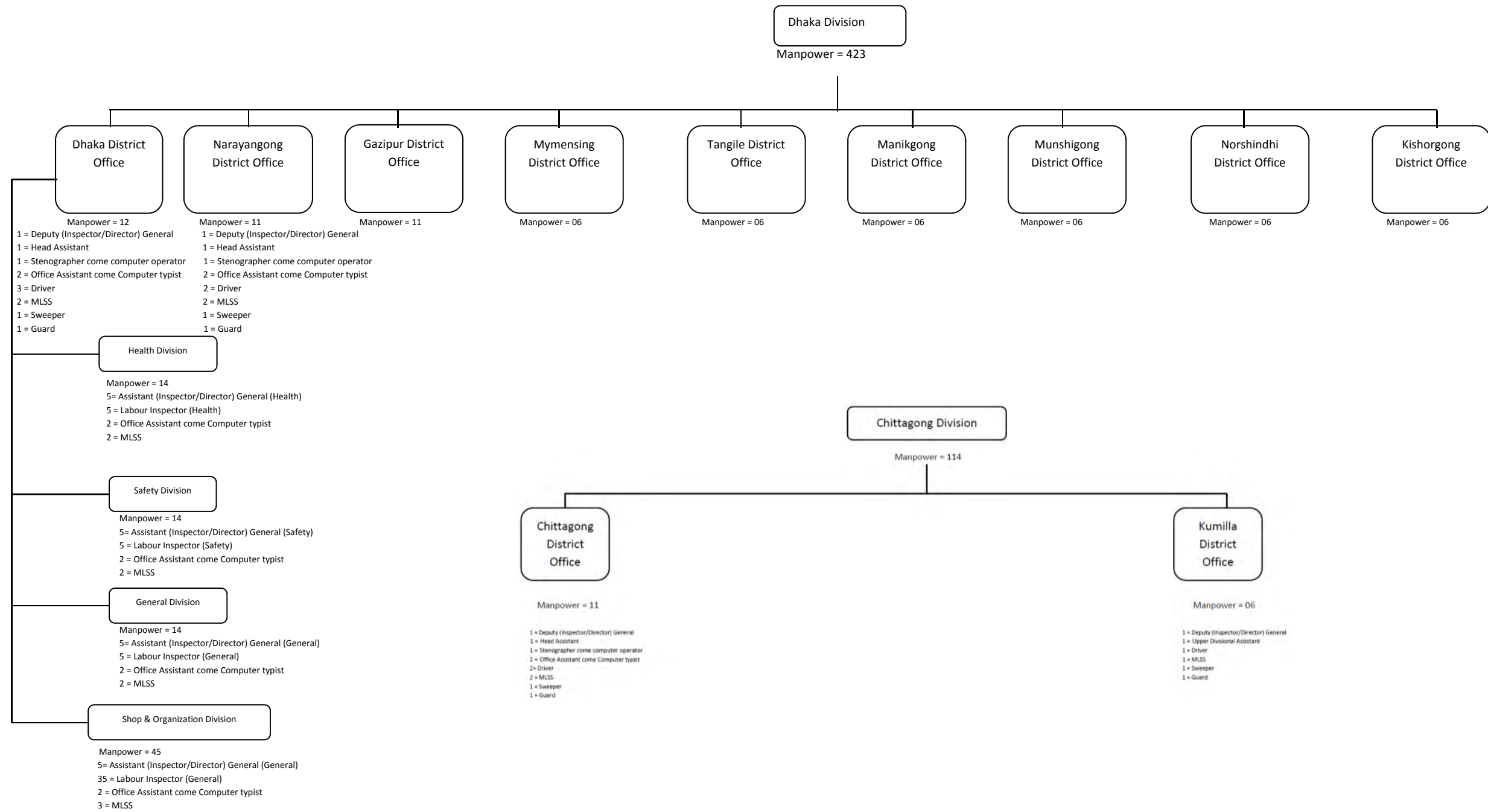
Appendix 2 Organogram of DIFE

Appendix 2 Organogram of DIFE

Government of the People's Republic of Bangladesh
Department of Inspection for Industries and Establishments
Ministry of Labour and Employment
Organogram



Sl. No	Name of Post	Number of Post
1	Inspector/Director General	1
2	Additional Inspector/Director General	1
3	Joint (Inspector/Director) General	4
4	Deputy (Inspector/Director) General	27
5	Assistant (Inspector/Director) General (General)	96
6	Assistant (Inspector/Director) General (Health)	41
7	Assistant (Inspector/Director) General (Safety)	41
8	Statistic & Research Officer	01
9	Information & Public Relation Officer	01
10	Librarian	01
11	Law Officer	01
12	Administrative Officer	01
13	Labour Inspector (General)	248
14	Labour Inspector (Health)	58
15	Labour Inspector (Safety)	58
16	Statistic Assistant	01
17	Stenographer come computer operator	06
18	Computer Operator	01
19	Head Assistant	05
20	Accountant	01
21	Upper Divisional Assistant	22
22	Steno typist come computer operator	07
23	Office Assistant come Computer typist	124
24	Account Assistant	01
25	Telephone Operator	01
26	Multimedia Projector Technician	01
27	Driver	36
28	MLSS	156
29	Gardener	01
30	Guard	25
31	Sweeper	25
	Total =	993



**Appendix 3 Inspection Checklist for Garment Factory by
DIFE**

Appendix 3 Inspection Check List for Garments Factory by DIFE

**Government of the People's Republic of Bangladesh
Ministry of Labour and Employment
Department of Inspection for Factories and Establishments**

Inspection Check List for Garments Factory

1. Factory
Name:.....
.....
Address:.....
.....
Phone:..... Fax:.....
E-mail:.....
2. (a) Chairman/Owner Name :..... Mobile No
:.....
Telephone No:.....
- (b) Managing Director Name :..... Mobile No
:.....
Telephone No:.....
- (c) Director Name :..... Mobile No
:.....
Telephone No:.....
- (d) Manager Name :..... Mobile No
:.....
Telephone No:.....
- (e) Factory Building owner Name :.....
Address:.....
.....
Telephone No :.....

3. Date of Construction/Establishment (Factory Building) :.....

4. (a) Inspection Date :..... (b) Past Inspection Date :.....

5. Factory Registration & Renewal information :

(a) Issued by Department of Inspection for Factories and Establishments:

License number :.....

number :.....

Date:.....

Date:.....

Renewal Date:.....

Date:.....

(b) Issued by Professional Organization:

Registration

Renewal

6. Major Production Item:

Knit	Oven	Sweater	Others

7. Number of Labour : (a) Female:..... (b) Male:.....
Total:.....

8. Number of Employee: (a) Female:..... (b) Male:.....
Total:.....

9. Factory Layout Plan Approval Authority Name:..... Approval
Date:.....

10. Date of Approval (Factory Layout Plan by Department of Inspection for Factories and Establishments):.....

11. The organization or the person Who create Structural Design its/his
identity/introduction:.....

12. If there was a supervising Authority during construction time then his identity/introduction:.....
13. How many storied the factory building & in which floor the factory is situated:.....
14. Area of the factory building:.....
15. Type of the factory building (Converted/Shared/Purpose Based).If Shared then its type:.....
16. Is the factory building own property/Rented:.....
17. Location of the factory building (Residential area/ Industrial area/ Commercial area/ Others):.....
18. Number of factory is running in this building:.....
19. The organization or the person Who make the soil test report its / his identity/introduction:.....
20. Description of trade union, if it is active in factory:.....

Sl. No	Subject	Yes/No	Evaluation			Total gained marks	Remarks
			Fully Satisfactory (2)	Roughly Satisfactory (1)	Not Satisfactory (0)		
1	Is there any similarity of Factory Layout plan according to Department of Inspection for Factories and Establishments, existing factory building & machine Layout plan?						
2	Is Extended factory building Layout Plan approved by Department of Inspection for Factories and Establishments?						

3	Are the factory godowns & stores according to approved Layout Plan?						
4	Are there sufficient number, appropriate size stair & doors available?						
5	Is there any emergency exit available?						
6	Is there walking way & Stair inside factory building free from obstacle?						
7	Is there roof of the factory building fully open?						
8	Is the rout safe to reach the roof of the factory building?						
9	Is the exit rout marked by red arrow & bangle latter?						
10	Is the factory gate & doors remaining open during working time?						
	Total gained / obtained marks						

Regarding building security

Total marks: (10 x 2) = 20

Regarding Fire security

Sl. No	Subject	Yes/No	Evaluation			Total gained marks	Remarks
			Fully Satisfactory (2)	Roughly Satisfactory (1)	Not Satisfactory (0)		
1	Is there updated/ up-to-date fire license available?						
2	Is there arrange fire drill regularly & is it recorded?						
3	Are there necessary numbers of serviceable fire extinguisher available?						
4	Is there arrange regular inspection, examination & maintenance for fire extinguisher equipments?						
5	Are the factory employees & labors trained about fire extinguisher equipments & fire safety?						

6	The factory must have a underground water tank which should be connected with main fire pump.						
7	Are there necessary numbers of serviceable hose reel available for every floor?						
8	Is there sufficient wide road available for the fire service vehicle?						
	Total gained / obtained marks						

Total marks: (8 x

2) = 16

Sl. No	Subject	Yes/No	Evaluation			Total gained marks	Remarks
			Fully Satisfactory (2)	Roughly Satisfactory (1)	Not Satisfactory (0)		
1	Is there electrical line establish / setup safely?						
2	Is there all electrical line check regularly & is it recorded?						
3	Is the main electrical switch situated in safe place & is there any obstacles surrounding of it?						
4	Is there earthing line available for every electrical switch board?						
5	Is there any electrical connection available inside godawn?						
6	Is there any connection of IPS/Charger at working place, exit rout and stair during emergency situation?						
7	Is there any cautious alarm (range of hearing), strobe & PA system available during emergency situation?						
8	Is there proper arrangement to disconnect electrical line during emergency situation?						
9	The factory hoist, lifts must be check by proper person & it should be written in register book.						

10	Is there uses electric load approved?						
11	Is factory generator surrounded by safety wall?						
12	Is factory boiler surrounded by safety fence & is it recorded after regularly maintain?						
	Total gained / obtained marks						

Regarding electrical security

marks: (12 x 2) = 24

Total

Regarding general subjects

Sl. No	Subject	Yes/No	Evaluation			Total gained marks	Remarks
			Fully Satisfactory (2)	Roughly Satisfactory (1)	Not Satisfactory (0)		
1	Are employees/labors appointed letter & Photo ID provide?						
2	Are employees/labors service book updated with all information & is it recorded?						
3	Are employees/labors register & attendance card recorded?						
4	Is the factory pay labour salary in proper time according to follow government announced salary structure?						
5	Is there a canteen facility available?						
6	Over time bill should be paid according to law?						
7	Rules of holiday followed whether or not?						
8	Whether or not, maternity leave & allowance followed according to law?						

9	Whether or not, time schedule of the factory approved by the inspector & it should be hanging in front door?						
10	Is there sufficient number of toilet (Male & female) available?						
11	Is factory free from child labour?						
12	The factory must have a day care centre at appropriate place.						
13	The factory must have a medical centre with important equipments.						
14	The factory must have drinking water facilities in every floor.						
15	The factory must have an elected participation committee.						
16	Must have available facilities to send accident related notices & it should be recorded in register.						
17	Are there available facilities for labour safety to personal protective equipment?						
18	Must have sufficient light & air circulation facilities for every floor.						
19	The factory must have a safety committee & safety recorded book.						
20	All employees/labours of the factory should be under custody of life insurance policy.						
	Total gained / obtained marks						

Total marks: $(12 \times 2) = 24$

Idea about grading

Total obtain marks	Grading according to obtain marks
85-100	A
70-84	B
Less than 70	C

Subject related grading & obtains grad

Sl. No	Subject	Grad A	Grad B	Grad C	Obtain marks	Obtain grad
1	Regarding building security	17-20	14-16	Less than 14		
2	Regarding Fire security	14-16	11-13	Less than 11		
3	Regarding electrical security	20-24	17-23	Less than 17		
4	Regarding general subjects	34-40	28-33	Less than 28		
Total obtain marks & grad						

Overall/General Comments about factory

.....
Signature of factory authority

.....
Signature of inspector

Inspection information for the month of.....

District office name:

Inspector Name:

Designation:

Sl. No	Number of inspection	Inspected factory name	Cause for not inspection	Inspected factory name & address	Date of inspection	Factory owner Name, Telephone/mobile	Description of noticed violation during inspection	Taken steps	Remarks

Inspection information for the month of.....
District office name:

Inspector Name:
Designation:

Sl. No	1 st inspection date	Inspected factory name & address	Factory owner Name, Telephone/mobile	Description of noticed violation during 1 st inspection	Date of next inspection	Description of noticed violation during next inspection	Taken steps	Remarks

Appendix 4 Preliminary inspection sheet for FS buildings

Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Appendix 4-1

Outline information		Floor plan, photo or others (Free choice)
Name	① Siddique Bazar (HQ) (Admin Building)	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> school <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown	
Number of stories	4-story	
Year of completion	1974 (Duration:40 years)	
Total floor/building area	5,786.95 m ² / 2,256.82 m ²	
Surrounding terrain	-	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Work Shop, etc.)	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : (cracking, rusting of rebar)	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : (Change in effective mass)	
Constraints on seismic retrofit work	Temporary buildings or the replacement facility will be required.	
Additional facilities/Fence	Wall height is 2m. If the boundary walls fall down, it may block the passage vehicles.	
Others	Three story building with expansions (small intervals)	
Comments		
<p>High-rise buildings exist in the near distance. Road in front is constantly jammed.</p> <p>It is impossible in the common seismic retrofitting method of construction to adapt due to realistic usability.</p>		

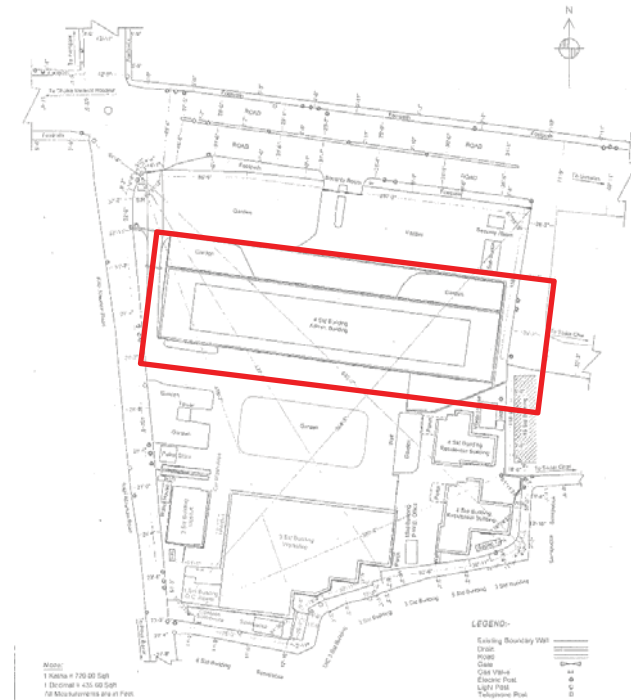


Figure Lay out plan of Siddique Bazar

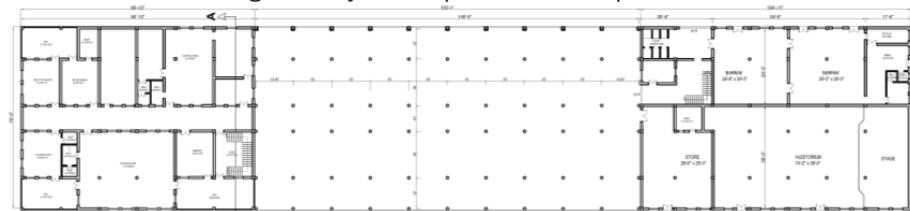


Figure Plan of ground

Photo



Front side



Back side



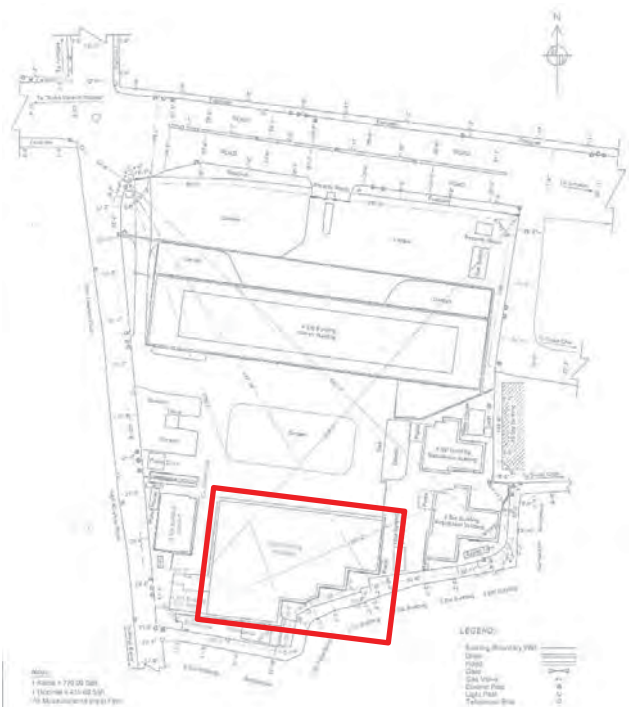
Corrosion of rebar



Narrow expansion-joint

Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Outline information		Floor plan, photo or others (Free choice)
Name	①Siddique Bazar (HQ)(Work shop)	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> school <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Unknown	
Number of stories	3-story	
Year of completion	1974 (Duration:40 years)	
Total floor/building area	Unknown/Unknown	
Surrounding terrain	-	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : (cracking, rusting of rebar)	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input type="checkbox"/> Existent : (Irregular plan)	
Constraints on seismic retrofit work	Temporary buildings or the replacement facility will be required.	
Additional facilities/Fence	Wall height is 2m. If the boundary walls fall down, it may block the passage vehicles.	
Others	-	
Comments		
High-rise buildings exist in the near distance. Road in front is constantly jammed.		

Appendix 4-3

Figure Lay out plan of Siddique Bazar

Photo



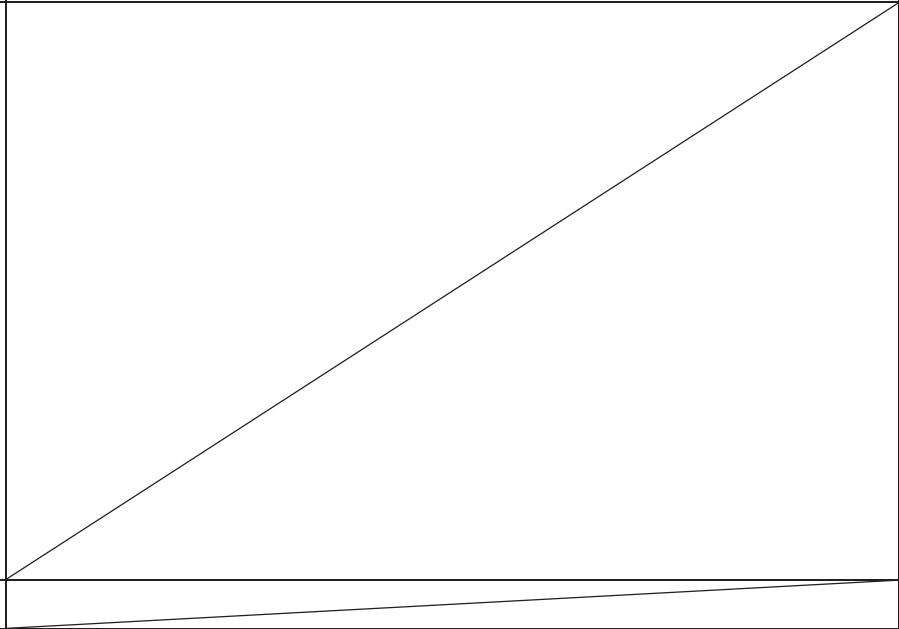
Front side



Side



Degradation situation



Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Outline information		Floor plan, photo or others (Free choice)
Name	②Sadarghat (A class)	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> school <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input checked="" type="checkbox"/> Unknown	
Number of stories	2-story	
Year of completion	1961 (Duration:53 years)	
Total floor/building area	741.43 m ² /357.64 m ²	
Surrounding terrain	Dense areas, lowland (flooding history), Riverside	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (dormitory, etc.)	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent :(carbonation)	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :	
Constraints on seismic retrofit work	-	
Additional facilities/Fence	The seismic capacity of residences is low.	
Others	Some high-rise building adjacent. There is a possibility that the neighboring building collapse	
Comments		
<p>The building and the area are not suitable to be set as the emergency centers on disaster. It is needed to seek alternative facilities.</p> <p>There are residences of the employees, which the seismic capacity is low. The human resources in disaster are spoiled.</p>		

Appendix 4-5

Figure Plan of grand

Figure Lay out plan

Photo



Front side



Back side



Front gate and front road



Adjacent building

Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Outline information	
Name	③Postogola (A class)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> school <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	2-story
Year of completion	1963 (Duration:50 years)
Total floor/building area	876.24 m ² / 418.47 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (dormitory, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent :(cracking)
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :
Constraints on seismic retrofit work	-
Additional facilities/Fence	-
Others	-

Floor plan, photo or others (Free choice)

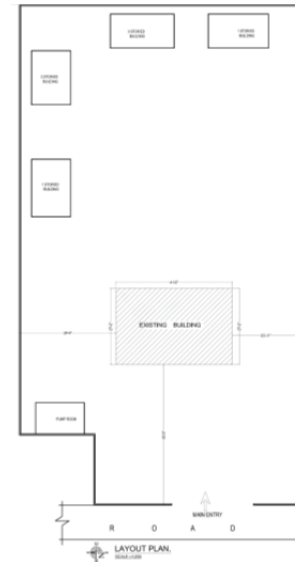


Figure Lay out plan

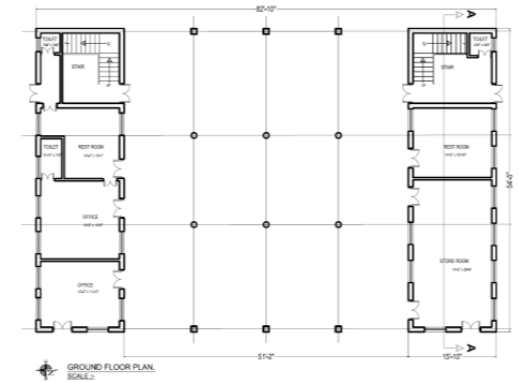


Figure Plan of grand

Comments

Reinforcing-bars possibly be corroded judging from the status of the building frame, which has been exposed to water. But the explosion of concrete is currently not observed.

Photo



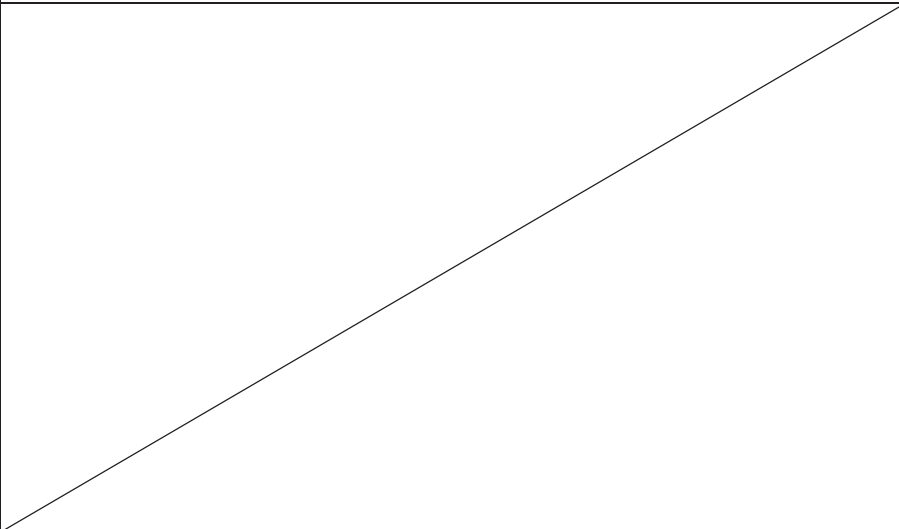
Front side



Back side

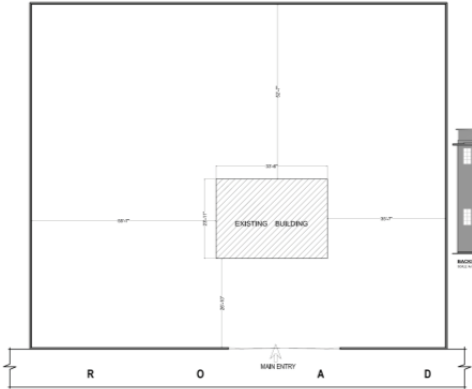
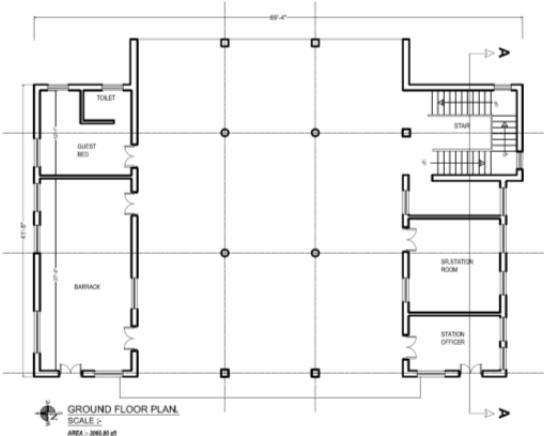


Degradation situation



Preliminary inspection sheet for the seismic capacity of a building

Date: August/17/2014

Outline information		Floor plan, photo or others (Free choice)
Name	④Demra (A-class)	 <p>Figure Lay out plan</p>  <p>Figure Plan of grand floor</p>
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> school <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown	
Number of stories	2-story	
Year of completion	1983 (Duration:31 years)	
Total floor/building area	445.68 m ² / 292.57 m ²	
Surrounding terrain	Riverside	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Family Quarter Dining, etc.)	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent Height is 1.0-1.5m	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent :(cracking)	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Change in effective mass	
Constraints on seismic retrofit work	-	
Additional facilities/Fence	-	
Others	-	
Comments		
Reinforcing-bars possibly be corroded judging from the status of the building frame, which has been exposed to water. But the explosion of concrete is currently not observed.		

Photo



Front side



Degradation situation

Preliminary inspection sheet for the seismic capacity of a building

Date: August/17/2014

Outline information	
Name	⑤Khilgoan (Type A)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input checked="" type="checkbox"/> Pile(12.2m) <input type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	3-story
Year of completion	2014(Duration:0 years)
Total floor/building area	Unknown m ² , 442.24 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Dining, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent Height is 2.0 m
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :-
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Change in effective mass
Constraints on seismic retrofit work	-
Additional facilities/Fence	The fence is less likely to turn over.
Others	Road in front is narrow, and there are many week buildings in the area.

Floor plan, photo or others (Free choice)

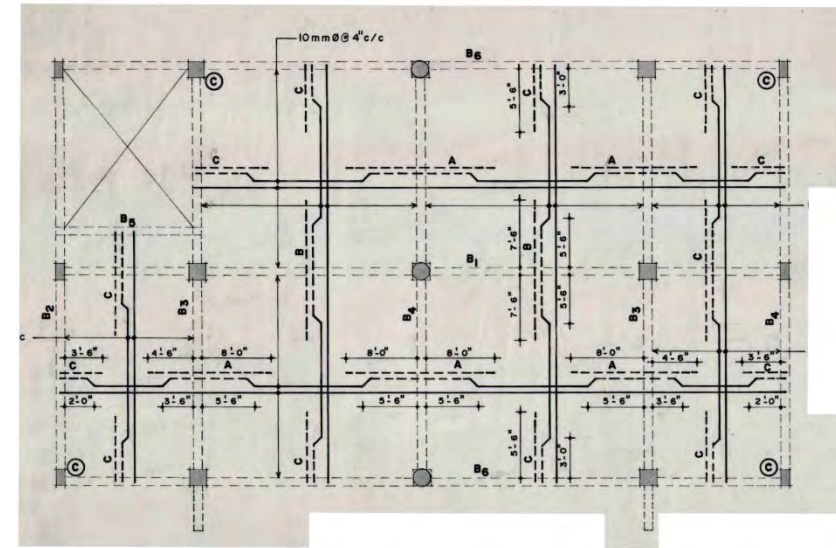


Figure Framing Plan

Comments

The building and the area are not suitable to be set as the emergency centers on disaster. It is needed to seek alternative facilities.
The important factor is 1.25 of the current BNBC. New BNBC requires 1.50. The seismic capacity is lower than the one required by the New BNBC.

Photo



Front side



Degradation situation



Road in front of the fire station.

Preliminary inspection sheet for the seismic capacity of a building

Date: August-/2014

Outline information		Floor plan, photo or others (Free choice)
Name	⑥Tejgoan (Type A)	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown	
Number of stories	2-story	
Year of completion	1965(Duration:49years)	
Total floor/building area	563 m ² , 279 m ²	
Surrounding terrain	-	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Dormitory, etc.)	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent Height is 2.0 m	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Corrosion of existing main reinforcing-bar	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent : -	
Constraints on seismic retrofit work	-	
Additional facilities/Fence	The fence is less likely to turn over.	
Others	-	
Comments		
-		

Appendix 4-13

Figure Lay out plan

Figure Plan of grand floor

Photo



Front side



Back side



Corrosion of existing main reinforcing-bar in columns



Reinforcing-bar arrangement in existing beam

Preliminary inspection sheet for the seismic capacity of a building

Date: August/18/2014

Outline information	
Name	⑦Kurmitola (Type A)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	2-story
Year of completion	1980(Duration:34years)
Total floor/building area	573 m ² , 298 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Dormitory, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Corrosion of existing reinforcing-bar
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent : -
Constraints on seismic retrofit work	-
Additional facilities/Fence	Even if the walls fall down, that would not be a major problem for the rescue activities.
Others	-

Floor plan, photo or others (Free choice)

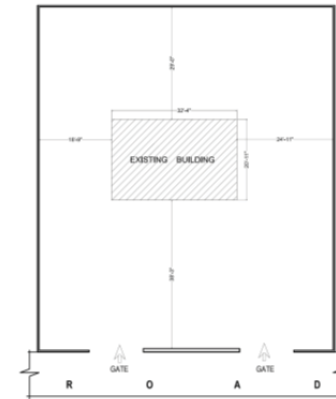


Figure Lay out plan

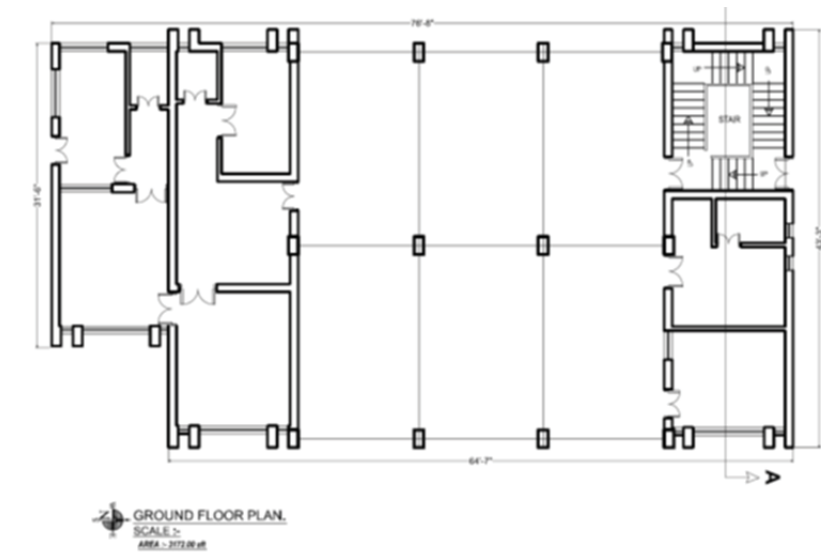


Figure Plan of grand floor

Comments

-

Photo



Front side



Back side



Corrosion of reinforcing-bar in existing slab

Preliminary inspection sheet for the seismic capacity of a building

Date: August/13/2014

Outline information	
Name	⑧Mirpur (Type A)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	1-story
Year of completion	1967(Duration:49years)
Total floor/building area	371 m ² , 362 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Staff quarter, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent : -
Constraints on seismic retrofit work	-
Additional facilities/Fence	Even if the walls fall down, that would not be a major problem for the rescue activities.
Others	-

Floor plan, photo or others (Free choice)

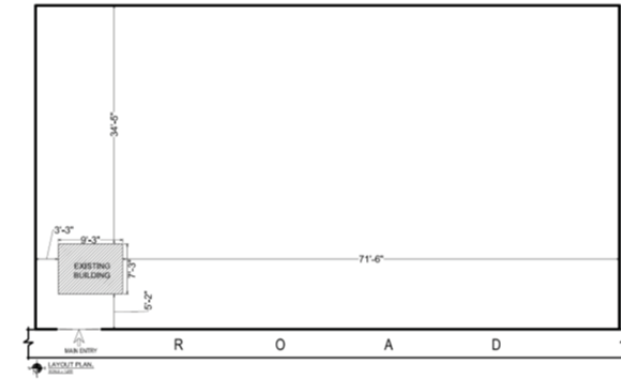


Figure Lay out plan

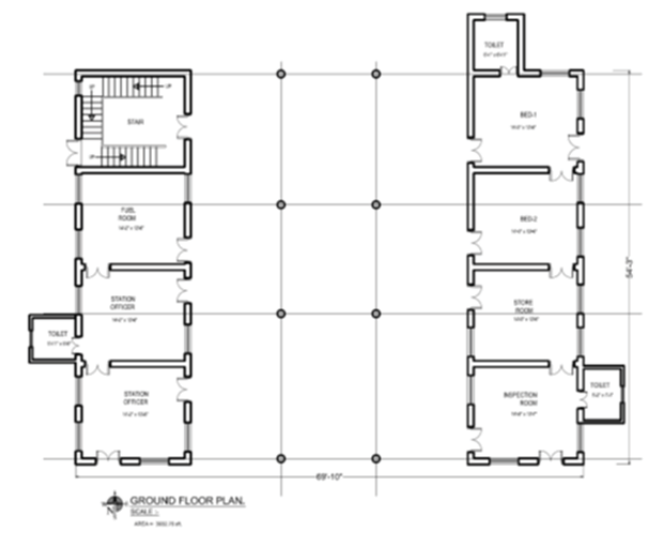


Figure Plan of grand floor

Comments

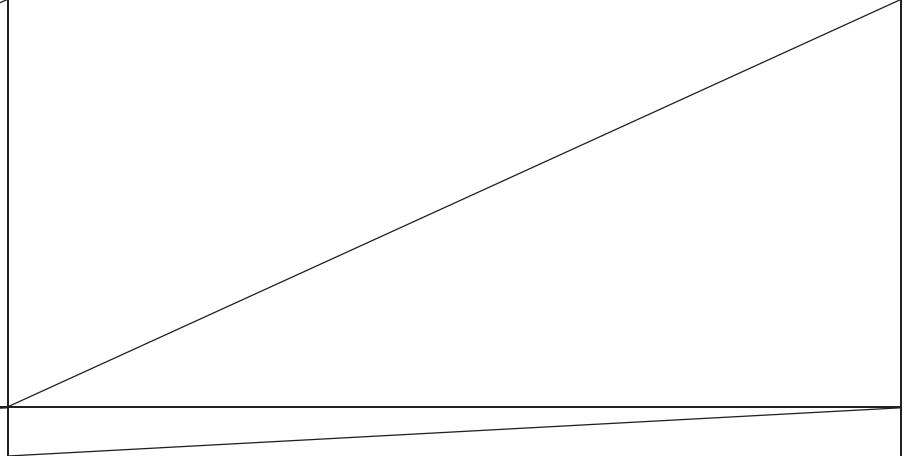
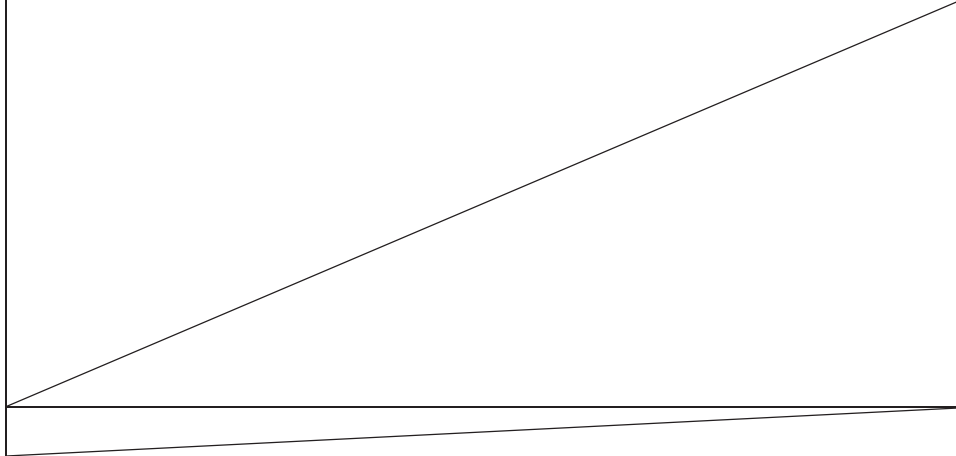
-

Photo



Front side

Back side



Preliminary inspection sheet for the seismic capacity of a building

Date: August/16/2014

Outline information	
Name	⑨Mohammedpur (Type A)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	2-story
Year of completion	1963(Duration:51years)
Total floor/building area	765 m ² /375 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Dormitory)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent : -
Constraints on seismic retrofit work	-
Additional facilities/Fence	-
Others	-

Floor plan, photo or others (Free choice)

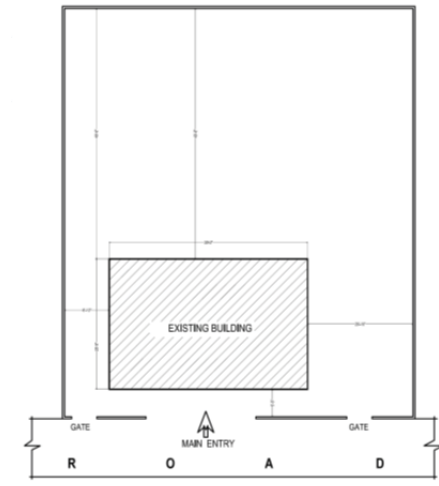


Figure Lay out plan

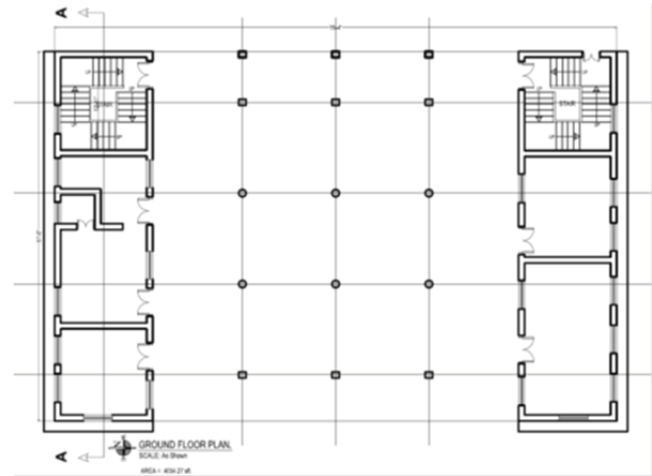


Figure Plan of grand floor

Comments

The dormitory made of brick is significantly deteriorated and has an eccentricity caused by the training-tower.

Appendix 4-19

Photo



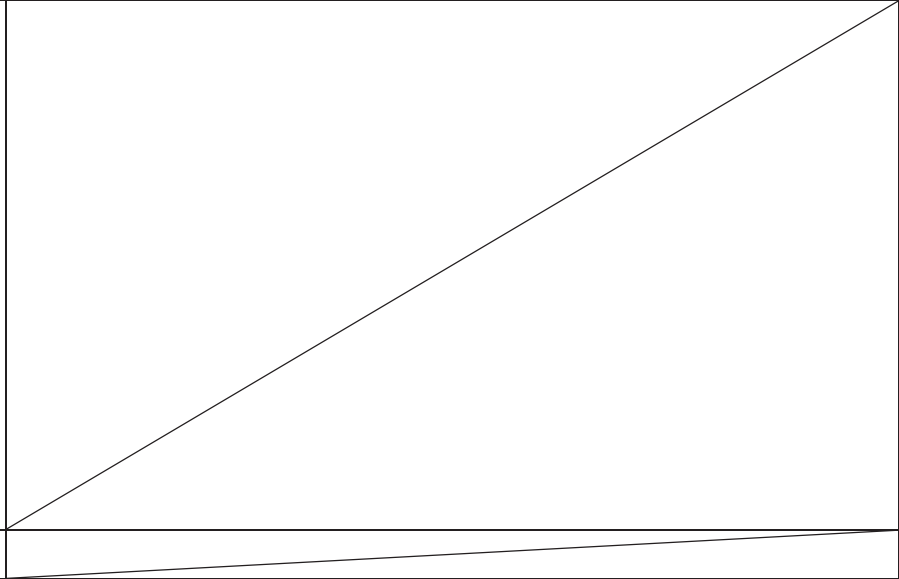
Front side



Back side



Training-tower



Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Outline information		Floor plan, photo or others (Free choice)
Name	⑩Polasshi Barak (Type B)	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Unknown	
Number of stories	1-story	
Year of completion	1947(Duration:67years)	
Total floor/building area	Unknown m ² , Unknown m ²	
Surrounding terrain	-	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Dormitory, etc.)	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Corrosion of existing main reinforcing-bar in columns	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent : -	
Constraints on seismic retrofit work	-	
Additional facilities/Fence	-	
Others	BUET owns land.	
Comments		
Approval of BUET is necessary to rebuild this fire station, because BUET owns land.		

Photo



Front side



Back side

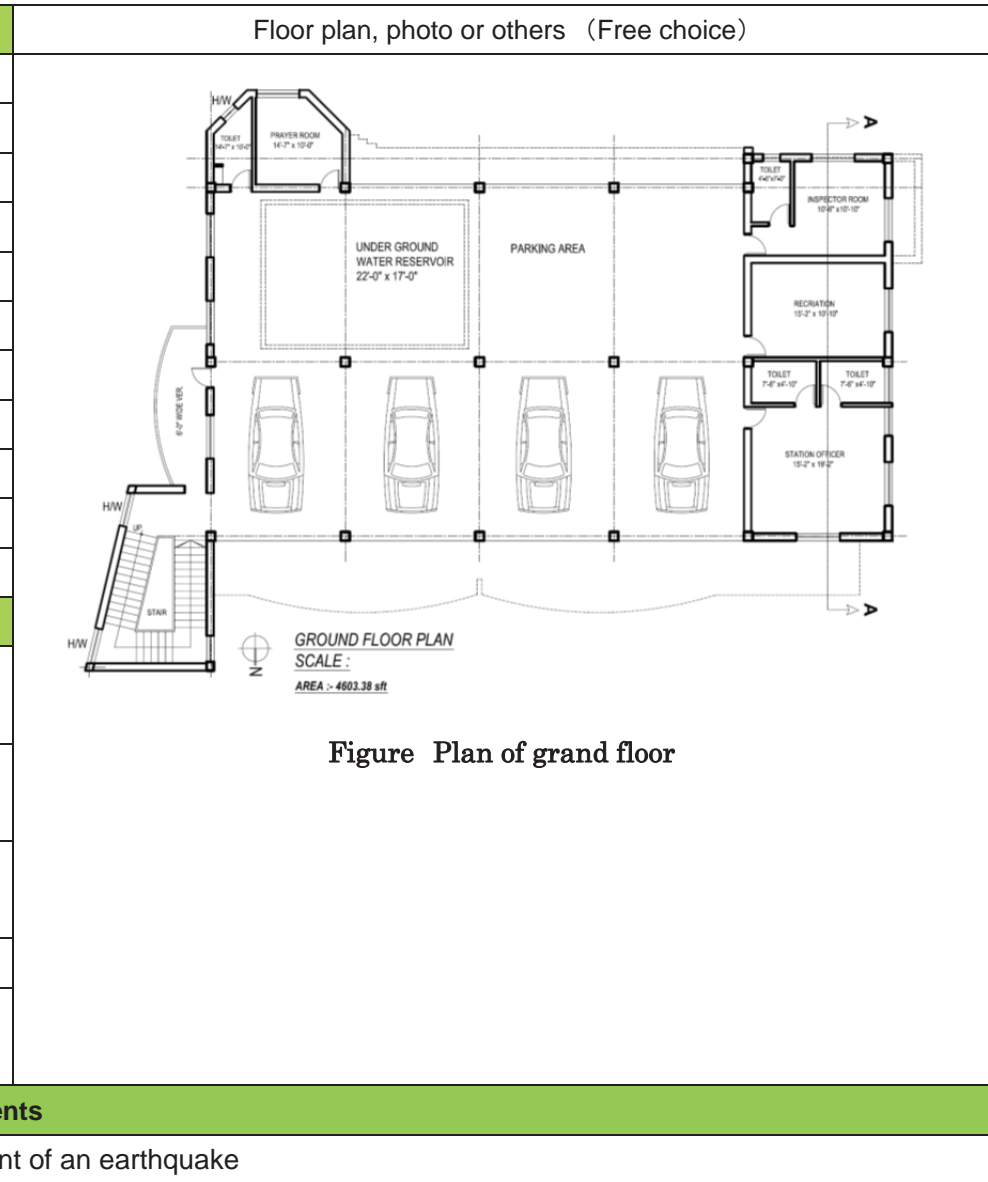


Corrosion of existing main reinforcing-bar in columns

Preliminary inspection sheet for the seismic capacity of a building

Date: August/16/2014

Outline information	
Name	⑪Lalbag (Type A)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	2-story
Year of completion	2001(Duration:13years)
Total floor/building area	759.47 m ² , 380.49 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Dormitory)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : left-right asymmetry
Constraints on seismic retrofit work	The site is narrow.
Additional facilities/Fence	Vertical shape of dormitory is overhang.
Others	Road in front is narrow, and there are many week buildings in the area.
Comments	
It does not appear to be the suitable area to set a stronghold of activities in the event of an earthquake	



Photo



Front side



Back side



Surrounding site



Road in front of fire station

Preliminary inspection sheet for the seismic capacity of a building

Date: August/13/2014

Outline information	
Name	⑫Savar EPZ (Type A)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input checked="" type="checkbox"/> Pile(- m) <input type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	3-story
Year of completion	1997(Duration:17years)
Total floor/building area	671.19 m ² , 285 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Garage)
Fence	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent :Cracking
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Vertical set back
Constraints on seismic retrofit work	-
Additional facilities/Fence	-
Others	

Floor plan, photo or others (Free choice)

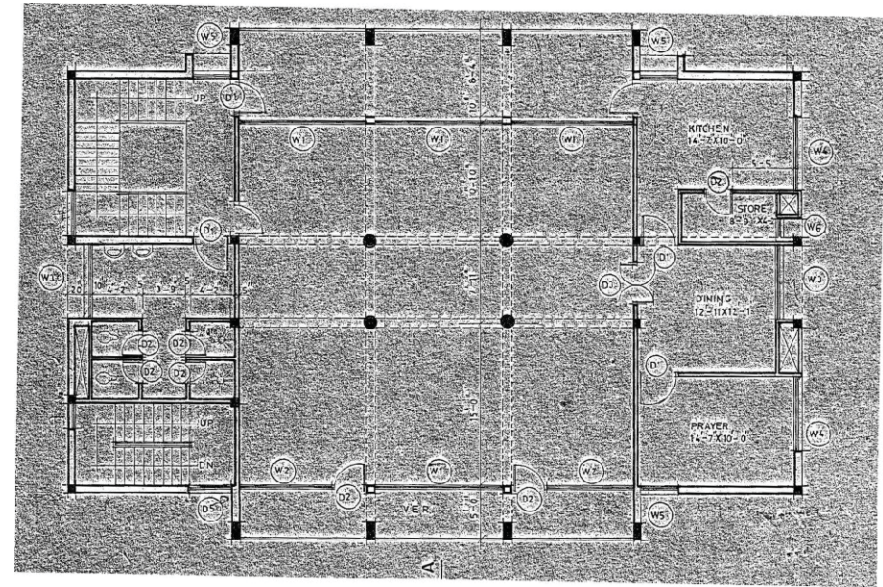


Figure Plan of ground floor

Comments

Section area of column is small. One-way depth of column is small.

Photo



Front side



Back side



Garage



Deterioration(Crack)

Preliminary inspection sheet for the seismic capacity of a building

Date: August/13/2014

Outline information		Floor plan, photo or others (Free choice)
Name	⑬Savar (B type)	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input checked="" type="checkbox"/> Pile(- m) <input type="checkbox"/> Spread <input type="checkbox"/> Unknown	
Number of stories	2-story	
Year of completion	2004(Duration:10years)	
Total floor/building area	Unknown/ Unknown	
Surrounding terrain	Pond in front of the site	
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Family quarter, etc.)	
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent	
Inspection results		
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :	
Constraints on seismic retrofit work	The site is narrow.	
Additional facilities/Fence	Even if the walls fall down, that would not be a major problem for the rescue activities.	
Others	-	
Comments		

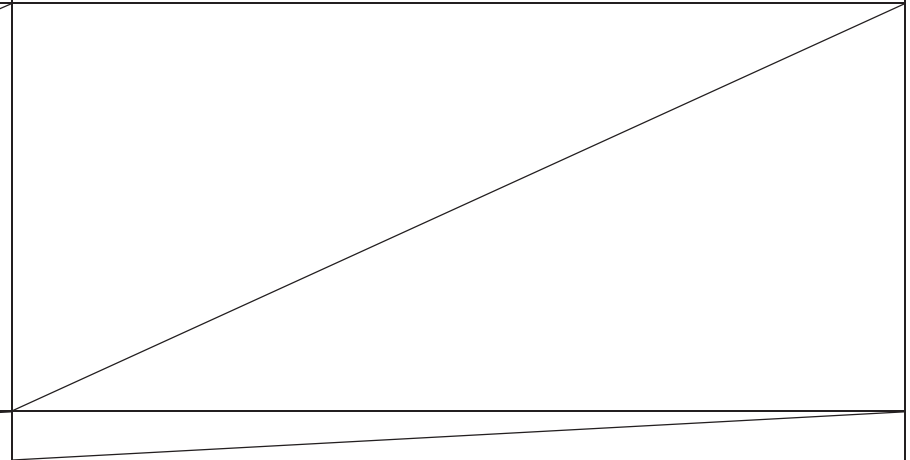
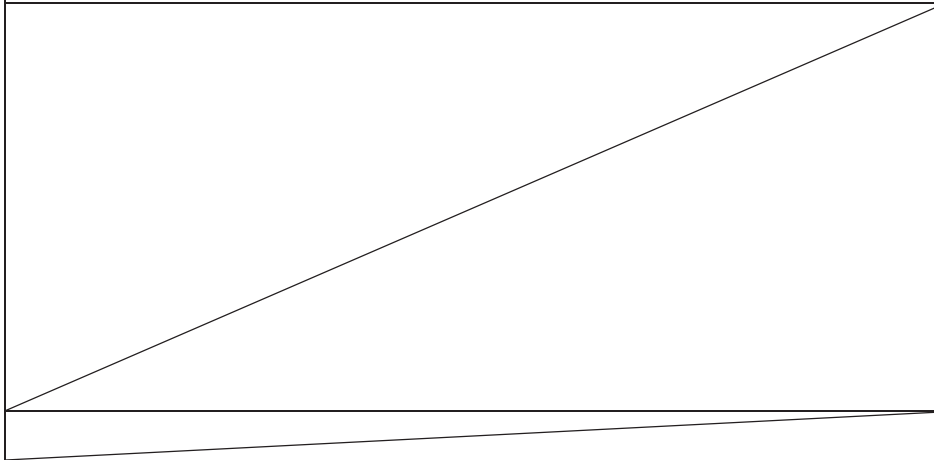
Photo



Front side



Back side



Preliminary inspection sheet for the seismic capacity of a building

Date: August/17/2014

Outline information	
Name	⑭ Baridhara (Type B)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input checked="" type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	2-story
Year of completion	2004(Duration:10years)
Total floor/building area	Unknown/282 m ²
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Family quarter, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Height is 1.5m)
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Cracking with settlement of building.
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent: Height of each floor is different significantly
Constraints on seismic retrofit work	-
Additional facilities/Fence	Even if the walls fall down, that would not be a major problem for the rescue activities.
Others	-

Floor plan, photo or others (Free choice)

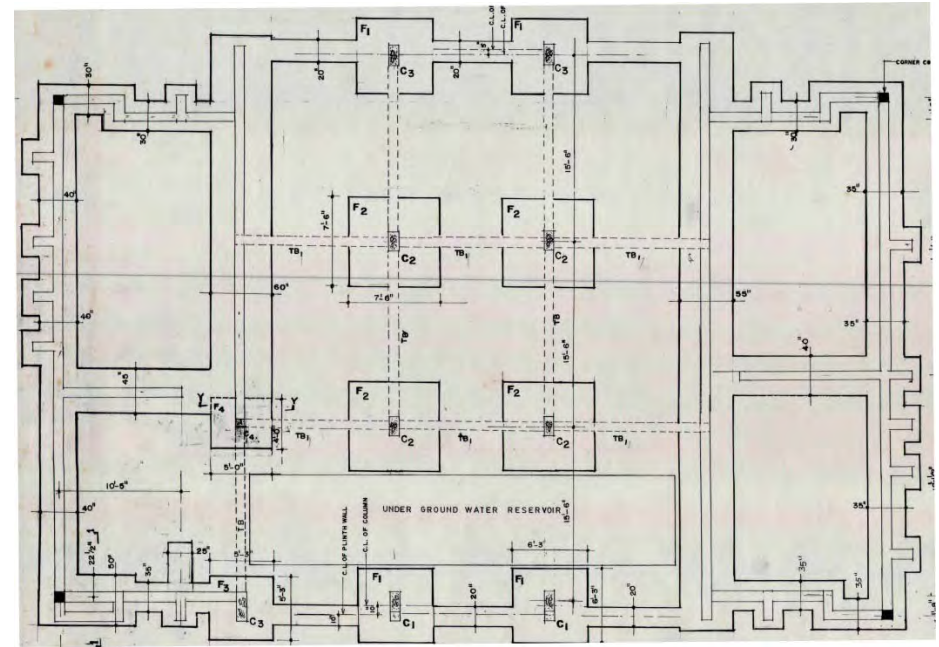


Figure Foundation Plan

Comments

-

Photo



Front side



Side



Cracking with settlement of building

Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Outline information	
Name	⑮Keraniganj (Type B)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	2-story
Year of completion	2004(Duration:10years)
Total floor/building area	Unknown/277 m ²
Surrounding terrain	Riverside
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Family quarter, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Height is 2.0m)
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent:
Constraints on seismic retrofit work	-
Additional facilities/Fence	Even if the walls fall down, that would not be a major problem for the rescue activities.
Others	-

Floor plan, photo or others (Free choice)

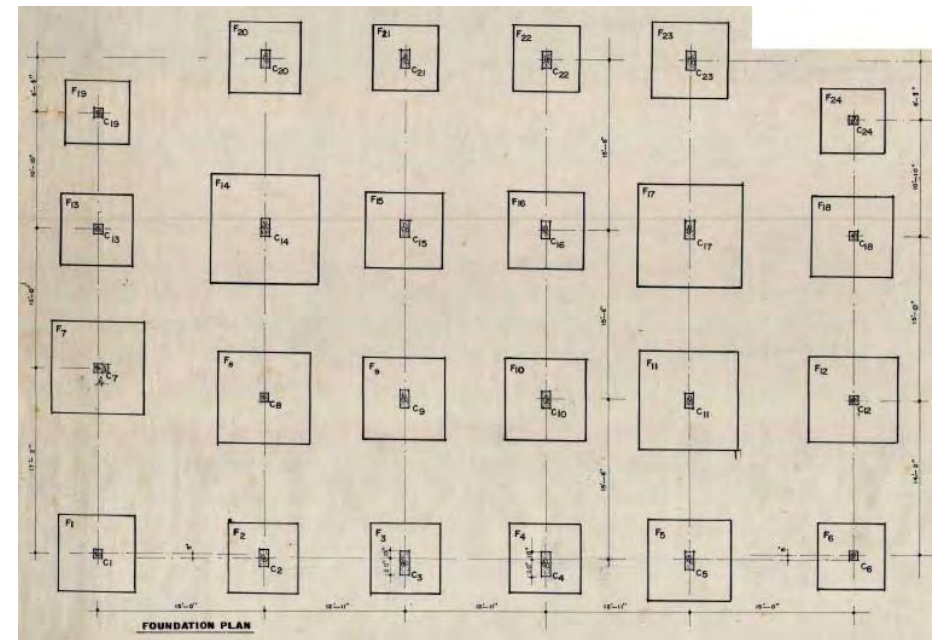


Figure Foundation Plan

Comments

-

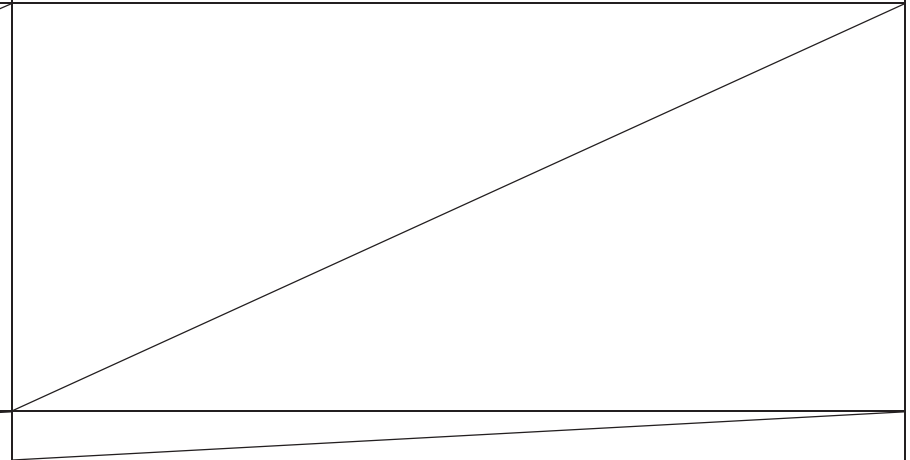
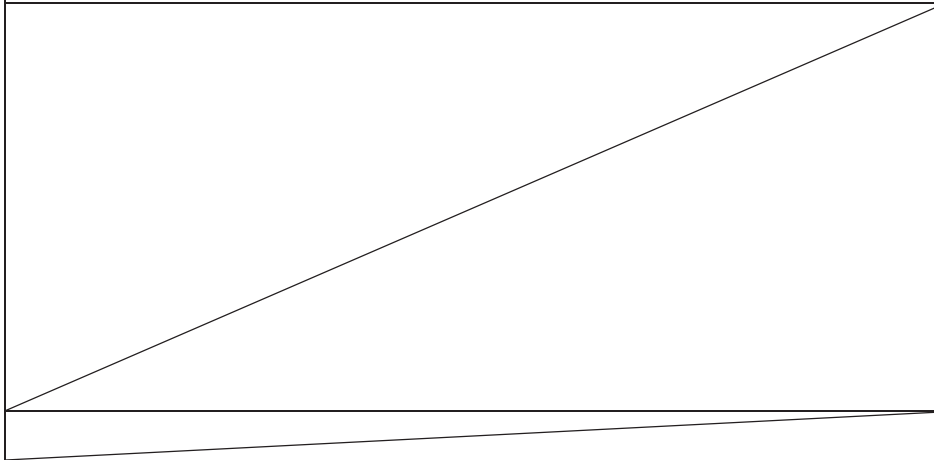
Photo



Front side




Side



Preliminary inspection sheet for the seismic capacity of a building

Date: August/14/2014

Outline information		Floor plan, photo or others (Free choice)
Name	⑩ Sadargaht river	
Location	-	
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input type="checkbox"/> Others ()	
Structural type	<input type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others	
Foundation structural type	<input type="checkbox"/> Pile(m) <input type="checkbox"/> Spread <input type="checkbox"/> Unknown	
Number of stories		
Year of completion		
Total floor/building area		
Surrounding terrain		
Additional facilities	<input type="checkbox"/> None <input type="checkbox"/> Existent	
Fence	<input type="checkbox"/> None <input type="checkbox"/> Existent	
Inspection results		
Deterioration (cracking, rusting, deflection and others)	<input type="checkbox"/> None <input type="checkbox"/> Existent :	
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input type="checkbox"/> Existent:	
Constraints on seismic retrofit work	-	
Additional facilities/Fence		
Others	-	
Comments		
In the earthquake disaster, the use of the waterway by ship as a transportation vehicle is effective		

Preliminary inspection sheet for the seismic capacity of a building

Date: August/16/2014

Outline information	
Name	⑰Dhamrai (C class)
Location	-
Occupation	<input checked="" type="checkbox"/> Fire station <input type="checkbox"/> School <input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Others ()
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input checked="" type="checkbox"/> Pile(m) <input checked="" type="checkbox"/> Spread <input type="checkbox"/> Unknown
Number of stories	3-story
Year of completion	2010(Duration:4years)
Total floor/building area	Unknown/150 m ²
Surrounding terrain	Soft soil, which is surrounded by wetlands.
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Family quarter, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent :
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent: Change in effective mass
Constraints on seismic retrofit work	-
Additional facilities/Fence	Check whether the water storage tank withstands the earthquake.
Others	-

Floor plan, photo or others (Free choice)

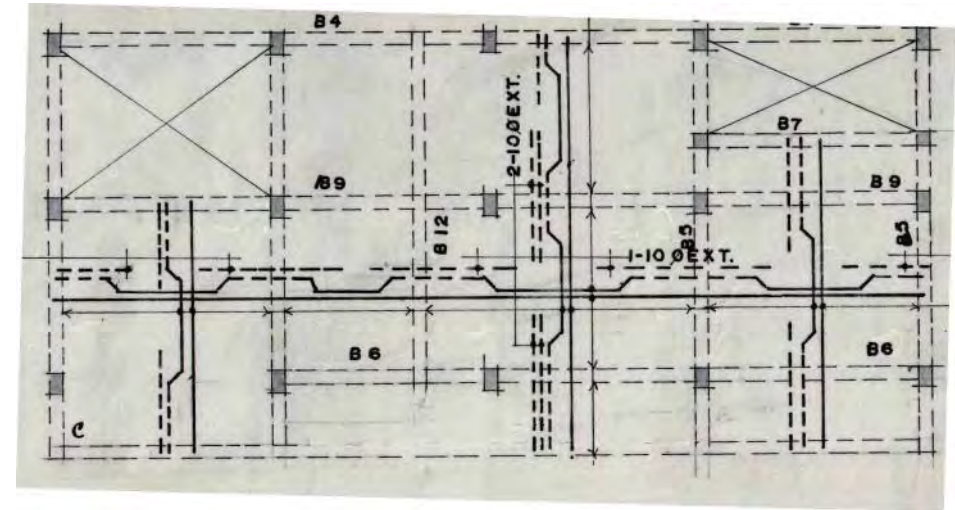


Figure Structural Plan

Comments

The important factor is 1.25 of the current BNBC. New BNBC requires 1.50. The seismic capacity is lower than the one required by the New BNBC.
Land subsidence observed in the surrounding area.

Photo



Front side



Side



Land subsidence



the water storage

Preliminary inspection sheet for the seismic capacity of a building

Date: August/13/2014

Outline information	
Name	Mirpur Training complex(Barack Building)
Location	-
Occupation	<input type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input checked="" type="checkbox"/> Others (Dormitory)
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Unknown
Number of stories	4-story
Year of completion	1983(Duration:31years)extend buildings 2006,2008
Total floor/building area	Unknown/ Unknown
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Family quarter, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent
Inspection results	
Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent :Cracking
Irregular structure (Mass, Torsion, Weak/Soft story)	<input checked="" type="checkbox"/> None <input type="checkbox"/> Existent:
Constraints on seismic retrofit work	-
Additional facilities/Fence	-
Others	Three story building with expansions (small intervals)

Floor plan, photo or others (Free choice)

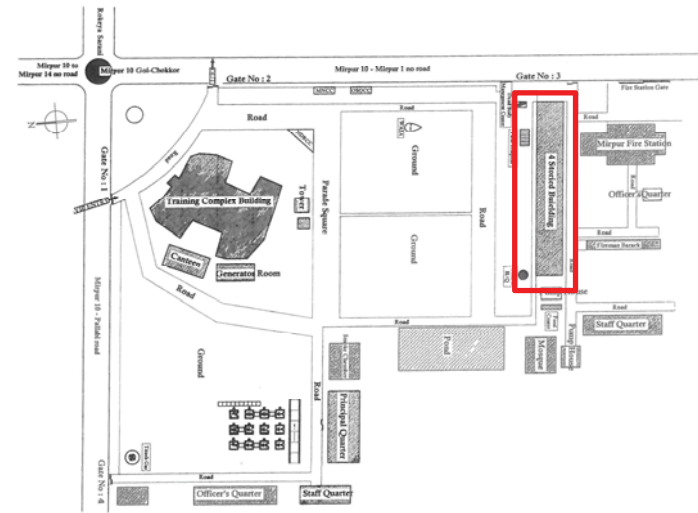


Figure Lay out plan of Training complex Mirpur

Comments

The west part of extend building does not need seismic retrofit, because the design is based on BNBC.

Photo



Front side



Back Side



Situation of deterioration



Expansion joint

Preliminary inspection sheet for the seismic capacity of a building

Date: August/13/2014

Outline information

Name	Mirpur Training complex(Training Complex building)
Location	-
Occupation	<input type="checkbox"/> Fire station <input type="checkbox"/> School <input type="checkbox"/> Hospital <input checked="" type="checkbox"/> Others (Dormitory)
Structural type	<input checked="" type="checkbox"/> RC <input type="checkbox"/> BRICK <input type="checkbox"/> RC+BRICK <input type="checkbox"/> Others
Foundation structural type	<input type="checkbox"/> Pile(m) <input type="checkbox"/> Spread <input checked="" type="checkbox"/> Unknown
Number of stories	3-story
Year of completion	1980(Duration:34years)
Total floor/building area	Unknown/ Unknown
Surrounding terrain	-
Additional facilities	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent (Staff quarter, etc.)
Fence	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent

Inspection results

Deterioration(cracking, rusting, deflection and others)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent : Corrosion of existing reinforcing-bar in beams
Irregular structure (Mass, Torsion, Weak/Soft story)	<input type="checkbox"/> None <input checked="" type="checkbox"/> Existent: Irregular plan, Frame is ununiformity.
Constraints on seismic retrofit work	-
Additional facilities/Fence	-
Others	-

Floor plan, photo or others (Free choice)

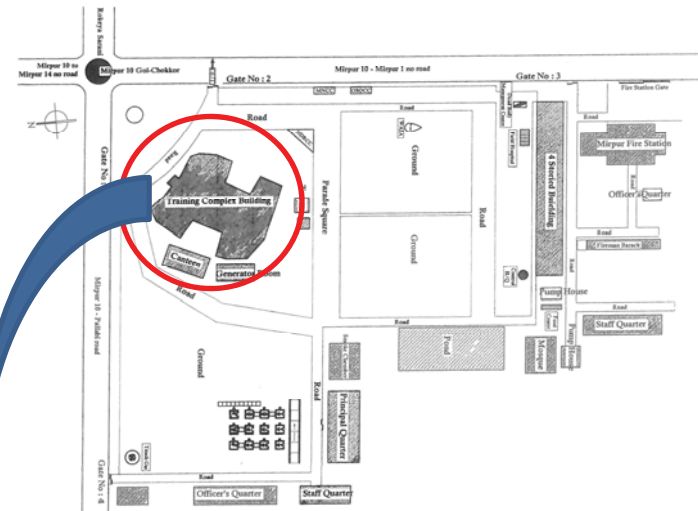


Figure Lay out plan of Training complex Mirpur

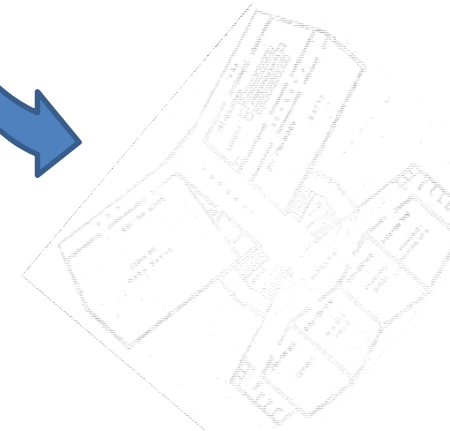


Figure Lay out plan of Training complex Mirpur

Comments

Photo



Front side



Back Side



Corrosion of existing reinforcing-bar in beams



Corrosion of existing reinforcing-bar in beams