

DOCUMENTATION OF FIVE PANAM BUILDING IN THREE DIFFERENT STYLES

AR. HOSSAN MURAD & MEHNAZ HASAN

(Lecturer Department of Architecture, Premier University, Chittagong)

ABSTRACT

Historically, Bangladesh has earned the reputation of being at the crossroads of many cultures, rulers & traders the ruins of magnificent cities and monuments left behind in many parts of the country by the vanishing dynasties of rulers still bear testimony of the richness of its cultural & Architectural heritage. Rapid growth and unplanned developments have been threatening the charm of historic treasures settlements. This type of transformation mitigates negative impacts on the environment and heritage both of which are deeply linked to the social and cultural identity of local communities. Moreover distortion of history and unscientific conservation work by the government has been damaging. This includes fifty centuries old structures in the linear settlements of Panam Nagar. To preserve and represent cultural heritage or the glories past of a society, the documentation of architectural heritage is of enormous importance. This study concentrates on the documentation of the selected five different types of building of panam which have precious and research worthy information. This paper based on such documentation and analyses by the first author in his undergraduate urban project in 2006 supplemented by studies on architectural heritage, history and traditional built form by the second author This study concentrates on the documentation of the selected building of Panam which have architectural ornamentation and elements used on the buildings.

KEYWORDS: Panam, Building Typology, Architectural Style, Decoration and Ornamentation, Façade, Building Layout

INTRODUCTION

In contributing to the familiars, aesthetic quality of our surroundings, where we live and work, the historic environment exaggerate our senses of well being. As it is all around us and easily accessible, it provides a setting for a great variety of local activities. The historic environment is fundamental to our sense of place; helps link us to our roots and predicate our sense of cultural distinctiveness. It is of value for what it tells us about past society, modern environmental change. Bangladesh has a rich, diverse culture. Its deeply rooted heritage is thoroughly reflected in its architecture. New unplanned developments that took place in the last few decades are changing the historic setting, visual continuity and architectural integrity of those areas where heritage are placed. Warning to this site is flooding, defacing, unplanned, unauthorized and illegal development, poor maintenance ,access of heavy vehicles on Panam road and earthquakes due to lack of structural retrofitting. The low lying areas of Bangladesh are especially affected by the impacts of global climate change, particularly due to rising sea water levels and lack of water drainage, retention pond and encroachment on wet land. In recent time most of Panam building facing masonry damage due to water logging, rising damp and also facing architectural woodwork damage due to moist weather different types of insects. Some of Panam buildings nemesi giving the evidence of structural failure of those buildings. Department of Archaeology took the decision for conservation of important and special buildings and monuments but those institutions facing funding problem to take a appropriate conservation for Panam buildings, though Panam is looking for a appropriate planning with proper

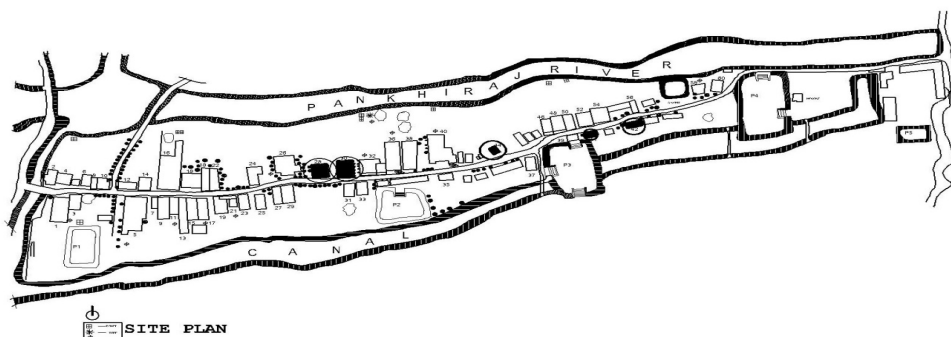
conservation with proper documentation.

PANAM NAGAR

Panam Nagar is the earliest city of Sonargaon Thana. It is a linear urban settlement which is 27 km to the southeast of Dhaka. It has been seemed to be Hindu capital city of Sonargaon. During the late 13th century the glorious architecture of Panam was developed, when city was the focus of the Deva Dynasty. After that Panam city was developed as Muslim city on old city. During Mughal Empire Panam becoming home to middle and upper class families. When Mughal took over the control on Sonargaon they construct bridge, highway and lots of development and give a gorgeous look. Panam City is also connected by a narrow one vaulted bridge with Sonargaon road. Panam city is a unique township with east-west oriented road and along with fifty two buildings in one its last legs, in a abandoned condition having 31 on north side and 21 on south side of this road. Exact count of buildings according to the number of floors cannot be done due to bad accessibility and poor condition of structure. Most of the buildings are rectangular in shape and elongated in the north-south direction. Exterior adornments are interesting with arched doorways and windows being a common theme. Parapets followed a uniform design and heights with vertical slit openings, rounded at the top and bottom, raised plinth and verandah created the transition space between the inner house and the street. Some built forms have ornamented pillars supporting verandahs and many have covered entrance ways, but all lead directly on to the panam street. Decorative carvings ornamentation many of the pillars, some with intricate details and patterned work can be seen on some of the verandahs. Primarily Hindu communities are remained occupied in Panam Nagar, until the migration of Hindu to India following the indo-Pakistan war, which took place in 1965 and subsequent Muslim Hindu conflicts. Most probably Hindu community left panam entirely during indo-Pakistan war which took place in 1965 and also subsequent Muslim Hindu conflicts.

OBJECT OF THE STUDY

This paper will discuss and try to document about the architectural character and detail ornamentation of five buildings of three different architectural styles from the Mughal, mixed and colonial period in Panam. This comparative analysis will be done through field survey and literature survey by its author. In this paper follow the building numbers which are assigned by Hussain and others (1997). An adequate number of photographic of these five buildings of different style have been taken by the author for the study. For documenting of these buildings the author has to draw necessary drawings details regarding the buildings on the basis of field study in 2006.



FOUR TYPES OF PLANNING IN PANAM

a) Central Courtyard Type

This building type is derived from centering on a courtyard. The building activities and layout are arranged around the courtyard. The enclosed courtyard is extensively delineated with arched openings and pilasters having ornamentation in base, shaft, capital, cornice and parapet. Building No: 5, 25, 32, 36, 38, 40, 42, 48, are central courtyard type.

b) Central Hall Type

The central hall designed with a double height covered hall room as the main focal point of this typology. The rectangular and double height halls were not located in the centre always. The building activities such as worshipping social gathering jalsha etc. were held in the hall. Building No: 1, 5, 16, 17, and 26 in this type.

c) Consolidated Type

Majority of house in Panam are in this typology. The buildings without any court or hall fall in this type. Single storied buildings in Panam mostly belong this category. The consolidate types are designed with either on entrance portal or a verandah or a high plinth as transition space from street to inner house. Building no: 42, 44 fall in this type

d) Compartment Type

Only few example of this type remain in Panam Nagar, with single compartment or multiple compartments. In this type single room, where as multiple compartment type consist rows of rectangular rooms. Building No: 35, 39, 41 falls in this type.

ARCHITECTURAL STYLE IN PANAM

Sonargaon boast architecture of the Mughal and Colonial periods. So in Panam two different architectural styles built in two different periods-The Mughal Style and The Colonial Style. Mughal monuments, among them the Sonakanda river fort, the panch pir mazar shrine and Ibrahim's Abdul Hamids Mosque. British colonial architecture preserved in Sonagaon includes the Anandoa Mohan Piddar and street front houses. Also another architectural style found in panam and it is called Hybrid style. The hybridization of styles seen during early colonial phase remains as a bridge between two successive and distinct architectural styles-Mughal and Colonial.

MUGHAL STYLE BUILDING IN PANAM

In Panam there isn't available evidence to give exact information about the construction year of the Mughal style building. But observing architectural style of those building was thought that some buildings from the Mughal reign in Bengal still exist there. By expressing facade ornamentation and spatial organization Buildings fall under this Mughal style. Like elements used are multiple. Cusps moulding over door and window openings, painted. Ogee shape window, rectangular panels in the facade, floral decorations in the surfaces, small niche with pointed arch, etc. In that period the Zafree brick was abundantly used. Building no 44 and 28 are briefly discussed in following.

a) Building No: 44

This building situated at Southside of Panam Nagar road. The condition of it is very bad. It is assumed that this

building was built in 18th century. It was used as residence but now it is not suitable for living. It is a one story building with one stair case which is risk in use. Ground floor accompanied with four (4) rooms and one (1) corridor. The last room has no roof. The main stair situated at ground floor. The building structure is Arch Brick. Probable there are ornamented column in front of this building but now ruined. The roof condition is so bad that there is chance of accident anytime. General information of the Building no: 44 are given below:

Building Type

This building is a true example of a consolidated type building.

Building Layout

This 30'×20'2'' building is located at the south side of the street.

Rectangular in shape and elongated in the north-south direction this is a single story building. Ground floor plan comprises with four rooms and one corridor. Main stair also situated at the ground floor. The front was semi public in nature providing entry and place for receiving sitars socializing etc.

Architectural Style

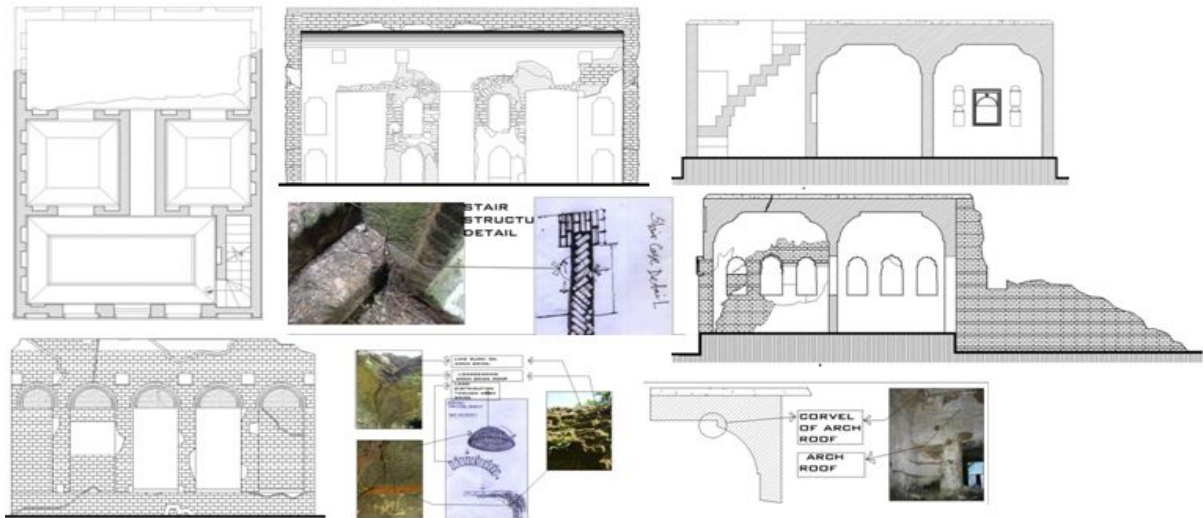
The building no 44, which bears good examples of Mughal style in Panam, was built in the Mughal period. This building hears some features used in the Hindu religious structures.

Decoration & Ornamentation

Architectural and ornamental features like short column, various sculptural details and moldings done with plaster in lime mortar used in dimple ornamentation were borrowed and added to non religious building otherwise built in Mughal style the decorative feature of this building are well proportioned multiple cups decoration over the opening. But at present condition there is no lime plaster outside the building facade.

Building Condition

At present existing Interior & exterior building condition is very poor structural retrofitting is urgently needed for conservation.



Necessary Drawings and Detail of Building No. 44

b) Building No: 28

The building no 28 is a two storied building located at the Southside of the street. The condition of this building is very bad. It was used as residence but now days it is not suitable for living. lower floor consist of three (3) rooms and three (3) corridors. Heights of this corridor 5'6". There are two linear halls at this building. One is front side and another is back side of the building. At present roof and walls of these both halls are demolished. Upper floor comprise of four (4) rooms and two corridors. There is chance of accident anytime in this building. Basic information of building 28 is given below:

Building Type

This is a building of multiple compartment type. Where these compartment are located at the middle portion of this building.

Building Layout

This 32'6"×35'10" south facing building has a two layer of planning. In this two storied building lower floor of this building consists of three (3) rooms and three (3) corridor the height of the corridor is 5'6"(max). There are two spaces; one is back side of the house which has no roof. The only stair situated at the right side of the porch. And the upper floor, there are four (4) rooms and two (2) corridor among which two rooms have no roof and other two rooms are bad in condition.

Architectural Style

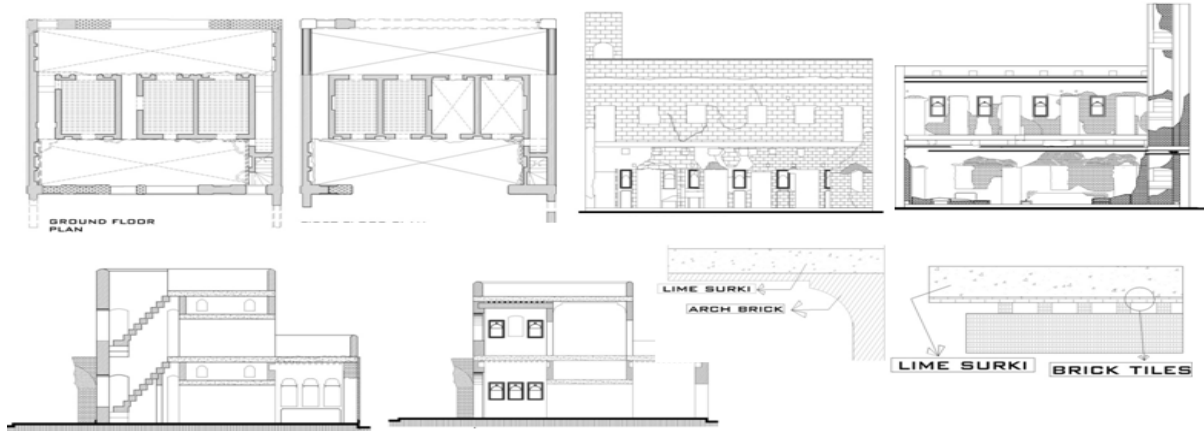
The planning layout and facade design of the building were influenced by Mughal style. So, building no 28 in Panam bears a good example of Mughal style.

Ornamentation & Decoration

The Mughal style features like small rooms, pointed ogee arch openings, niches on the facade having pointed arch etc. In the building there is shown perlin-joist which support the roof with brick tiles. But perlin didn't exist now there are also some of the features used in the Hindu religious structures.

Building Condition

At present, existing interior and exterior building condition is very bad for using any purpose. The back side elevation of this building totally destroyed.



Necessary Drawings and Detail of Building No. 28

PANAM BUILDING IN COLONIAL STYLE

A large number of Hindu Zamindar houses were built in this style which had marvelous facade ornamentation in the colonial period, there are two division of style found in the buildings. In one of the divisions, there were no gorgeous ornamentation on the facade and the walls simple plasterworks were done. The classical elements like semi circular arches flanked by pilaster or engaged columns with ornamentation less capital and entrance portico with flat entablature, supported by round columns on both sides can be found. In later division elements with highly decorative ornamentation on facade were used the noticeable features used on the facades of these colonial buildings were semi circular arches, sometimes highly decorated with floral patterns rich corbellings and relief works around the openings. Also the pillars, columns, and pilasters are well proportioned. In this style, Corinthian columns were abundantly used. In the facade, these columns took the load of semi circular arches used in verandah.

Corinthian capital and base, having variation in shape and ornamentation richly decorated with floral patterns under the projected cornice also cast iron floral decorations in railing and windows and colored glass are found in this style. Building no 30, of colonial style are presented briefly in following:

a) Building No: 30

This colonial building of Panam Nagar located at the south side of the street double height central hall room on the ground floor of the two storied building. It was built near late 18th century. It is used as a residence; till now it was used when built two families are sharing two floors. The residents are Hindu and they changed the rooms according to their need like "Thakur Ghar". Basic information of building no 30 are given below:

Building Type

This is a consolidate type building which is generated with a double height covered hall room.

Building Layout

This 56'6"×31'4" building located in the north south direction central hall is located on the ground floor. This is a two story building with four (4) staircases among which only one stair has access ground floor to upper floor and other three stairs are sealed because of bad condition. Ground floor consists of Eight (8) rooms and two (2) corridors. And first floor consists of six (6) rooms and a terrace. There is a stair from the terrace to go the building roof at present the terrace has no railing but it has a roof. The raised plinth has a single molding. The pillar columns and pillars all have well defined based shafts, and capitals.

Architectural Style

The remarkable features used on the facades and planning layout of the building bears the good example of the earlier colonial period. The building have plastered portion of the front facade whereas some other parts were in exposed brick.

Structure & Material

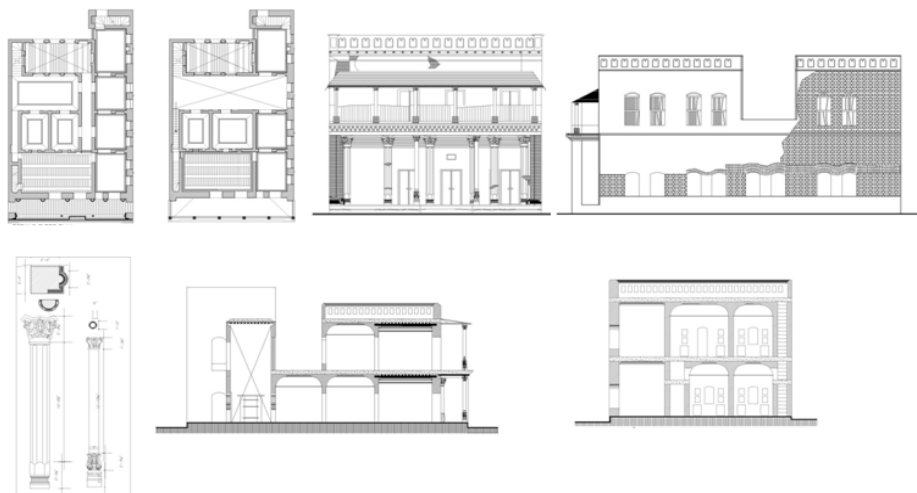
Bricks are plastered for facade delineation at front side and interior work of this building and bricks are entirely left exposed other three side of the building. Different sizes, shapes and layout patterns are used to curve out rich moldings and other designs. Building was made of different sizes brick. Bricks are also arranged over the window lintel. Cast iron ventilators, window grills, railings had been used. The building has tow type of structural system: Perlin joist and Arch-Brick. In front of the building there are five (5) plaster and two (2) cast iron columns.

Decoration & Ornamentation

In this building the use of decorative arches are noticeable. Heavy extended cornice and ornamented parapet with a distinct feature are also seen in this building. The raised plinth has a single molding. The pillars columns and plasters all have well defined bases, shafts and capitals.

Building Condition

At present existing interior building condition isn't very good for using as the residence purpose.



Necessary Drawings of Building No. 30

b) BUILDING NO. 41

Some of the unique designs elements and special feature in Panam are worth mentioning. Building 41 was one of them. This building has unique character for its relatively smaller size and the uniformity of its decorative treatment in all four sides. Behind the house there is a pond known as KARAI PODDAR pond which is independent in nature. The pond serves the purpose of bathing. Through the structures are now being used for residential accommodation but original purpose of this building may have been different. Because of location of this small size structure, it is assumed that this building was used as bathing and changing room previously. General descriptions of building no 41 are given below:

Building Type

This is a single compartment type one storied building.

Building Layout

This 26' 4" × 17' 6" Building is boated at the north-south direction of the street. This building plan is rectangular in shape. This building has three openings. Over the openings there are different kind of arch shape and others two are false doors. There are also extended decorative roof in this building the treatment over the entry to upstairs was basically local, used in most colonial building.

Architectural Style

The decorative features and planning style of this building bears the symbol of colonial period. So it is an example of colonial style.

Structure and Material

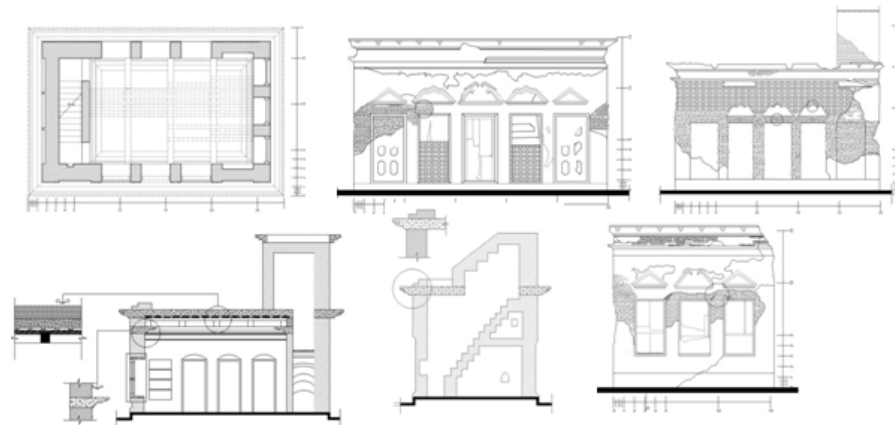
This building has two type of structural system: Perlin joist and Arch-Brick. For roof thickness used brick lime and shurki. There were no uses of reinforcement in roof construction. So they used Perlin and joist under the roof thickness. The prime construction material of Panam is Brick under every decoration there used angular brick to transfer load over the opening. This building have decorative plastered portion on the facade and interior works.

Ornamentation & Decoration

This building have classical framework in facade decoration in vibrant color. Variation in the use of pediment and decoration is clearly noticeable. Use of Greek and Swan's neck pediment with flexible moulding and decoration can also be seen. Brick quoins framed and dressed the corners of the building. This type of features can also be prominent features in the building.

Building Condition

At present existing interior and exterior feature of this building isn't very good for using as the residence purpose.



Necessary Drawings of Building No. 41

MIXED (MUGHAL AND COLONIAL) STYLE BUILDING IN PANAM

During early colonial phase the mixed of styles remains as a bridge between two successive and distinct architectural styles - Mughal and Colonial. It is difficult to make a clear time frame of this phase. The buildings that were built during a transition between styles basically maintained the bold dominating Mughal style, but gradually added elements from contemporary European architecture. In this hybrid style intermix the dominating Mughal architectural like two centered arch, four centered arch, multiple cups etc, with features from imported elements like entrance portico, different types of pediments, cost iron reining with floral decoration, Ionic and Doric column, corbelling molding work in projected cornice etc. During this phase some buildings even rent to the extent of using Mughal character in the ground and European character in the upper floor. Building No: 42 of mixed character is presented briefly in following:

a) BUILDING NO. 41

This two storied consolidated type building is located at the north side of the street this mixed style building shows remarkable decorative features of both style Mughal and colonial period. In past it was used as a residence but at present it has no use because of poor condition. This building also shows Mughal character in the ground floor and roof top and colonial character in the upper floor however this may have been happened due to later additions of upper floors an existing floor. Basic characteristics of the building no: 42 are given below:

Building Type

This is a building of consolidated type, which is generated without any inner court or hall.

Building Layout

This 35' 6" × 30' 2" building is located in the north-south direction of the Panam street. Ground floor of this building consists of three rooms placed one after another. The upper floor has an open court terrace located at the center of the spatial planning used as a four court to the temple. The hut shaped do-chala structure used on roof top in part of this building. This part with the pitch roof was used as a Mandir- a place of worship by the Hindus.

Architectural Style

The ground floor of this building has influence in Mughal style facade decoration while the upper floor facade

reflected European neoclassical style. So, building no: 42 bears the good example of mixed style building in panam.

Structure and Material

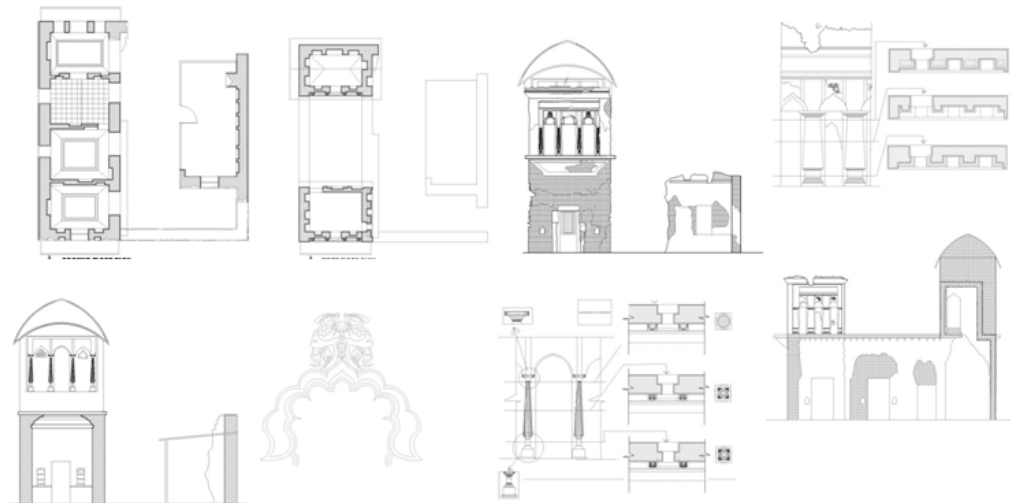
In the ground floor bricks are plastered for facade delineation. In this building Architectural and ornamental features various sculptural details and moldings done with plaster and lime mortar.

Decoration and Ornamentation

In this building the hut shaped do-chala rooftop is an elegant feature taken from Mughal ornamentation and style. Also in this building use of short column, various sculptural details and moldings well proportioned multiple cusps decorations over the openings were borrowed from late Mughal period. In this building the use of blind arches are being noticeable. The next phase fully adopted the European classical style which used round columns with iconic capital, in pair on both sides flanking three openings over the opening only narrow part extended upwards. The swan's neck pediment was used. There were also used semi circular moulding below the broken arms of the pediment and weave molding over it.

Building Condition

At present interior condition is very bad for using any purpose.



Necessary Drawings of Building No. 41

CONCLUSIONS

The historic environment can make beneficial contribution urban and rural areas. Through the adaption of historic building for modern uses and in providing a high quality setting for new development the historic environment where people choose to live and work. Their inherent quality provides an opportunity for reviving run-down areas.

People are very proud of their local history, but don't always express how much they value a place until it's threatened. Because it adds character and distinctiveness to an area, heritage is a fundamental in creating a 'sense of place' for a community. As a reflection three style architecture, the ancient Panam Nagar settlements is undoubtedly made a profound contribution to the socio-cultural history and heritage of Bangladesh. Panam's building with their structure and

materials, decoration and ornamentation is unique which make a strong and glorious image of our past. Recently Bangladesh government taking an action in preservation process, colored almost all the historical buildings into pink color. Adaptive reuse of heritage buildings is an important factor in creating sustainable communities on the above. Circumstances an authentic documentation on the historical buildings of Panam Nagar is needed. In this regard authors present a research worthy documentation (based on the field survey in 2006) on five buildings in three different style of Panam Nagar , which will helps us a very positive influence on many aspects of the way a community develops and also our future generation to tell our true historical past.

REFERENCES

1. Hussain A.B.M, 1997 Sonargaon-Panam: A Survey of Historical Monuments and sites in Bangladesh.
2. Mowla, Q.A, Panam Nagar: Conservation and Management for Posterity, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, BANGLADESH.
3. Hussain A.B.M, (Ed.) 2007, Architecture, Dhaka, Asiatic Society of Bangladesh. Cultural survey of Bangladesh series-1.
4. Rahman S.M. (Ed.), 2007, Archeological Heritage, Dhaka: Asiatic Society of Bangladesh. Cultural survey of Bangladesh series-1.
5. Shaikh, Z.U. and Rahman M., December 2009, Twenty Five Buildings-Frozen museum of Panam Nagar, Old but New: New but Old, Architectural Heritage Conservation, Rahman M. (Ed.), published by UNESCO.
6. Mowla, Q.A. and Reza, M., 2000, Stylistic Evolution of Architecture in Bangladesh, Journal of the Asiatic Society of Bangladesh, Vol. 45, No.1: 31-58.
7. Mowla, Q.A. 2000, Colonial Urban Morphologies: an inquiry into typology and evolution pattern, Khulna University Studies, Vol.2. no.1: 45-62.
8. Akhter, S., 2004 Panam Nagar, The Ancient City of Bengal: In Search of Continuity in Tradition, Unpublished M.Arch thesis at Carleton University, Ottawa, Canada.
9. Mowla, Q.A., Panam Nagar: Conservation and Management for Posterity, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, BANGLADESH.
10. Khondker, S.M., January 2014, Documentation on Five Buildings of Panam Nagar: Structure, Material, Decoration and Ornamentation. The AUST Journal Of Science and Technology, Volume-5, Issue-1, January 2013.
11. <http://www.bangladesh.com/blog/sonargaon-s-deserted-city-panam-nagar>
12. <http://www.wmf.org/project/sonargaon-panam-city>
13. <http://bsle2014.blogspot.com/>

