

PREPARATION OF ACTION PLAN FOR CONSERVATION OF HERITAGE- PRECINCT IN MMR

Task V for Agashi Precinct, Vasai-Virar Sub Region.

Stage -2 Detailed Condition Assessment

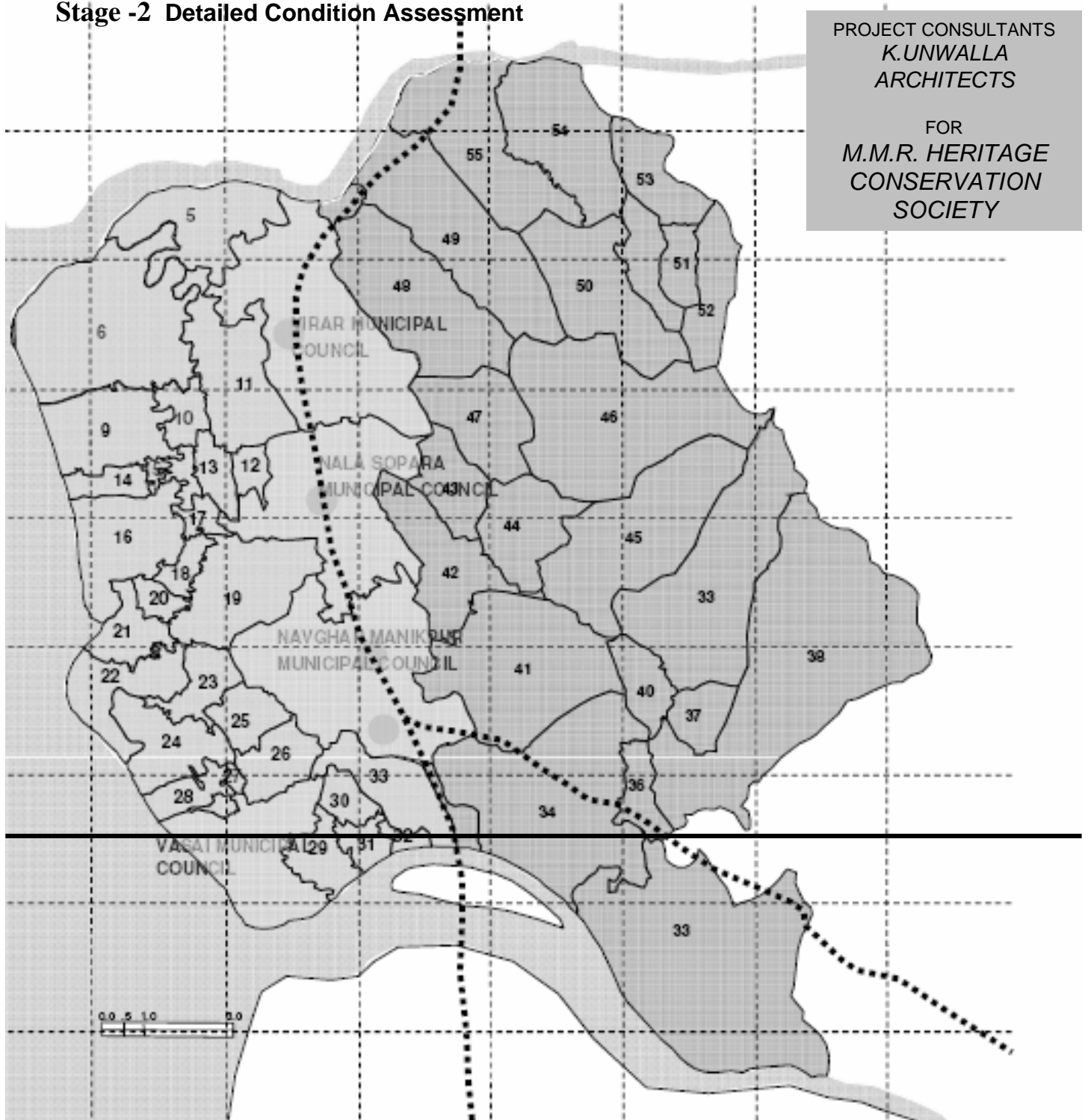


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SPECIAL CREDITS

We would like to thank MMRDA for giving us this opportunity; and providing us with base data from CRIT.

CRIT – Collective Research Initiatives Trust; CRIT were appointed as consultant on this project to study the Draft Development Plan for Vasai -Virar Sub Region (2001-2021)

ILLUSTRATION CREDITS

All Photographs unless otherwise mention are credited - by Architects: Kirtida Unwalla and Abhijit Athalye.

I. INTRODUCTION AND BROAD SCOPE OF WORK

The project : *“Preparation of Action Area Plan: Agashi Talav Precinct”* is envisaged to be undertaken hereby in the background of the Project *“Documentation and Preparation of Conservation Guidelines for Heritage Buildings and Precincts in Vasai-Virar Sub-Region(VVSR)”* conducted by the “Collective Research Initiative Trust” (CRIT) in December 2008, here after referred to as the CRIT Report.

The CRIT project has been sponsored by MMR Heritage Conservation Society (MMRHCS).

Objectives

As specified in the Terms of Reference, the objectives of this assignment are -

- To evaluate current status and conditions of the precinct through detailed documentation and analysis of key issues
- To identify schematic projects, programmes for conservation of precincts through participation of local communities and stakeholders
- To formulate financial, institutional and regulatory strategies for project implementation, phasing, operation and maintenance
- To prepared draft guidelines for conservation of the heritage precinct

Broad Scope of Work

The scope of work of this assignment has been categorized into the following stages

Stage 1: Review of Available data and Inception Report

Stage 2: Detailed Condition Assessment

Stage 3: Evaluation of Significance

Stage 4: Identification of Issues

Stage 5: Preparation of Action Plan

Stage 6: Developing Draft Guidelines

Structure of Stage 1:

Presented to MMRDA - 25th May' 2010.

The structure of presentation & report is as follows:

1. Historical and Cultural Background of Vasai -Virar Sub Region(VVSR)
2. Historical and Cultural Background of Agashi Gram Panchayat
3. Urbanization and Development Planning in VVSR: Trends and Impacts
4. The Agashi Talav Heritage Precinct: Review of settlement pattern and identified cultural assets
5. Stakeholder Identification and Analysis
6. Methodology for Development of Action Plan for Heritage Conservation of Agashi Talav Precinct
7. Bibliography & Annexures

II SCOPE AND METHODOLOGY FOR STAGE II: DETAILED CONDITION ASSESSMENT

Scope of Work

This report fulfills the scope of the second deliverable – Detailed Condition Assessment. As per the terms of reference, the following outputs have been achieved –

1. Detailed plan of the precinct showing existing condition(neighborhood landmarks, nodes, street shrines, public spaces, open spaces, cultural practices, existing infrastructure, demographic characteristics, transformations, major activities)
2. Other drawings like elevations, axonometric views, etc. showing the heritage characteristics (spatial architectural features , special buildings)
3. Establishing the common characteristics, features and elements

The approach is defined from macro to micro, thus offering regional dimensions to the heritage precinct to justify its ‘place-making’ character.

Geographical scope of the study

The Agashi Talav Precinct is a significant historic and cultural core – a heritage asset of the Agashi Grampanchayat area. The extent of the Study Area pertains to Agashi Talav Precinct as an identified Heritage Asset (CRIT). The asset conforms to a demarcated boundary (limits) while this study is liable to establish relationships with the extents and aspects of Cultural Significance of the surroundings in general.

The approach is defined from macro to micro, thus offering regional dimensions to the heritage precinct to justify its ‘place-making’ character.

Methodology

In order to fulfill the objectives of this stage, detailed documentation of the precinct has been undertaken. Two key tools were used for this objective as below –

- Detailed field measurements and surveys were undertaken to document the urban character & architectural heritage of the precinct. Interaction and dialogue with the local population and stakeholders were used to document the social and cultural activities and character of the precinct.
- The documentation is further supplemented by the Condition Assessment undertaken in depth on site at various scales from urban form to individual structures.

The study was undertaken in two hierarchical levels as below –

Detailed Documentation of the Precinct

1.1 Agashi & its Environs

The imageability of an urban space indicates the sets of relationships occurring between the urban form and its users as well as the physical settings [regional layers] it is linked with.

- based on this premise, the initial chapter looks at the context of the temple precinct with the immediate settings where the rich resources of Vasai-Virar Sub Region offer a character building quality to its urban spaces.

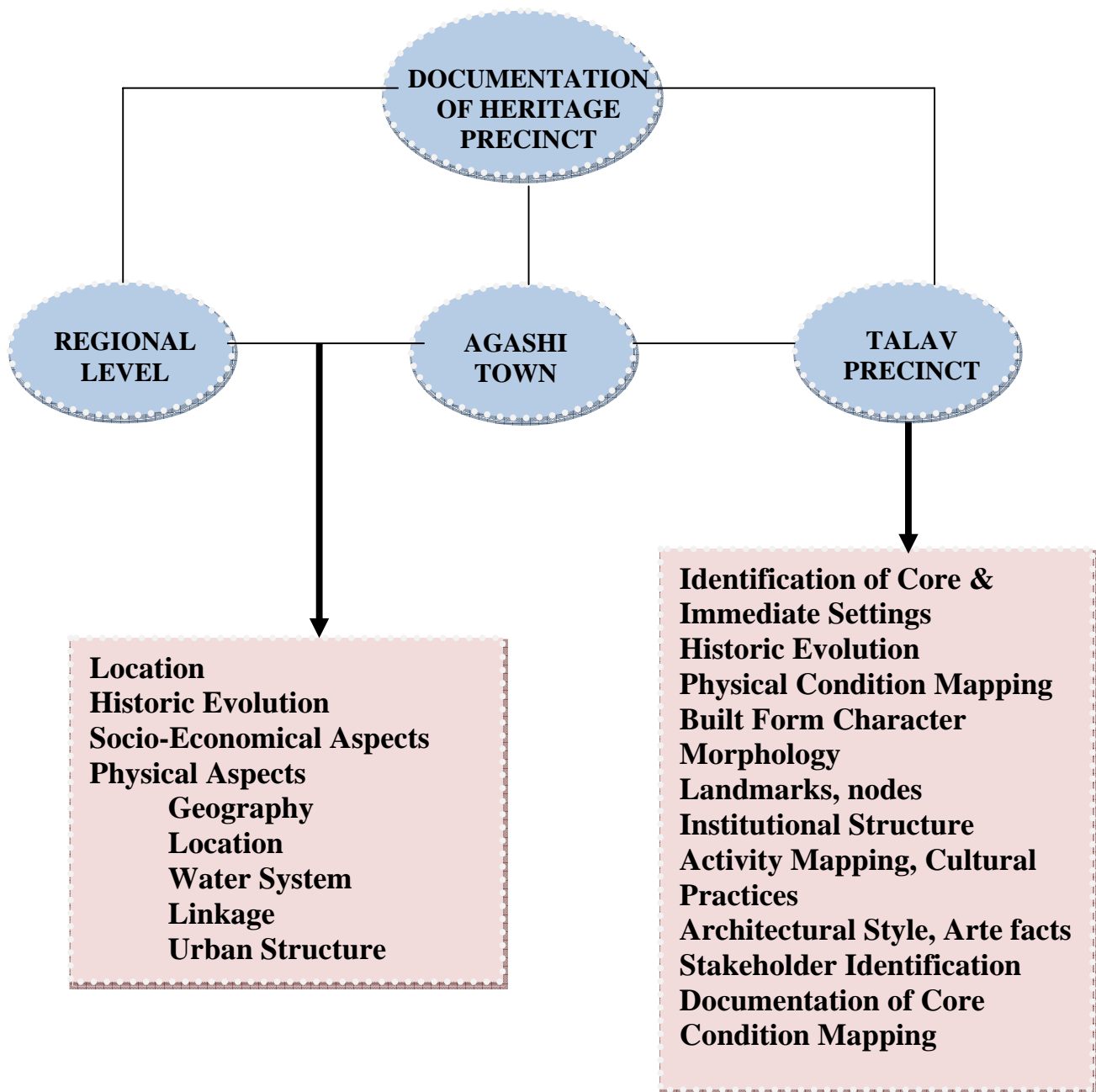
1.2 Agashi Talav Heritage Precinct- Urban Form & Space

The later phase looks at the detail documentation of the precinct in various scales and the respective architectural details.

1. Agashi Talav Heritage Precinct: Condition Assessment

The chapter develops a critical view towards the existing condition of the precinct and individual structures in detail. From the urban form level to the architectural details, various scales have been incorporated to offer in depth understanding of the site.

1. The Precinct
2. The Buildings
3. The Tank



Detailed Documentation of the Precinct

The imageability of an urban space indicates the sets of relationships occurring between the urban form and its users as well as the physical settings [regional layers] it is linked with.

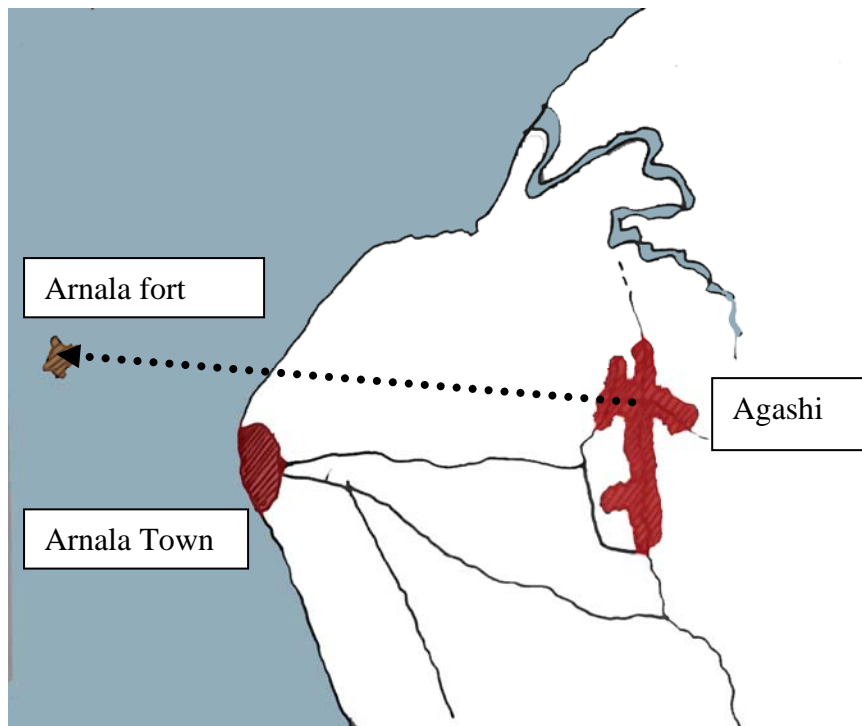
The rich resources of Vasai-Virar Sub Region offer the character building quality to its urban spaces. The intent of the study is to list which are the layers contributing to the making of the space and how they affect its urban form; which in turn gives us the in-depth understanding of Talav Precinct as an active public space.

1.1 Agashi & its Environ

‘Agashi & its environ’ refers to the area which is undergoing constant transformation w.r.t.its historical events, evolution of the town, Socio-economical activities, established linkages, trend & direction of development,etc.

1.1.1 Location

The rich resources [coastal ecology, flora & fauna, occupational landscape, etc.] of Vasai Virar Sub Region play the key role in shaping its settlement form. The evolution of towns were determined by its physical settings whether coastal or hinterland town. The symbiotic relations with physical features were considered before laying down the principles of town planning.



Map showing the location of Agashi w.r.t. Arnala town and fort

Map No.01 – Agashi & its Environ

With the emergence of Arnala as coastal town with Agashi as hinterland market town connected with, Agashi also played a role being located near the then active Bhatibandar. It was further secured by the sea fort of Arnala. The role playing of the town in return determined the nature of activities taking place within and the urban form to encourage the same.



Water Network

The regional landscape of VVSR is determined by its coastal ecology and its layers of transformations by the habitation[merging of islands, occupational landscape,etc.] How the region works in terms of its geomorphology- i.e. the working landscape between sea,rivers, creeks,ponds, hydrology network & movement of water.

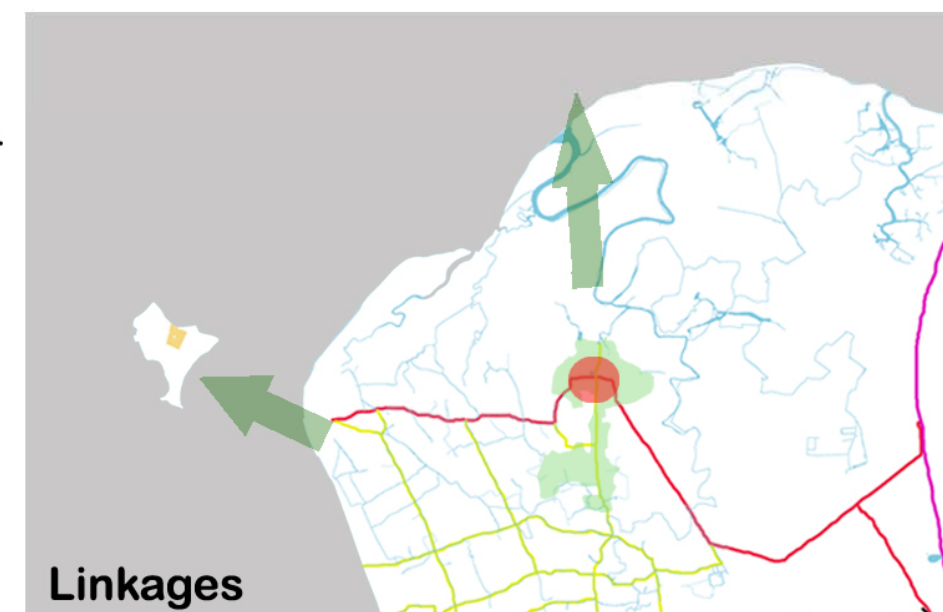
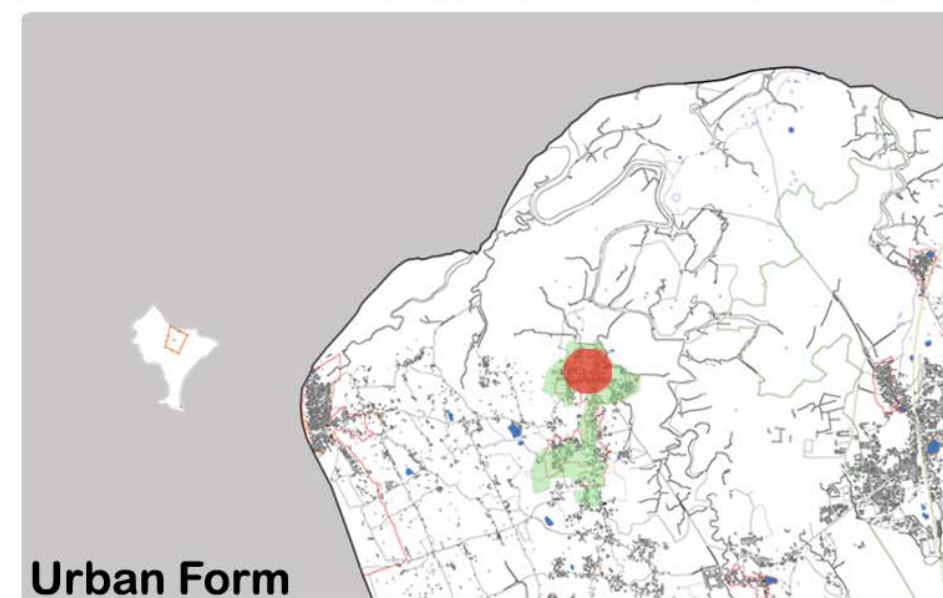
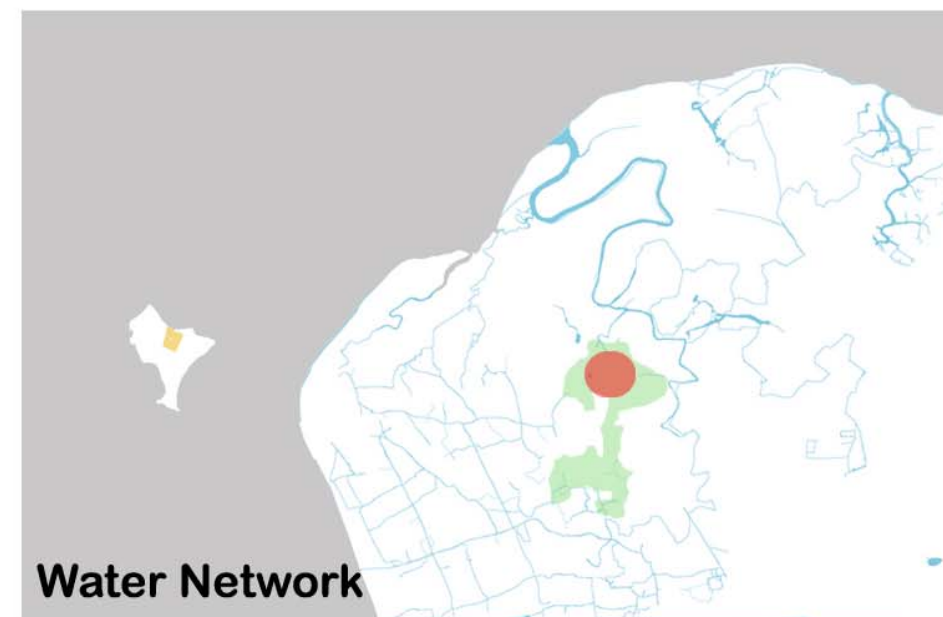
Urban Form

The settlements respond to the regional phenomena in terms of its location, physical form and occupational activities, whether coastal or hinterland town[along with its historical layers]. Agashi emerged as market or hinterland town to Arnala but its importance was known for being on Bhatibandar[once active port]

Linkages

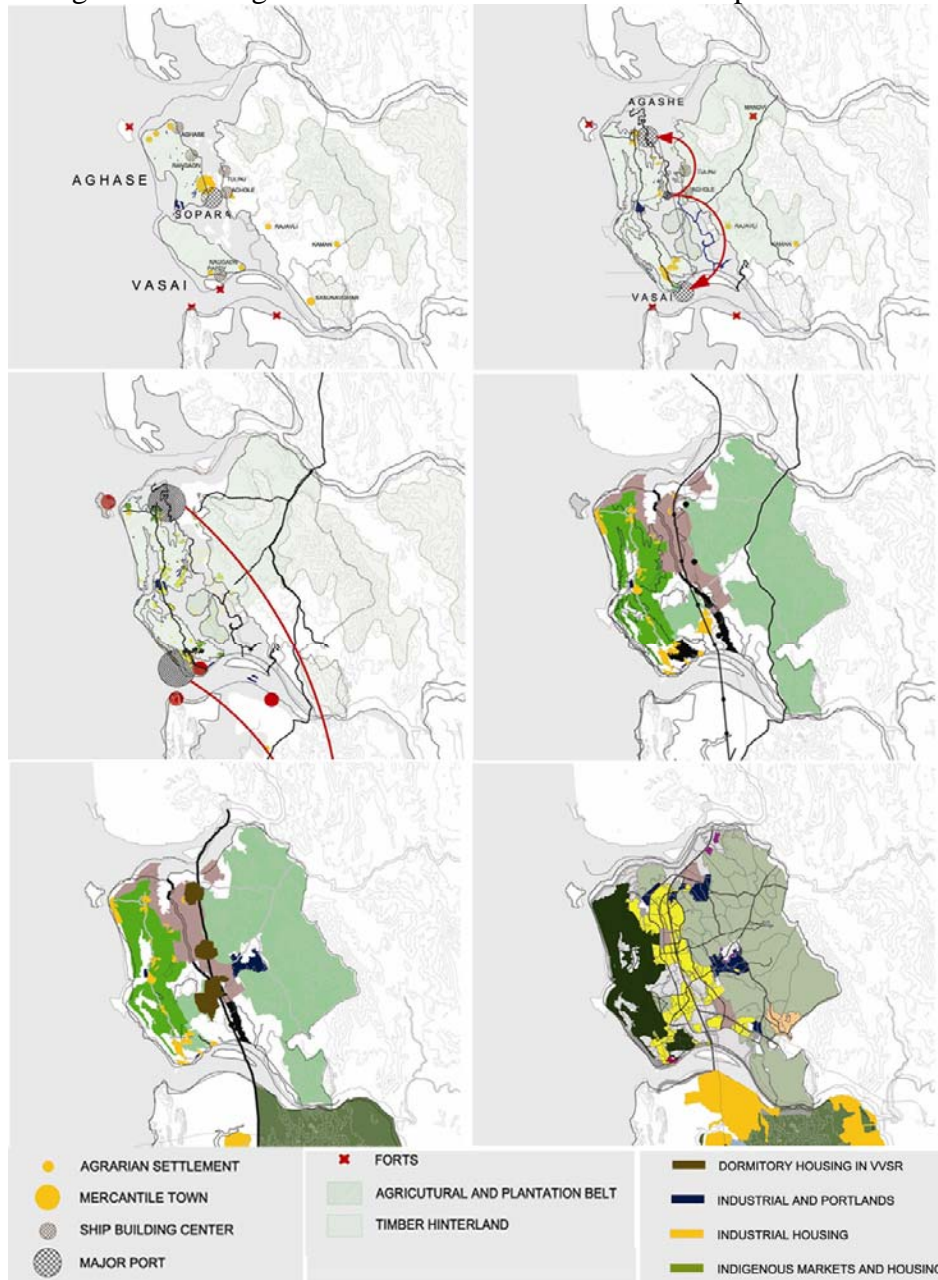
Historically waterways were determining factors for emergence of mercantile activities,market places and towns. Road ways and public transport governs the growth of settlements in today's context. Agashi is well connected to movement network and forms a thoroughfare between Arnala & Virar station which makes it a active node.

- Water body, lake, creek, etc.
- Agashi Village Boundary
- Agashi Talav Precinct
- Virar Railway Station
- Arnala Town
- Arnala Sea Fort
- Railway Line
- Primary Road Network/ Public Transport
- Secondary Road Network



1.1.2 Evolution & Linkages

The evolution of Agashi as an important port town encouraged its mercantile and commercial activities. The connectivity to other towns and villages promoted Agashi as a prime node on the linkage routes along with its historical connection to the port.

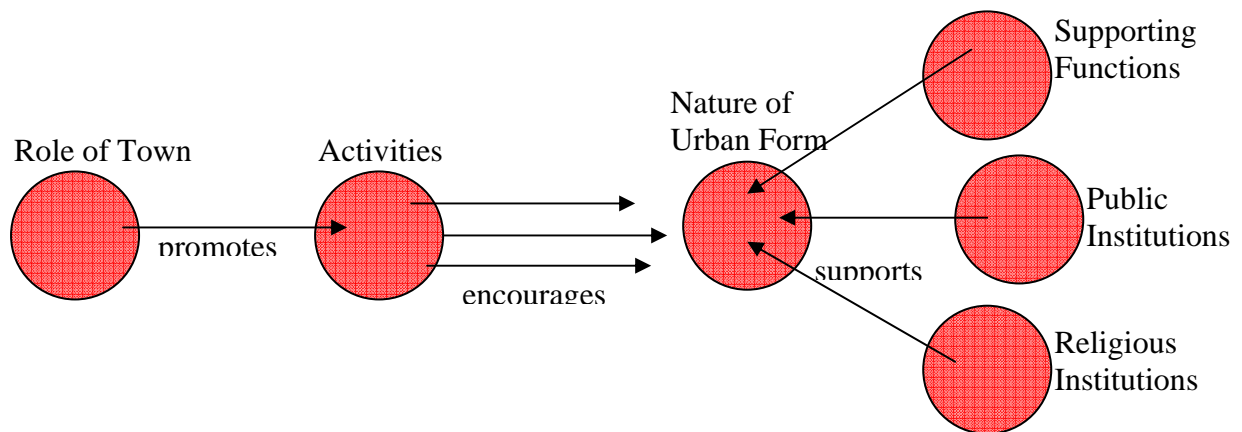


Map showing the evolution of Agashi w.r.t. Vasai Virar Sub Region and its changing role.

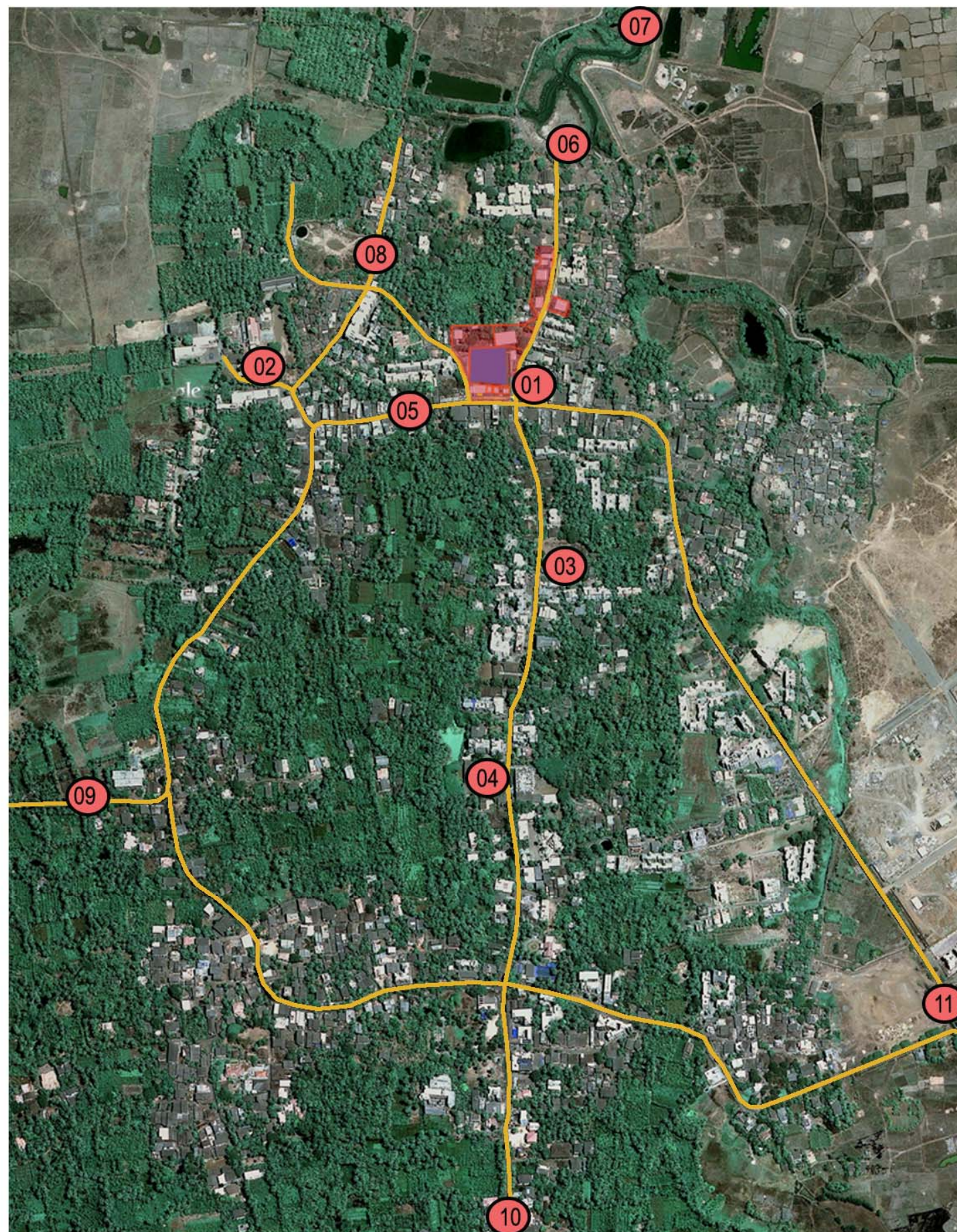
Political rules encouraged its own institutions [church /temples] which transformed the urban form with closely knit community structures. Agashi is also transforming from a historical port / market town connected to the villages around to the hinterland town/village with its extended platform for the growing Virar municipal boundary –a thoroughfare route between railway station and the coast.

1.1.3 Socio-Economical Aspect

The mercantile activities and movement of goods by water ways [medieval era] were supplemented by the regional occupation of farming, fishing and plantation. The urban planning underwent transformation under various eras of medieval & colonial. The architectural expressions found its way in the established under Maratha kings or Portuguese rule. The socio-cultural activities promoted the public congregations and effective use of urban spaces. Port activities encourage mercantile activities and so is the market place to accommodate the exchange between people. Market spaces in return allow people to gather and an opportunity to an individual to make people avail the other supporting facilities. Public, socio-religious Institutions grow around the Market Street or node. Religions find its own individual expressions to define their urban form and space but the systems of inter-relations remain common



Graphical representation of the various layers contributing the urban form and space



Temple Talav Precinct [Listed] - Situated on the major intersection of roads, the Agashe temple tank is marked by its distinct edge of important religious and public institutions .



The Bhavani Shankar Mandir with its setback and tree cover offer a characteristic setting to the tank. The childrens play area inserted as additional activity form the integral part of the tank complex.



The features pertaining to the beautification of tank such as barricades, railing underline its physical boundary with further division of activities from road and institutions around.



The shaded open space adjacent to the tank allow the extension of religious activities at daily and occasional levels thus giving an added dimension to the temple tank precinct.



The major node of temple tank on the intersection of two important axis of the town, connecting neighborhood to the old port and the surrounding region to the amala jetty. This is marked as major junction of the neighbourhood.



St. James Church is the major landmark of Agashe, located on the western boundary of the region. The larger open space around the structure facilitate the congregation of community during religious functions.



The Phadkewada listed as heritage building has been demolished recently on site, however the said road has similar distinct typology with front setbacks, low compound wall and rear large green footprint.



The Zilla Parishad School on th southern end of the area mark the concentration of educational activities with typical typology on building lined with verandah and outer courtyards.



The major market street and linear connection between the tank and amala jetty connecting node is also marked by the typical market street pattern. The no. of narrow plots are aligned to the linear street to allow maximum



participants to take part in socio-economical activities of the town. The road is also cater to the heavy movement of traffic connecting the amala jetty to Agashe and the region around.



Bhatibandar marks as the historical port connection of Agshe to Arnala fort, constitutes as the northern boundary of the town with creek and mangroves spread over the region.



The region constitutes of the distinct coastal eco system - i.e. of water hydrology network, mangroves and series of pond , ground water recharging wells.



The Christian community neighbourhood on the northern side of Agashe offers a different character to the region. The cluster of houses are surrounded by minor roads with one major connection to the religious-educational



Institutions and market street. The single/double storey houses face the outer and inner streets with low compound walls, semi open verandahs/balconies and major green footprint per plot giving a distinct character.



As the nearest inland town to the coastal town of Arnala the role of Agashe is significant in the kind of activities and movement pattern it promotes within. The movement pattern is punctuated by nodes which are marked by the public institutions and activities

01. Talav Precinct
02. St. James Church
03. Phadkewada
04. Zilla Parishad School
05. Market Street
06. Bhatibandar
07. Ecological corridor of Mangroves, creek, etc.
08. Christian Community Neighbourhood
09. Road to Arnala Village & Coast
10. Road to Vasai
11. Road to Virar Station

◀ Google Image of Agashe Precinct



ACTION AREA PLAN FOR AGASHI TALAO PRECINCT, VVSR

K. UNWALLA ARCHITECTS
Conservation & Planning

Agashi - Imageability

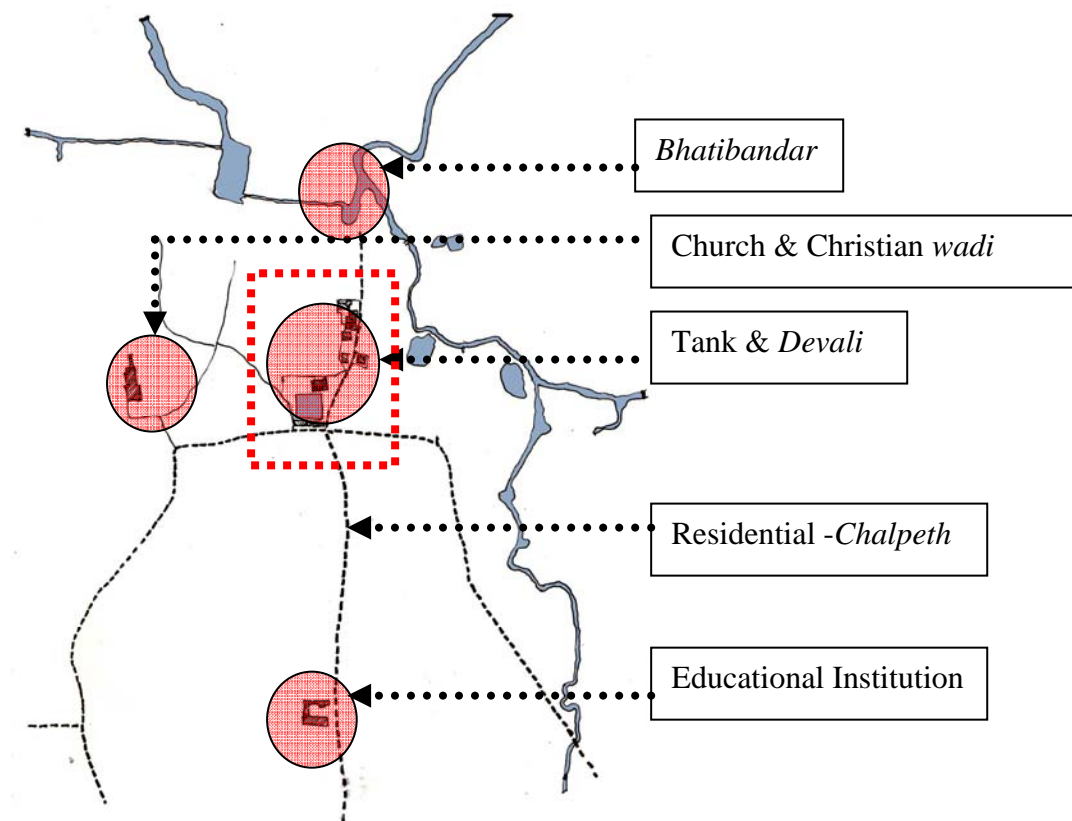


1.1.4 Urban Structure

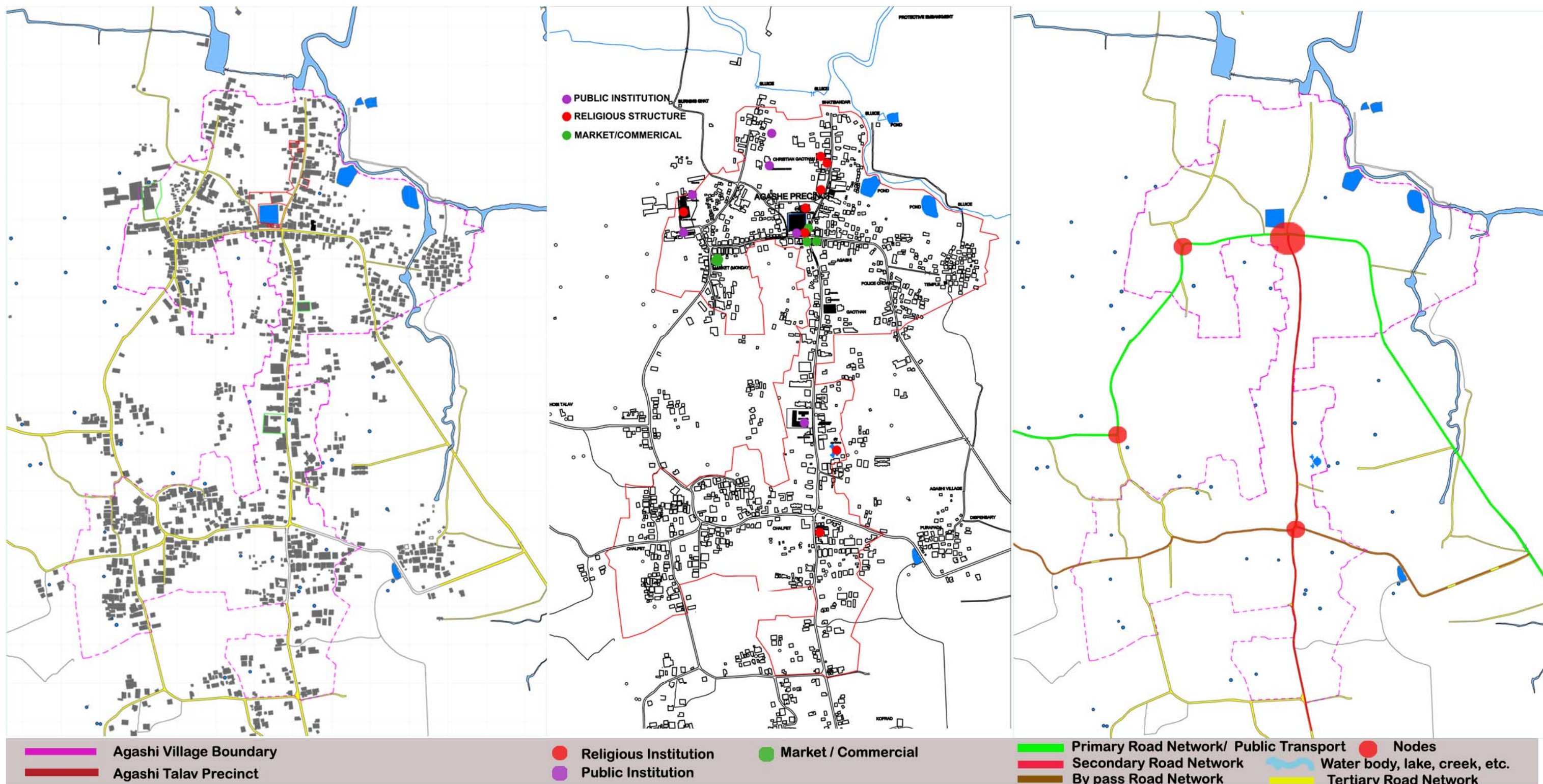
The urban form of Agashi responded to its socio-economical parameters. The market node is the hub of commercial activities with the then historical connection to the Bhatibandar for mercantile activities. The connectivity to other towns and villages promoted Agashi as a prime node on the linkage routes.

The political rule transformed the connection between Bhatibandar and market node as Devali [Maratha rule] and the western node were evolved with the church and the Christian wadi around. The linkage from the market node to the extreme southern end took the linear form of residential wadas and connected further to Vasai region.

The role of Agashi as a market town influenced its urban form and spaces. The linear as well as concentrated movement patterns became integral part of the urban spaces. Streets, nodes as public places, socio-religious buildings as congregation spaces [church ground/ temple tank] marked the urban form of the town



Map showing the urban structure of Agashi with linkages



BUILT FORM The east-west street with central node surrounded by temples, tank and another one with the church and the christian neighbourhood; forms the major market street. The linear growth of north-south direction connecting the historical bhatibandar with the extream southern Vasai region constitutes the residential street. The typology of houses along the street segregate the public domain from the private which offers the character of wadi.

INSTITUTIONAL STRUCTURE The overlap of religious socio-economical & public activities is premise for the generation of urban form in most of the indian cities and towns. The nodes and linear connections generate the typology to promote active user participation. The various religious communities form the cluster/wadis with markets as common factor within.

LINKAGES The water network system constitutes of the hydrology network and several ponds and wells. The temple tank is built to shape the water source in the middle of the town lined with religious institutions. The public transport corridor passes through the market street from the railway to the coast which is the primary road network. The secondary road network is accessed by the rikshaws thus giving the accessibility at the unit level.



The Agashe Precinct constitutes of the

- Temple tank & its immediate environ of landmarks religious-public institutions,
- series of temples - houses forming a street edge &
- physical setting as an urban form - a major node, an active street cum thoroughfare



Precinct edge

Temple tank

Precinct node- edge

Landmarks

Precinct edge

Tank

Node

Precinct edge

Plan of Agashe Precinct



The significant urban setting of precinct promotes mixed activities, multiple users participation & hierarchy of usage. The dynamism of the precinct lies in its inherent inter-relationships between its activities & the nature of built form - typologies.



ACTION AREA PLAN FOR AGASHI TALAO PRECINCT, VVSR

K. UNWALLA ARCHITECTS
Conservation & Planning

Agashe Precinct - An Urban Setting



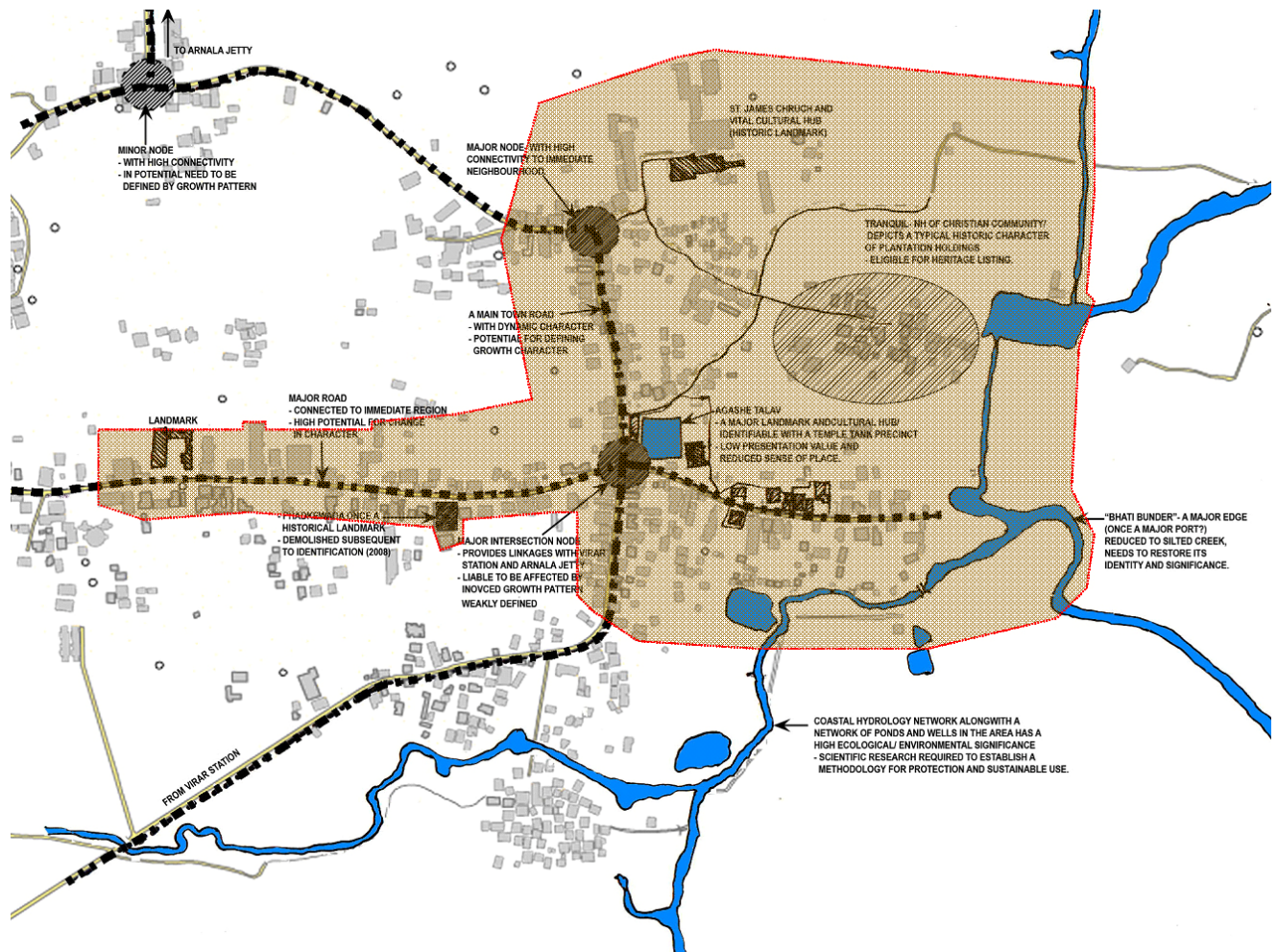
1.2 Agashi Talav Heritage Precinct- Urban Form & Space

1.2.1 Identification of conservation areas

The identified core area for conservation need to be larger to incorporate significant Based on streetscape along the 'Dev Ali' and 'Chalpeth Road', the setting of the Talav, and Historical 'Bhati Bunder' with its natural settings. Based on the review of the significance of these areas a revised core area is been demarcated to supplement the temple precinct core, such as-

- Core conservation area -CRIT
- Immediate setting

These areas are based on the identification of the potentials open space, green spaces, heritage structures, street character and cultural activities.

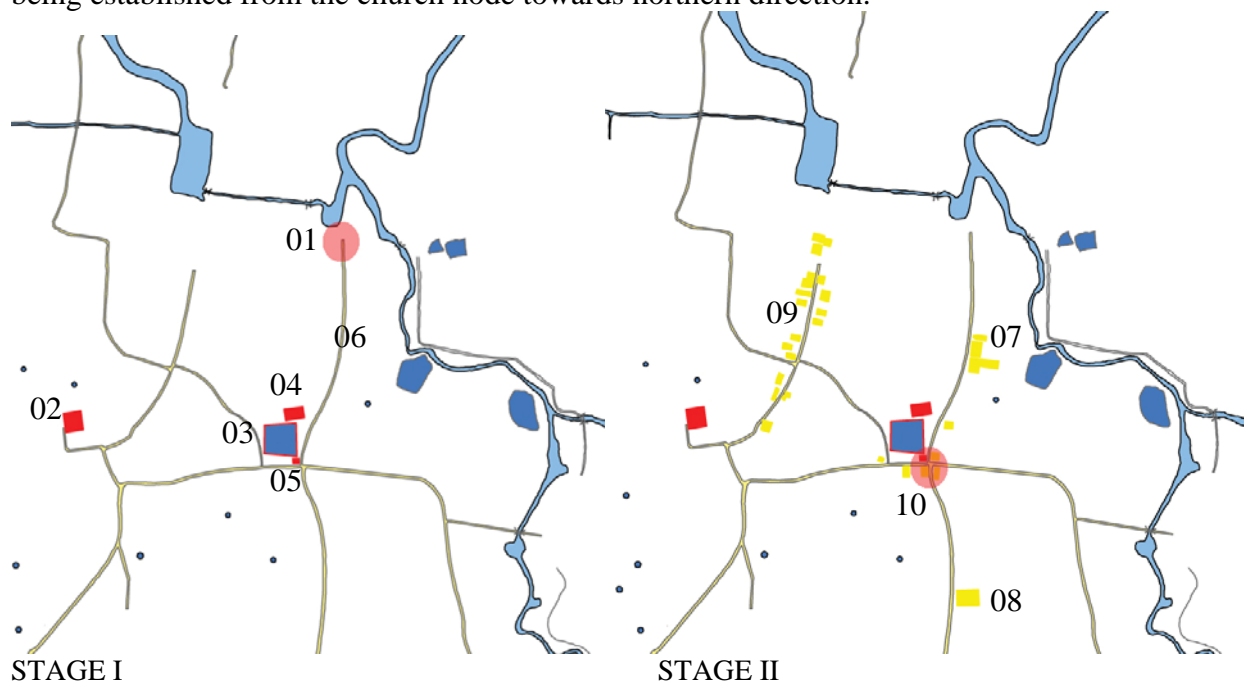


Map of Agashi indicating the immediate setting with respect to the Heritage Precinct Boundary

1.2.2 Evolution of Precinct

The evolution of Agashi precinct took place in several stages. The Bhavani Shankar Mandir, Hanuman Mandir along with the temple tank was evolved during period. The spatial relationship of tank with the Bhavani Shankar Mandir was function oriented with steps leading from the temple to the tank directly. The tank water was said to be blessed with healing powers, hence the value of being sacred was attached to it with the physical connection to the temple. The emergence of Bhatibandar as an active port strengthened the linkage with the tank through Devali Street and beyond chalpeth to the southern coast. The rise of Portuguese power saw the church Institution towards the western node of Agashi

During the Stage II, the Maratha Sardars controlled the power and built spacious wada typology while supporting the religious activities. The market street expanded on east-west direction increasing importance of Agashi naka as important node. The mercantile activities invited immigration of various bania and Jain communities across the states as well as the Brahmin money lenders. After the Maratha sardars, the said community expanded their activities through acquiring of land parcels and building spacious house types. Gadre and Phadke family established themselves in Agashi through their hold on political affairs as well on the land holdings. While the missionaries started spreading the religious message through the church, the Christian neighborhood [wadi] was being established from the church node towards northern direction.



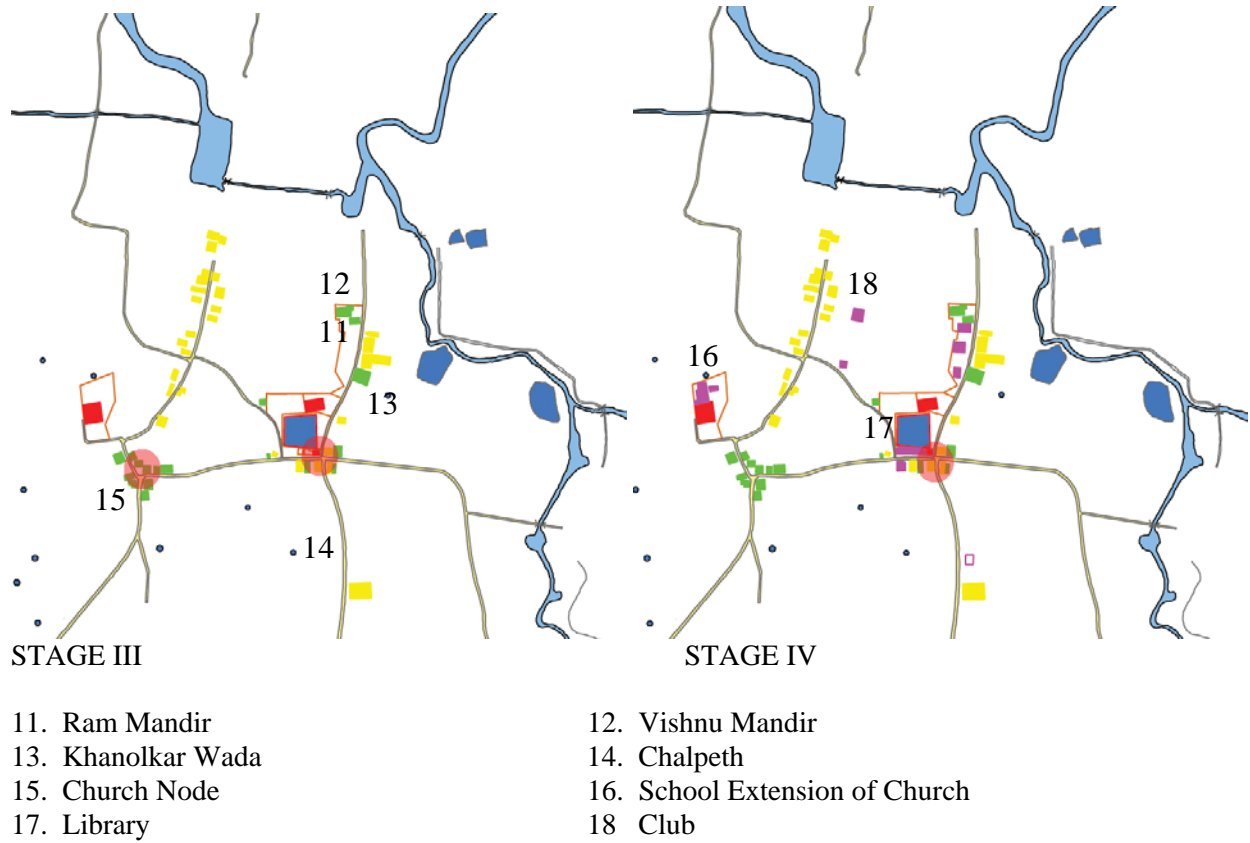
- | | |
|------------------------------|-----------------------------|
| 01 Bhatibandar | 02 Church |
| 03 Agashi Talav | 04 Bhavani Shankar Mandir |
| 05 Hanuman Mandir | 06 Devali |
| 07 Gadre Wada & surroundings | 08 Phadkewada |
| 09 Christian Wadi | 10. Agashi Naka /Old Market |

The Stage III underwent through rise in the religious power with the help of political support. Ram Mandir was founded by Gadre family and the Vishnu Mandir by private trust. Several shrines were being established along the streets and the nodes. The socio-religious aspects strengthened the community interrelations. The market street started expanding towards western side with increasing commerce activities at the church side node thus making a connection between the two.

The library was founded in the stage IV alongwith extension of educational institution to the church. The formal recreational activities was taken care by a club attached with the open space. This was the peculiar characteristics of colonial transformations. The market street had mix of institutional

character and that added dynamism to Agashi Precinct. The town growth was limited on eastern side due to the Bolinj creek.

Through the evolution period, the water networking system was restored and used for the community benefits. Several wells were contributing for the maintaining of water level in the tank. The Bhatibandar node lost its grandeur slowly shifting the centre towards the Agashi Naka comparatively concentrating the activities surrounding it.



1.2.3 Physical Condition Mapping

The significance of Agashi Heritage Talav Precinct lies in the system through which the regional landscape has evolved the symbiotic relationships with the urban built form. The regional coastal ecosystem, occupational activities, horticulture produce, percentage of figure ground vs. plantation; are the salient features shaping the character of the regional urban form.

Natural Environment- Physiography & Water Network

The Agashi Heritage Talav Precinct lies on almost flat land gently sloping towards nallahs running across the region.. The movement of sea water in high tide and low tide through the creek is controlled by the Mangroves belt on the northern side of Agashi. The no. of sluice gate controls the salinity of water for the agriculture & Plantation purpose. The series of ponds used at the community level is another peculiar characteristic of VVSR.

The tank

The tank has mineral source of water which was believed to possess healing powers. The tank also restores the rainwater and maintains the ground water table level in the adjoining wells of the surrounding area. The overflow channel of the tank was designed to feed the surplus water to the agriculture and plantation through the existing water network system.

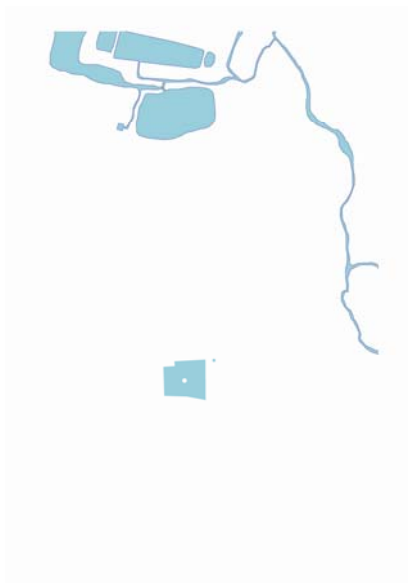
Vegetation Mapping

The available source of water and its even distribution system promotes agriculture along with the Horticulture activities. Ownership pattern and urban form aligned to the road allows large land parcels[act as neighborhood open spaces] available to be utilized for plantation purpose such as indigenous, fruit trees and local species. This helps to form the regional language of landscape. The micro climate of the region is maintained at the comfort level due to high tree cover which is also belongs to predominantly an evergreen series of species.

The indigenous trees promote sacred activities irrespective of its location and proximity to religious place. Individual plots abutting the streets allow the trees to be used as shading device for the public purpose-hence the negotiations between public and private.

The second layer of plantation promotes the place-making characteristics with flowery species. They are also used to indicate the soft boundary and sometimes to mark the domain of the user.

The northern boundary of Agashi is limited by the vast expanse of Mangroves which help to filter the salinity of water entering from sea side. This part also invites migratory birds at large extent and supports various creatures at the micro level.



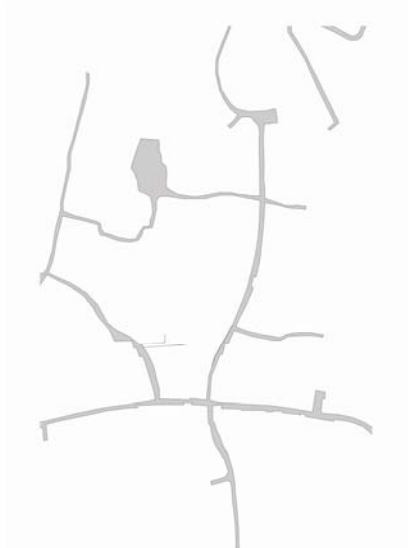
Water Network
Proximity to the creek
Tank used for water restoration



Vegetation Mapping
Mangroves towards North
Dense Plantation



Built Form
Along the X&Y axis
Defines Cluster boundary



Road Network
Hierarchical Network System
Informal pedestrian connections



Precinct Boundary
Centrally located
Linear & concentrated



Character Mapping
Place-making Quality
Imageability Character

Map No.04 – Immediate Setting of Agashi Precinct



LANDSCAPE URBANISM

The significance of Agashi Heritage Talav Precinct lies in the system through which the regional landscape has evolved the symbiotic relationships with the urban built form. The regional coastal ecosystem, occupational activities, horticulture produce, percentage of figure ground vs. plantation; are the salient features shaping the character of the regional urban form.

Salient Features of the Immediate Setting

Coastal Ecology Network of creek, hydrology lines, ponds, tank and ground water recharge wells

Temple tank promoting water restoration and centrally located public space

Dense Vegetation of Indigenous trees, fruit trees and local species

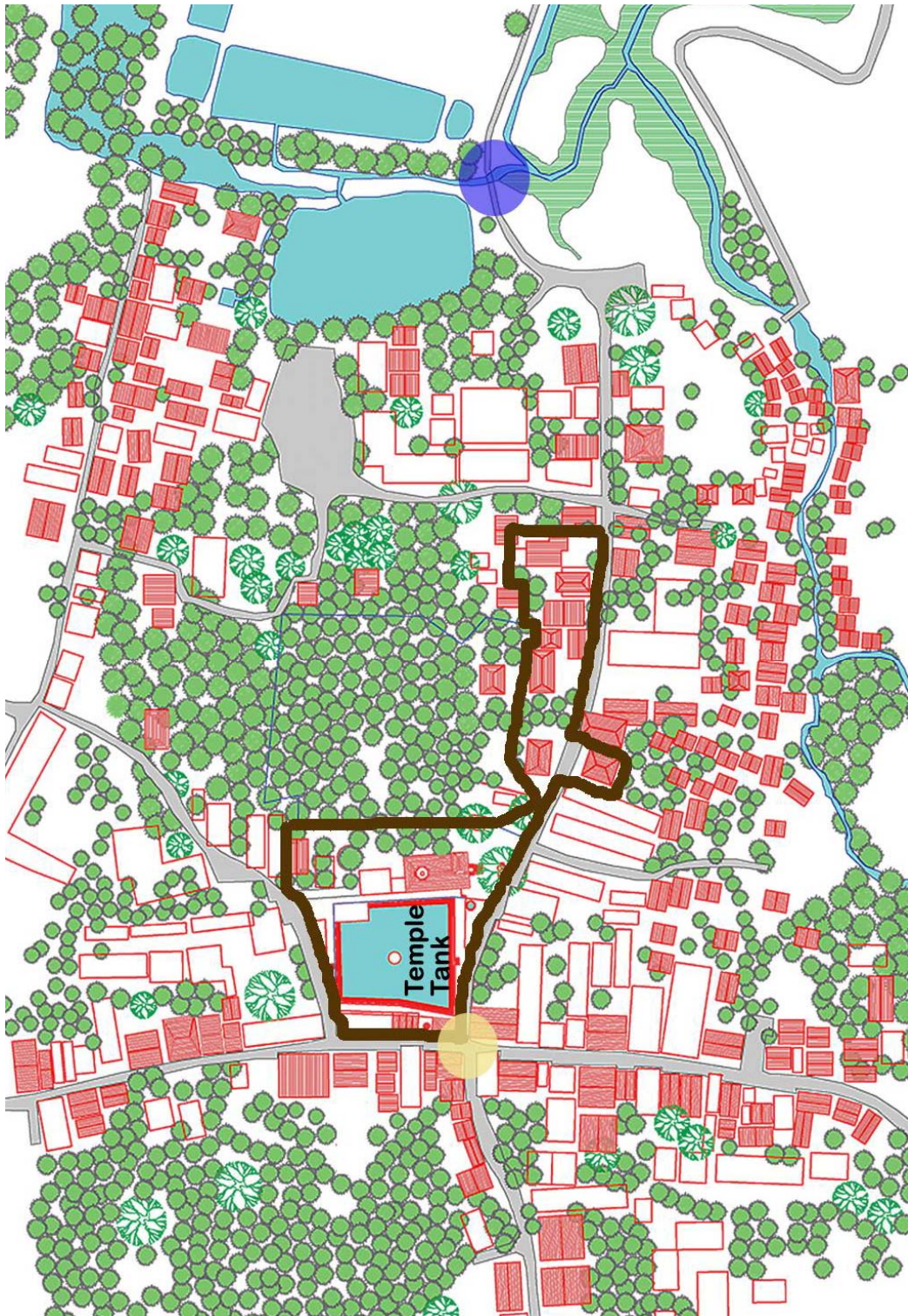
Mangroves on northern boundary regulates movement between sea and river water and invites migratory birds

Principle X & Y axis meeting at the important node marked by the heritage precinct. Street network defines the cluster boundary and promote typologies responding the same

The temple tank enclosed by the surrounding buildings is significant as a urban form & space in otherwise linear pattern of growth

- Agashi Talav Precinct
- Water Network
- Water Body
- Road Network
- Built Form
- Vegetation

Built Form Character



Character

Mapping of Agashi indicating the immediate setting with respect to the Heritage Precinct Boundary

1.2.4 Morphology of Agashi Precinct

Density & Urban Form

The nature of urban form in Agashi displays the similarities with the typical built form of a small town evolved in the medieval period. The high ratio between ground and built is evident with high proportion of land under plantation. The low density determines following salient features of urban form generation:

- Clustering of units bounded by streets
- Urban form abutting the major and minor streets.
- Evolution of Typology responding to the street character
- Skyline of the dense plantation which is the being grown on the rear side of the typologies.
- Maintaining the public edge to the plot
- Role played by the plot owner in being instrumental in planting the trees as shading device for the public domain
- Concentration of institutions as landmarks w.r.t. the main street or nodes to allow street as an active participant in the dynamisms of urban design
- Hierarchy of typologies from public to private use

Ownership pattern and land sub division

The role of Agashi as a market town has its implication in the way the land use is defined, orientation of land parcels and their ownership pattern. With streets playing the role of major spines of movement of people & economical activities, the easy access and frontage to the street is evident if public participation is taken as a prime factor in the traditional town planning principles.

In the market oriented towns, the streets become the medium of participation by people to engage in the economical activity [as linear form]. The plot extents abutting on the streets is defined by the no. of actors involved in the activity in relation to the no. of modules formed on the street elevation. Structures with single and multiple ownerships [either rented] are supported at times with supplementary function on upper floors. The narrow plots abutting on the street to allow large no. of stakeholders to take part in the activity and length of the plots is determined by the supplementary activities [storage, small scale industry, etc.] The common wall construction system dissolves the divisions between the plots and allows coherent street character to the users; which works efficiently for the market place.

The parcels of land, their ownership and sub division determines the nature of an urban form. The institutional land has the ownership under the trust [temple and church and private] which has proximity to the main streets and Landmark nodes. The large land holding with single ownership is the peculiar feature of the region. The subdivision of land is not only determined by the access to the road but also shows the trend for amalgamation of the same for future development. This has led to the change in the surrounding urban form with setbacks and high rise features.

The parcels of the land in the residential fabric are largely supported by the movement of water, specifically in the case of Agashi. A region rich with resources as water, flora and fauna, the settlements responds to the land management in a sustainable manner which is the regionally crafted landscape. Agashi residential fabric is defined by the parcels of land abutting to the road by the house typology situated on the narrow plot of the land. The backside of the house is used as horticulture activities or agriculture purpose. Over the generations the land got divided, thus forming an organic land division pattern, which is further accentuated by the access to water and road. The land ownership pattern contributes to the significant character of Agashi with roof line on the backdrop of heavy plantations.

The another important factor is the mechanisms used for plot demarcation- which is either through a low compound wall with decorative features or railing or soft hedge of plants or just a level difference. These tools determine the spontaneous interaction between users and urban form and space which is present in Agashi precinct

The stakeholders in Agashi are the grampanchayat, the trust [religious institutions] and individual land owners. The landholding size is the predominant factor as few individual people may hold the large parcels of land thus being the influential stakeholders for the development of the town.

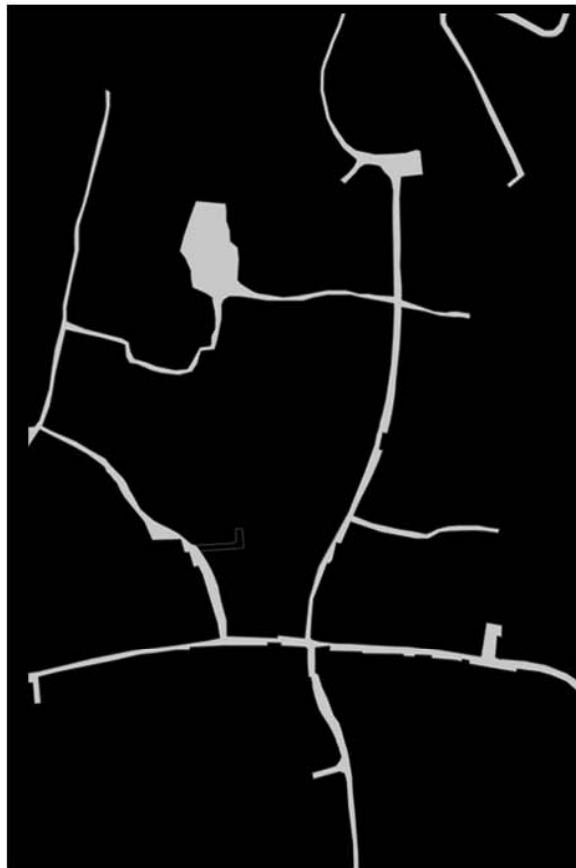
.The temples, namely Bhavani Shankar, Hanuman and Vishnu Mandir are under one single trust, namely the Deosthan Nidhi Mandal Agashi. Excepting the obvious religious structures, the land owned by the Trust also contains the Library building and a commercial block. The Ram Mandir and Khanolkar wada are privately owned by the Gadre and Khanolkar families respectively.

Street pattern and Clustering Principles

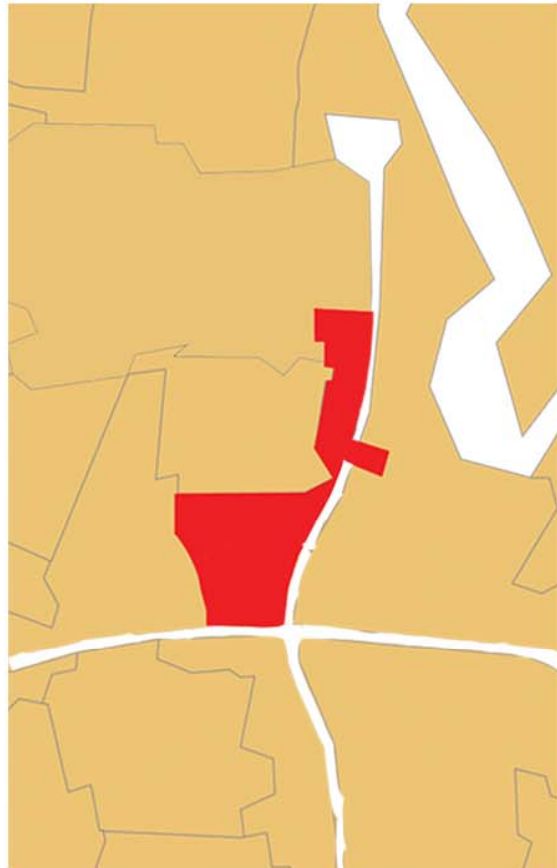
The east –west axis of the town is marked by the busy market street punctuated by two nodes. One node on the north –south axis is emphasized by the religious institutions of the temples, temple tank which is further connected to the Bhatibandar by Devali road. The western edge is defined by the node of St. James Church with residential fabric running from the church to the northern direction. Between these two different neighborhoods and their institutions are the winding narrow lanes lined by the residential houses dotted with orchards of heavy plantations. The north-south street caters to residential and religious activities.

The eastern side was once restricted by then Bolinj creek which has been taken over by the development pressure and the connection is developed from Agashi node to the Virar Station. The public transport adapts the same route to connect coast to the station which promotes Agashi as an active node. The second layer of streets caters to the residential clusters and the pedestrian paths occur at various places to limit access to only human scales.

The street pattern defines the clusters and its functioning along with its socio-religious economical aspects.



The Street Pattern



Plot Subdivision



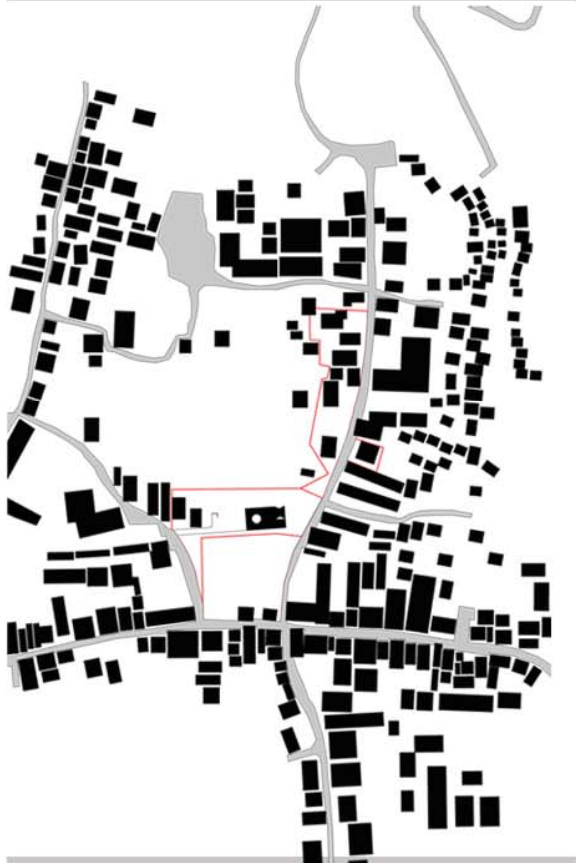
Built Open Ratio



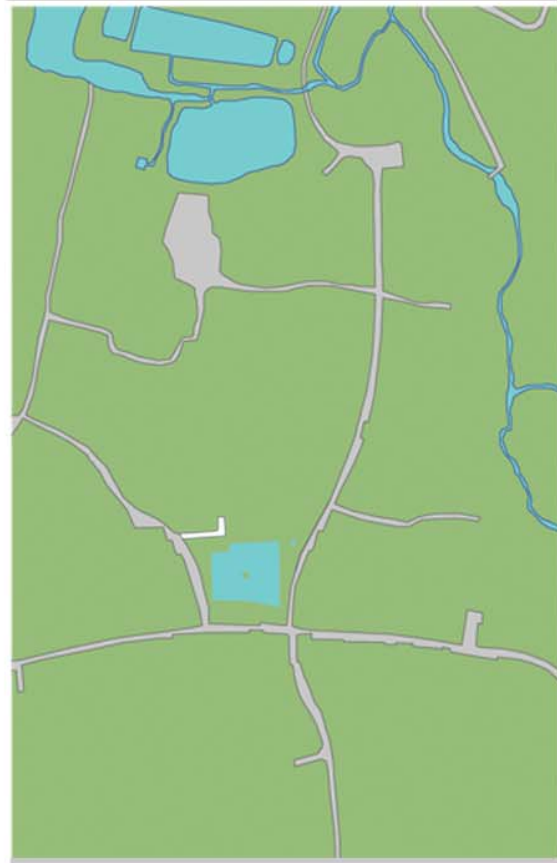
Ground Coverage



Core Demarcation



Urban Form w.r.t.Streets



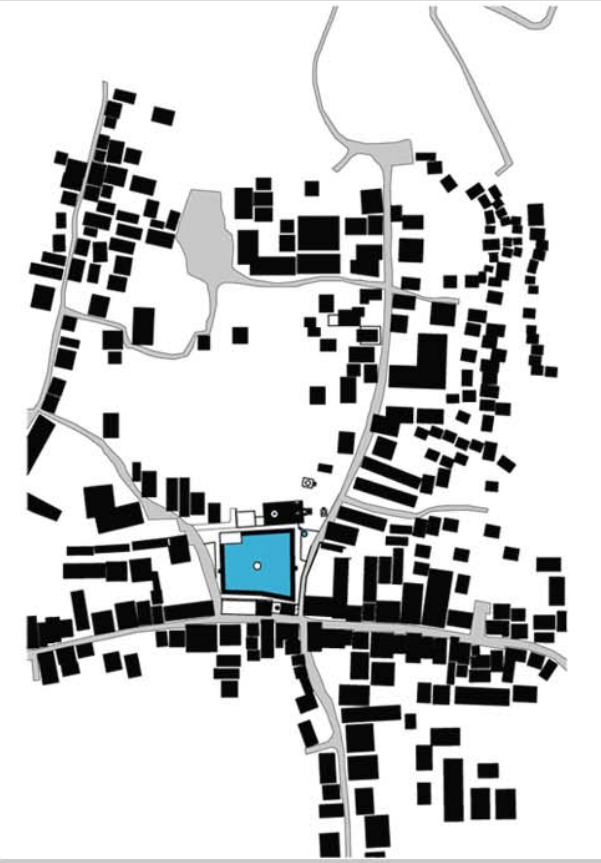
Cluster Formation



Access to Physical Features



Trees, tank as activity generator



Talav as Central Public Place

Landmarks, nodes and Institutional Character

The nodes of Agashi are marked by the religious institutions. Agashi Naka is the major node with overlapping activities or market-street, temple, temple tank, library and bus stop. Being a connection between the coast and the railway station, the node is used as the market place for the distant neighborhoods too.

Urban edge & Activity Mapping

The public and private edge is defined with the help of typological expressions. The edge of the urban block is hierarchical in manner with the most public edge on the east-west axis. The market street is busy with activities promoted by shops, library, commercial offices and the movement corridor passing thus extreme public in nature. The formality of functions is indicative the typology on the edge of the market has evolved with no setbacks, projected balconies for pedestrian shade with common wall concept with 2 storey and balcony projection on the upper floor. The market edge contributes in separating the private or semi-private from public spaces thus allowing filtration of activities from various domains. The temple tank is separated from the market street with the buildings of religious, commercial and institutional nature.

The streets emerging from market street to the northern side [Hindu & Christian communities] have been marked with the respective nodes of the church and Talav with temple, thus giving rise to second hierarchy of public spaces appropriate for its function [visit & congregation]. The church has the setback of the open ground used as social gathering space and Bhavani Shankar temple has the proximity of the temple tank with steps leading to the water as a central feature.

The church is attached to the educational institution and the residential fabric further down the road to the northern side. Bhavani Shankar temple is further attached by the several series of temples along the Devali road with residential fabric around and further terminated into a bhatibandar end.

The common factor between these two clusters is the winding internal road linkages and the hydrological network of water movement supporting the vast expanse of the orchards and water collection systems.

The secondary street maintains the public edge through the semi-open spaces as verandahs, balconies, low compound wall, high plinth, -tools used to promote interaction with street users.

Various typologies are used to differentiate the boundaries such as-

- Building of ground, ground+1 storey abutting the street [market building, library, Hanuman Mandir]
- Building with front set-backs and compound wall with pillared gate [church, Bhavani Shankar Mandir]
- Buildings with ground / G+1 floors separated by compound wall and setback [Khanolkar Wada, Ram Mandir]
- Open space separated by footpath or barricade [Agashi Talav, garden,etc.]
- Tree Plantation, level differentiation as segregation of activities [Agashi Talav]

The nature of urban edge promotes different kind of activities at macro and micro level. E.g. the Agashi Talav forms the public edge to the surrounding villages and towns for the religious and recreational activities whereas at the neighborhood level the scales of participation differ time to time. On day to day level, the temple and its front set back accommodates the secondary activities of the temple such as kirtan, bhajan, etc. The children's park is occupied throughout the day. The steps of the Talav are actively used in the evening. Depending on the activity pattern and the group of users, the edge component undergoes constant transformation.

1.2.5 Architectural Style, Artifacts

Most of the extant structures dating back to the Maratha period (late 18th - early 19th century) largely are of two typologies, residential and religious. Agashi village used to contain many “wadas” built during the time of the Peshwas. These two storied structures followed the typical plan of a central courtyard with rooms on all four sides. Hipped roofs, with decorative eaves projection, covered these rooms while the courtyard was open to sky. Rectangular windows that extended till the floor level were incorporated on the external facades. This was typical of Maratha architectures, especially in the western Maharashtra area of the Deccan region.

1.2.6 Stakeholder's Identification

Stakeholders need to be considered in achieving project goals and their participation and support are crucial to its success. Identification of all stakeholders is thus an important activity of the project. In the case of this Agashi Talav project, the stakeholders will include all individuals, groups and institutions who -

- Are impacted by project (positively or negatively) – Primary Stakeholders
- Facilitate the project implementation - Secondary Stakeholders
- Influence the decision making process – Primary or Secondary stakeholders

The stakeholders types who have been identified, are listed below-

Primary Stakeholder

1. Individual property/building owners
2. Tenants of property/buildings
3. Trusts of religious institutions
4. Visitors to the temples and precinct area
5. Builders and Developers

The revised boundary of the Agashi Talav Heritage Precinct lists following historically important buildings. The CRIT report has also identified the following cultural assets in the heritage precinct.

1. Hanuman Mandir
2. Sarvajanik Vachanalay (Library Building)
3. Bhavani Shankar Mandir
4. Ram Mandir
5. Vishnu & Ganesh Mandir
6. Khanolkar wada
7. Agashi Talav

Table showing listing of buildings and their classifications

Sr. No.	Building Name and Location	Building/Asset Type	Owner-ship	Description
01	Hanuman Mandir	Religious	Trust	The temple is managed by the Devasthan Mandal Trust.
02	Sarvajanik Vachanalay (Library Building)	Institutional	Trust	The temple is managed by the Devasthan Mandal Trust.
03	Bhavani Shankar Mandir	Religious	Trust	The temple is managed by the Devasthan Mandal Trust.
04	Ram Mandir	Religious	Private	The temple is managed by the Devasthan Mandal Trust. As per the DP this is marked as Residential in the urbanisable zone
05	Vishnu & Ganesh Mandir	Religious	Trust	It is managed privately. As per the DP this is marked as Residential in the urbanisable zone
06	Khanolkar Wada	Residential	Private	Private Ownership of the Khanolkar family. Used as guest house of the Peshwas in the historical past
07	Agashi Talav	Socio-religious	Trust	The Agashi Tank is managed by the Devasthan Mandal Trust

1.2.7 Documentation of Core Heritage Precinct

The chapter lists the detailed documentation of the core with respect to its site plan, site elevations, site sections and perspective views. The individual buildings have been studied with respect to its plans, elevations and section in detail. The photographic documentation of the precinct covers the visual images of the area.

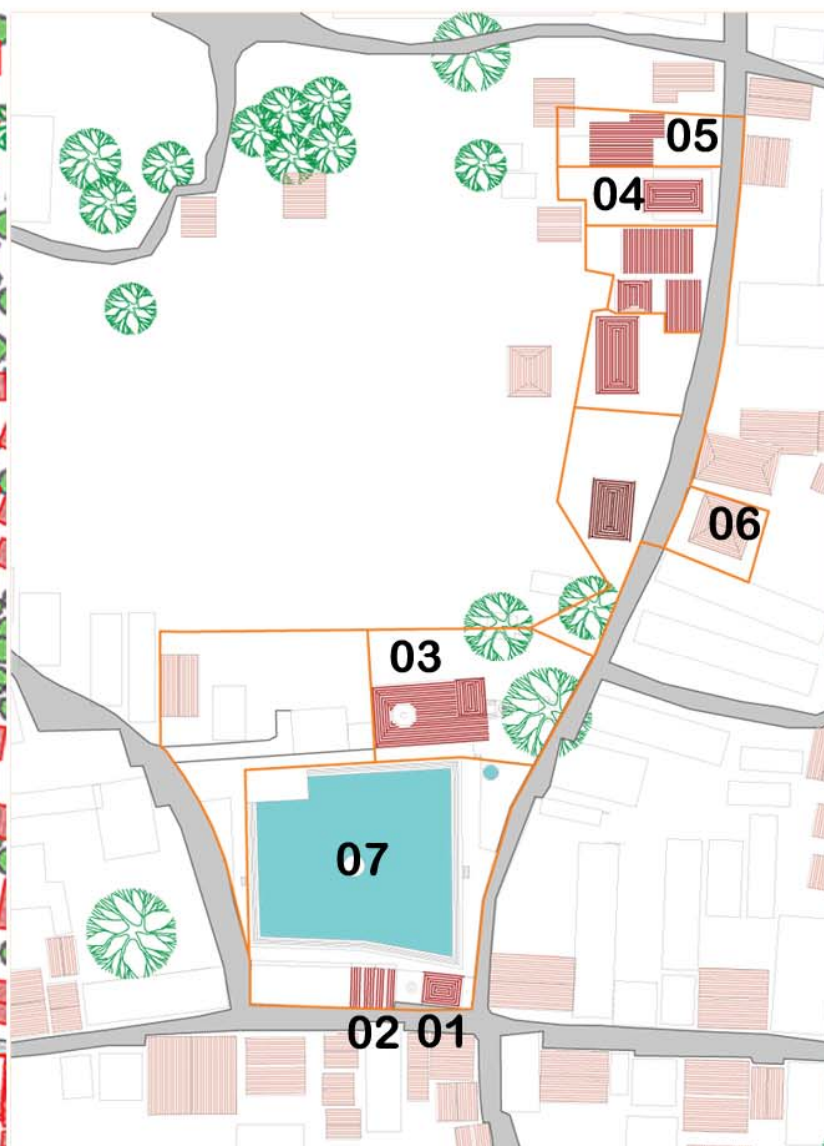
Map No.6 – Stakeholders Diagram
Map No.07 – Site plan Of Identified core precinct
Map No.08 – Site sections and site elevations

Documentation of individual Structures

Map No.09 – Bhavani Shankar Mandir
Map No.10– Agashi Talav(Tank)
Map No.11– Library and Hanuman Mandir
Map No.12– Ram Mandir
Map No.13– Vishnumandir Mandir
Map No.14– Photographic Documentation of Precinct



Temple Precinct Boundary



Stakeholders Identification
&
Ownership Pattern

The revised boundary of the Agashi Talav Heritage Precinct lists following historically important buildings. The CRIT report has also identified the following cultural assets in the heritage precinct.

1. Hanuman Mandir
2. Sarvajani Vachanalay (Library Building)
3. Bhavanishankar Mandir
4. Ram Mandir
5. Vishnu & Ganesh Mandir
6. Khanolkarwada
7. Agashi Talav



01



02



03



07



06

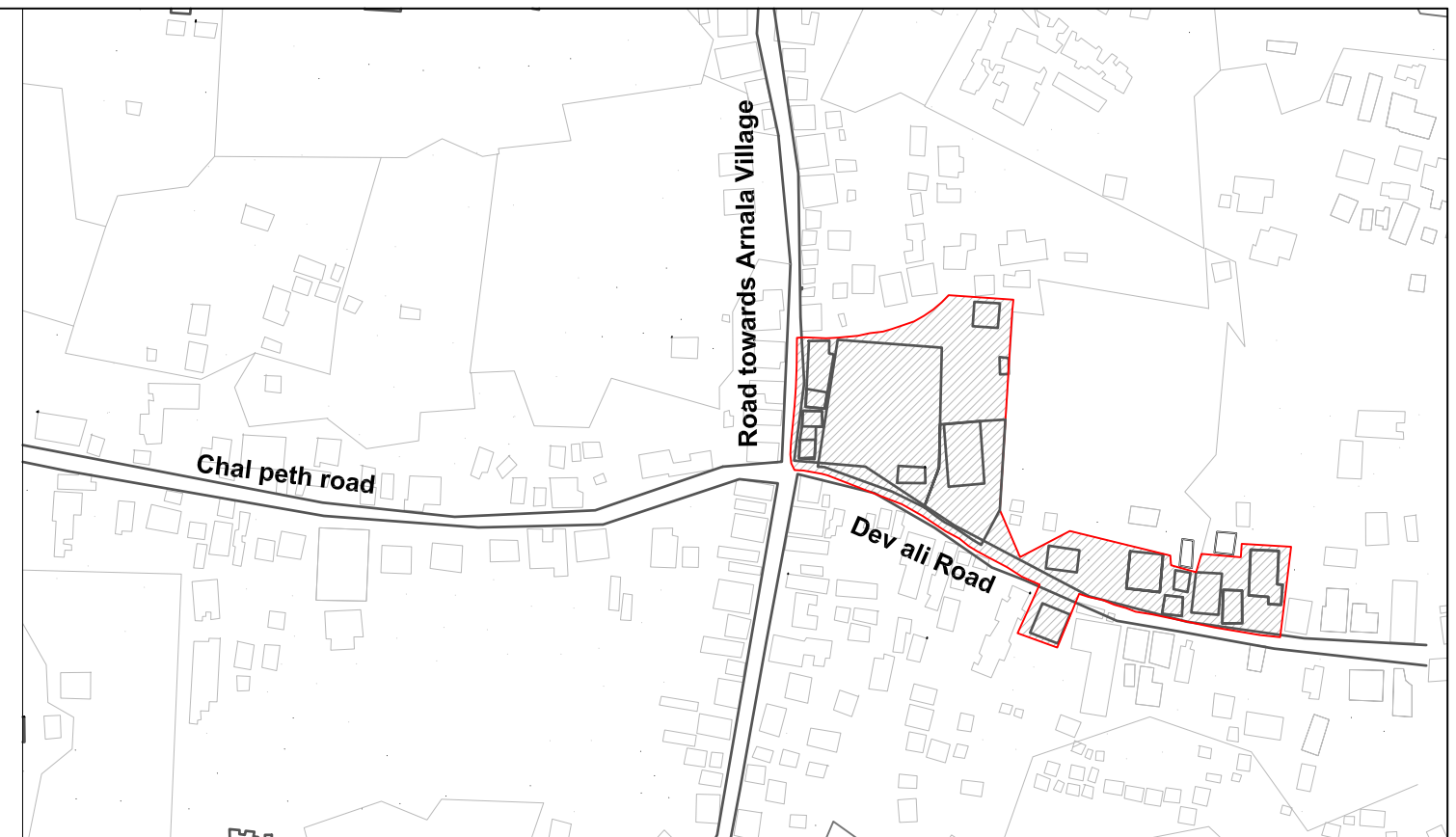


05



04

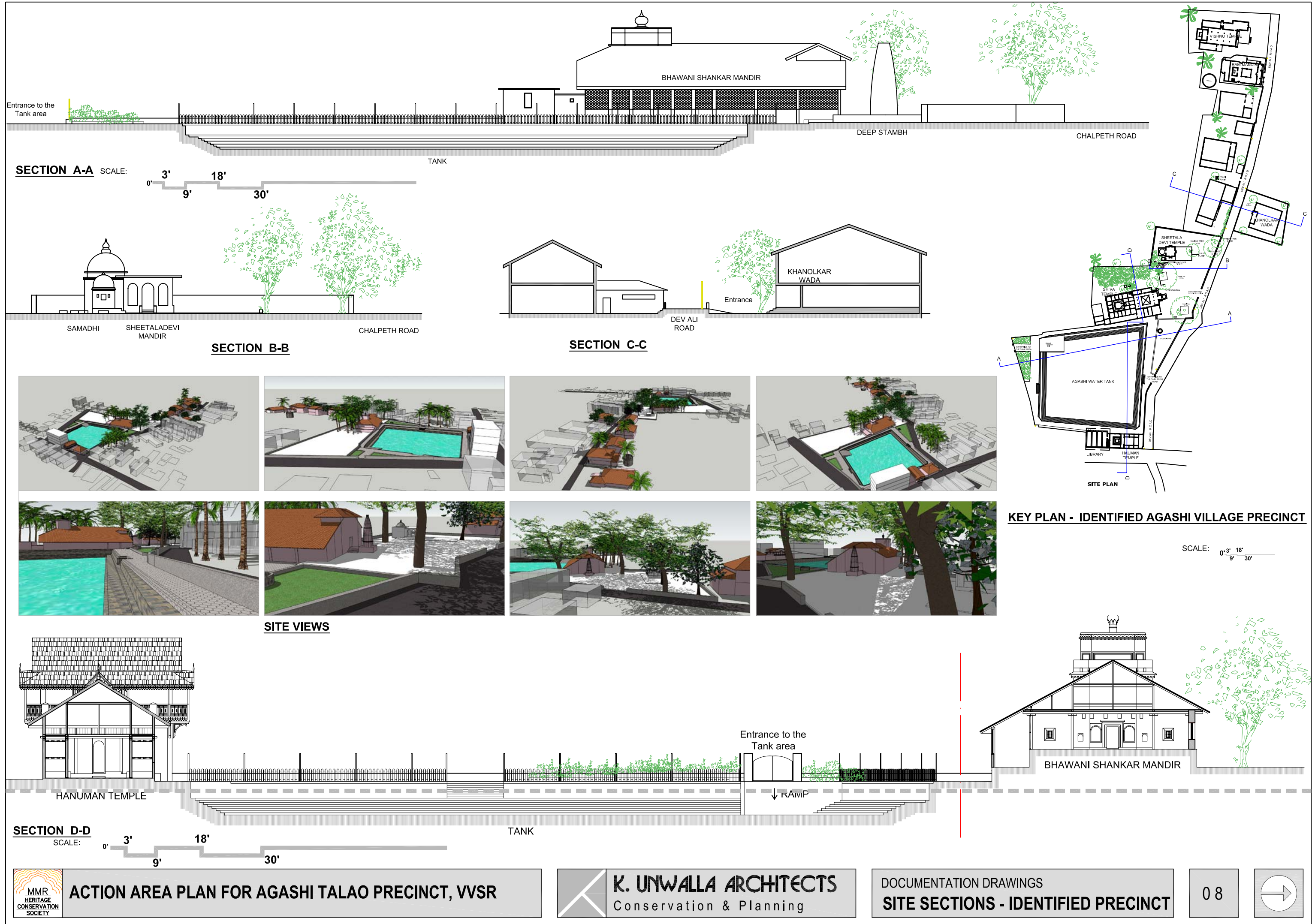


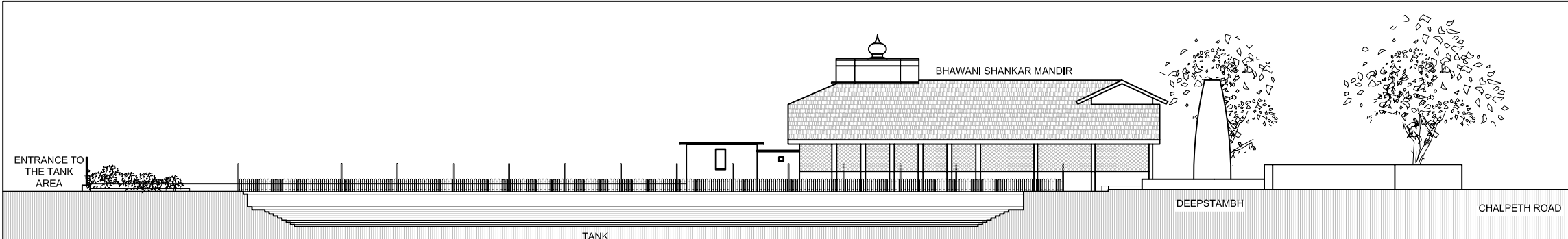


LOCATION PLAN OF IDENTIFIED AGASHI VILLAGE PRECINCT

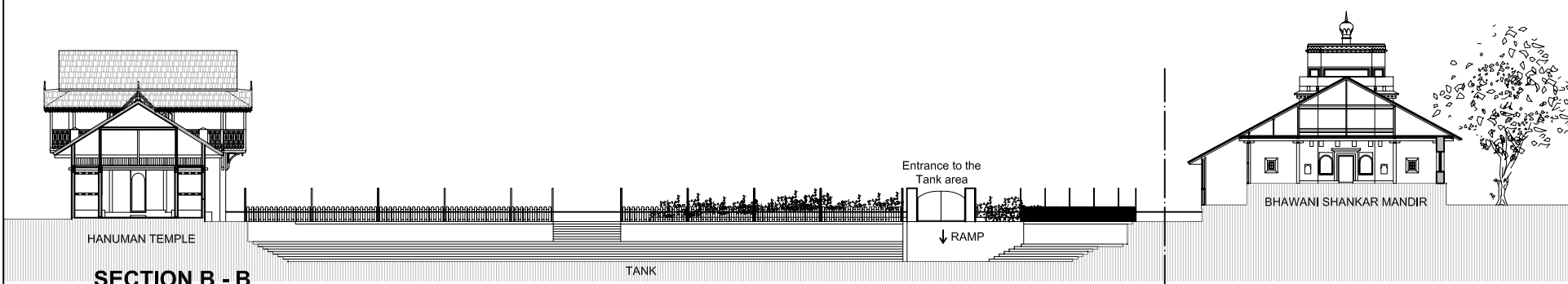
PLAN OF IDENTIFIED PRECINCT

SCALE: 0' 3' 18' 30' 9'

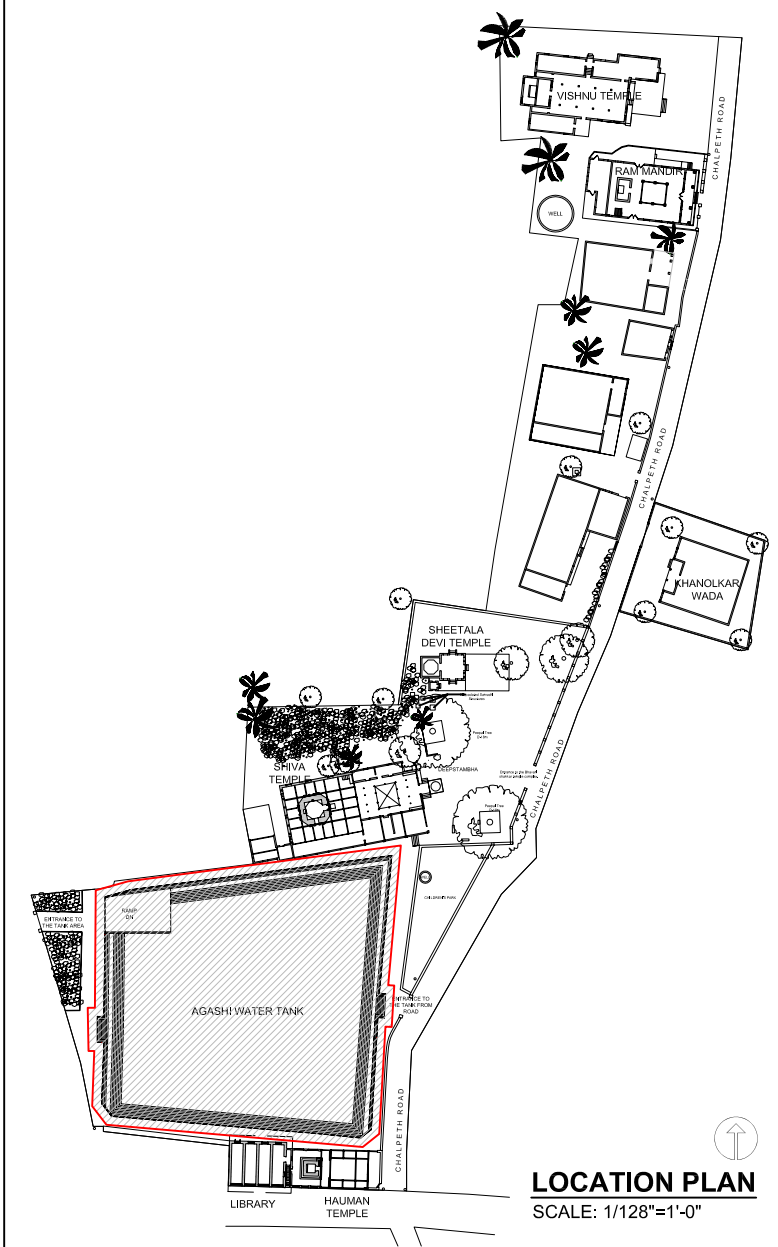




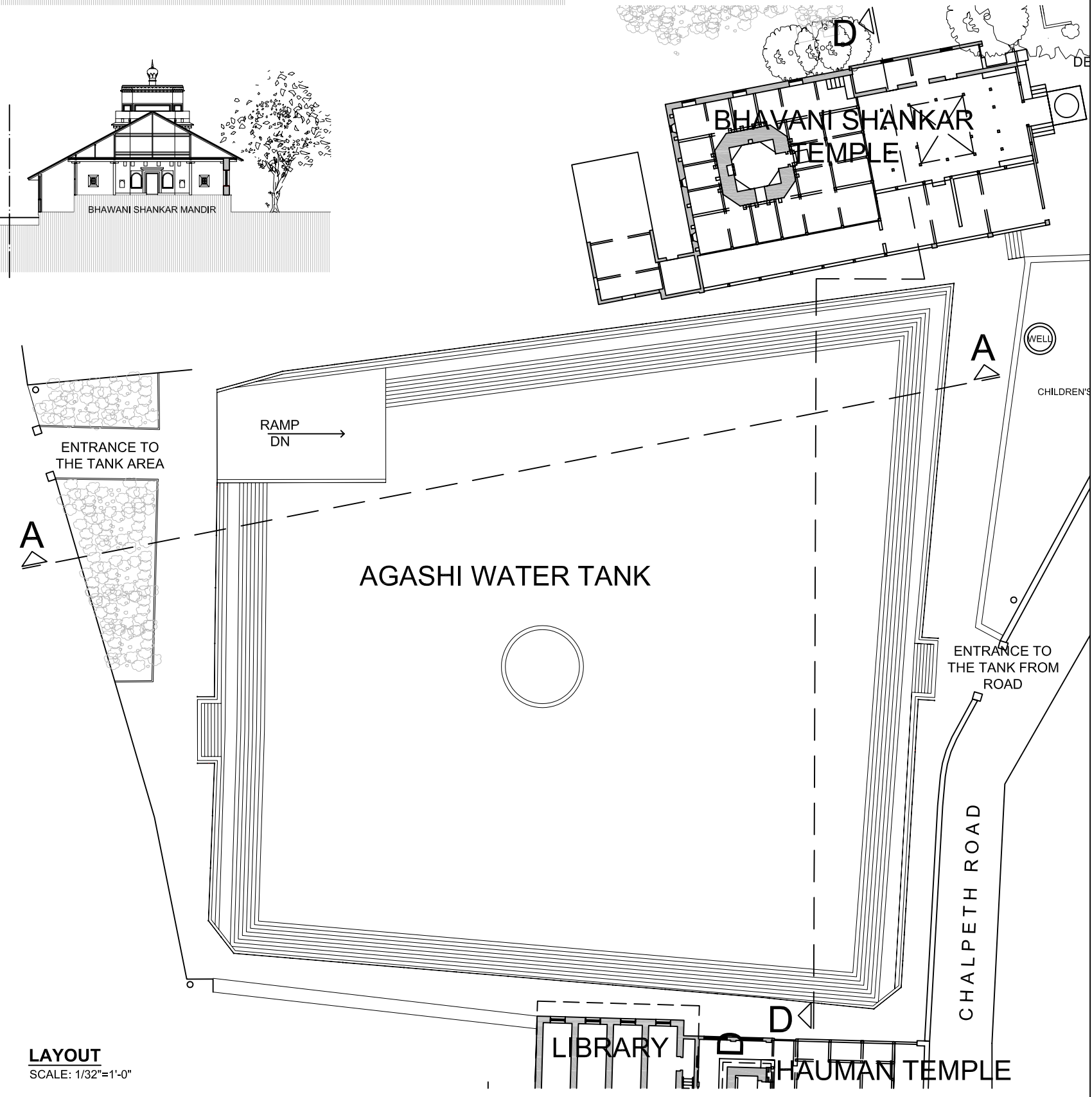
SECTION A - A
SCALE: 1/32"=1'-0"



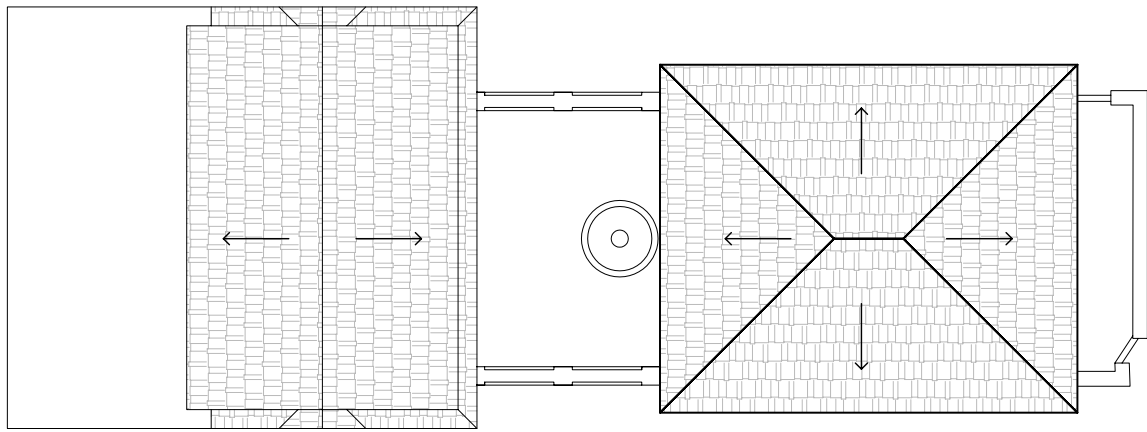
SECTION B - B
SCALE: 1/32"=1'-0"



LOCATION PLAN
SCALE: 1/128"=1'-0"



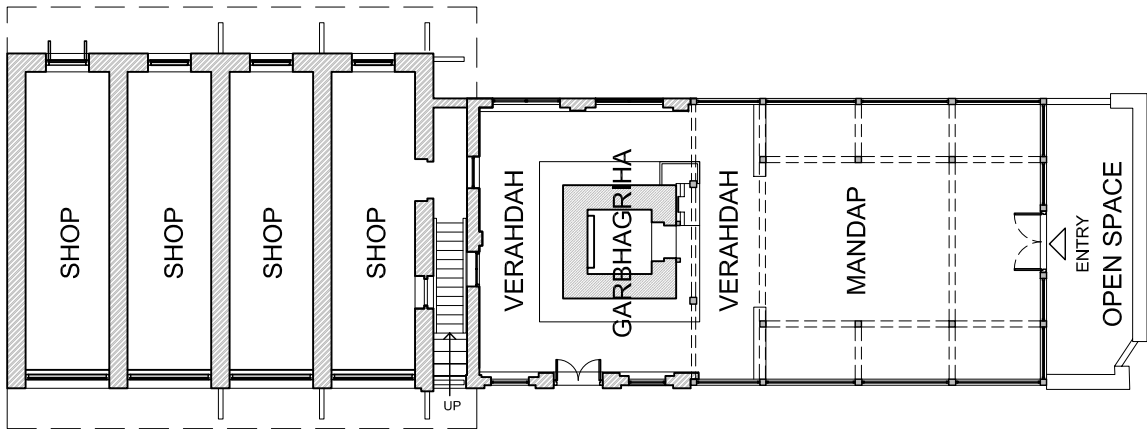
LAYOUT
SCALE: 1/32"=1'-0"



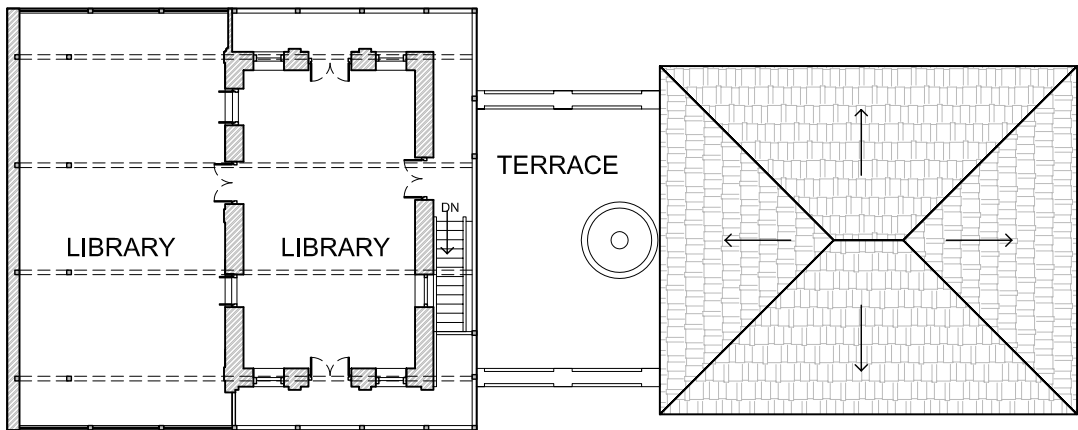
LIBRARY

HANUMAN MANDIR

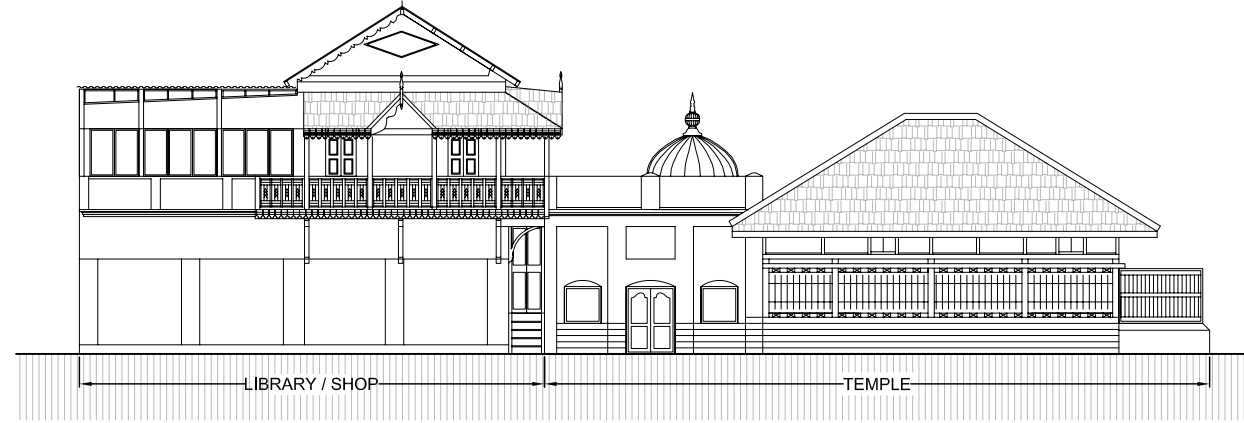
ROOF PLAN
SCALE: 1/16"=1'-0"



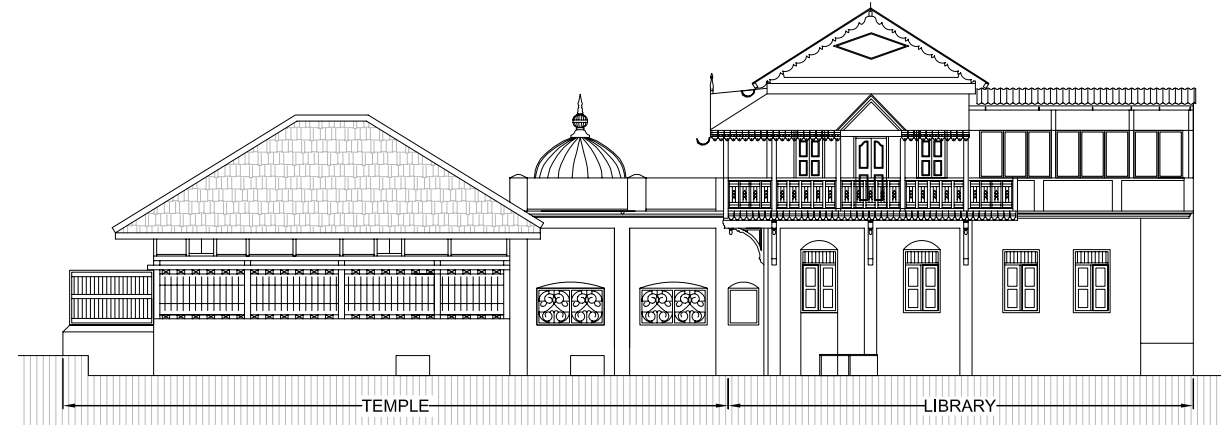
GROUND PLAN
SCALE: 1/16"=1'-0"



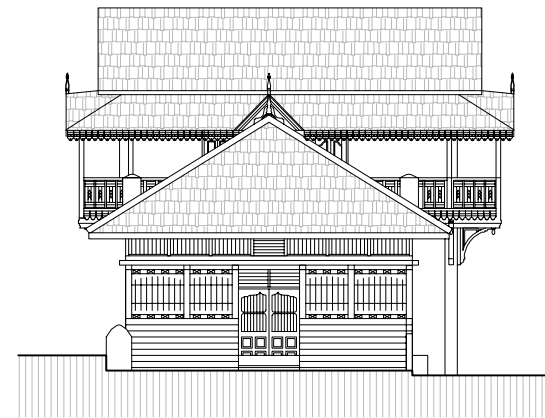
FIRST FLOOR PLAN
SCALE: 1/16"=1'-0"



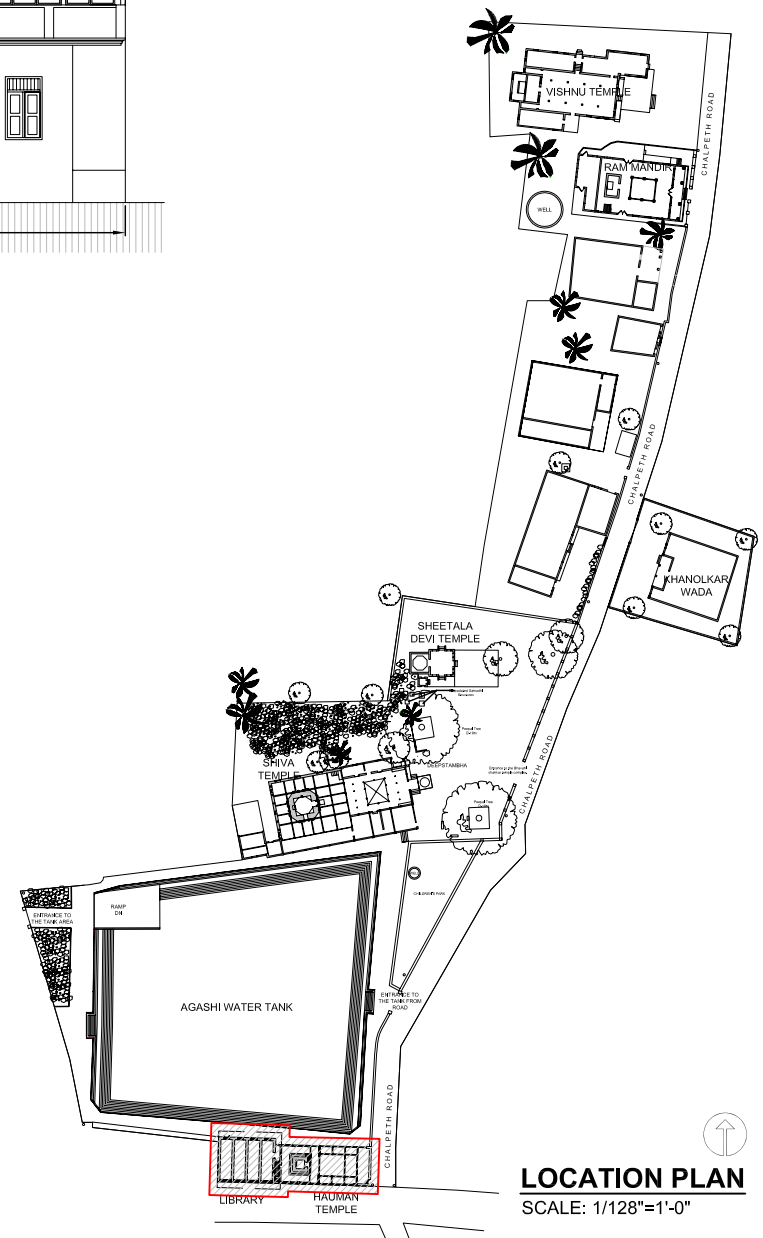
ELEVATION ALONG ARNALA ROAD
SCALE: 1/16"=1'-0"



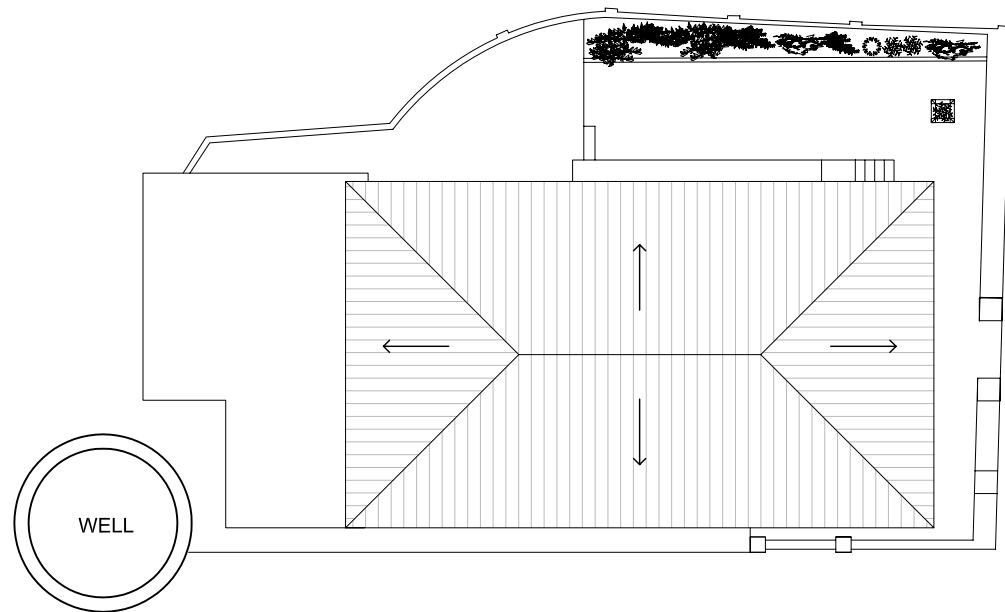
ELEVATION ALONG AGASHI TANK
SCALE: 1/16"=1'-0"



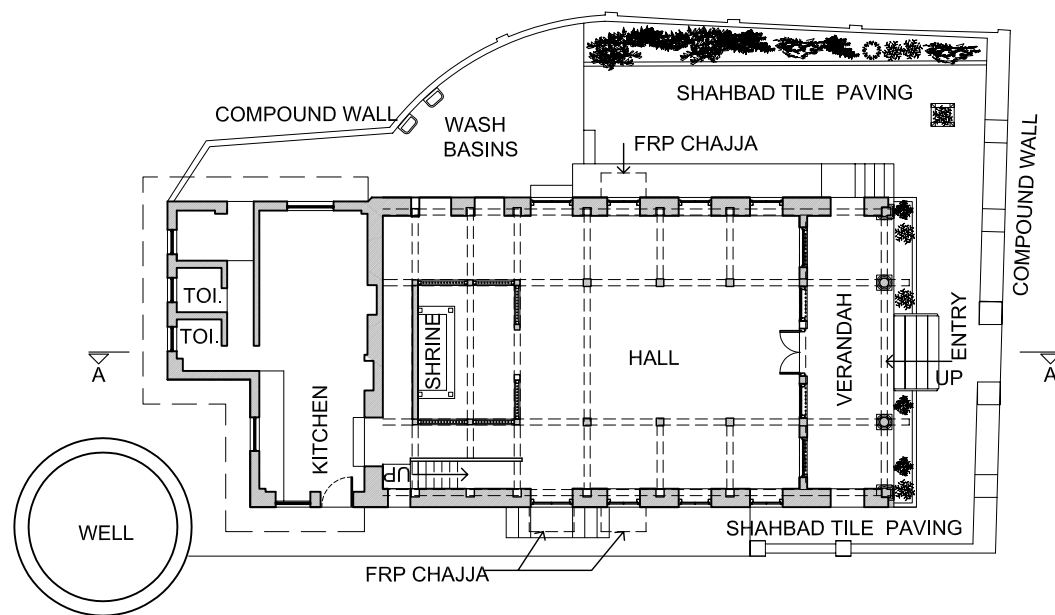
FRONT ELEVATION
SCALE: 1/16"=1'-0"



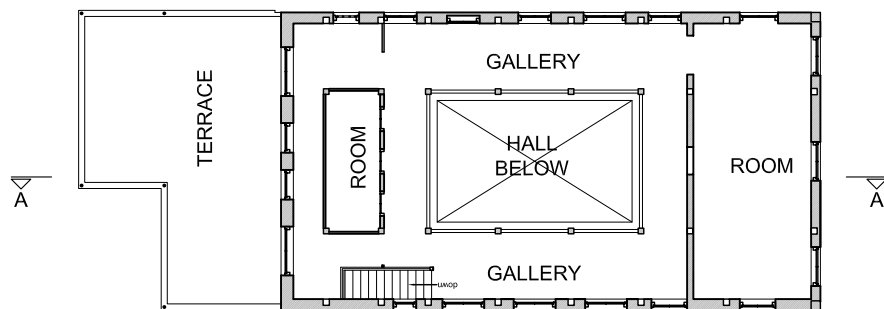
LOCATION PLAN
SCALE: 1/128"=1'-0"



ROOF PLAN
SCALE: 1/16"=1'-0"



GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"



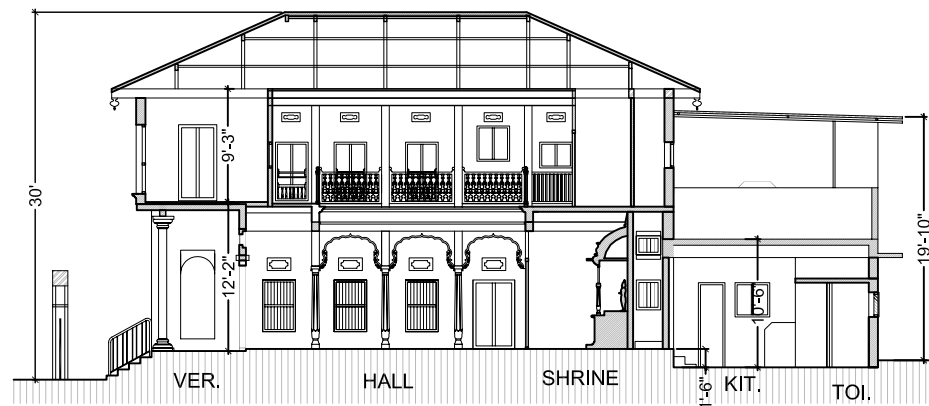
FIRST FLOOR PLAN
SCALE: 1/16"=1'-0"



NORTH SIDE ELEVATION
SCALE: 1/16"=1'-0"



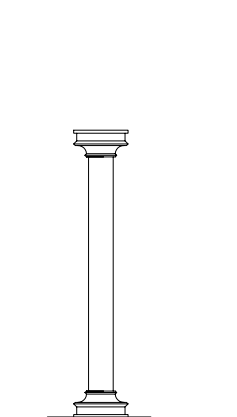
SOUTH SIDE ELEVATION
SCALE: 1/16"=1'-0"



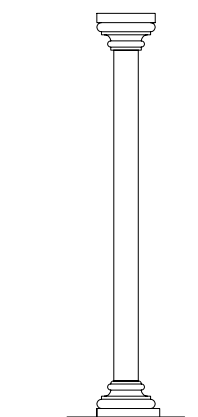
SECTION A - A
SCALE: 1/16"=1'-0"



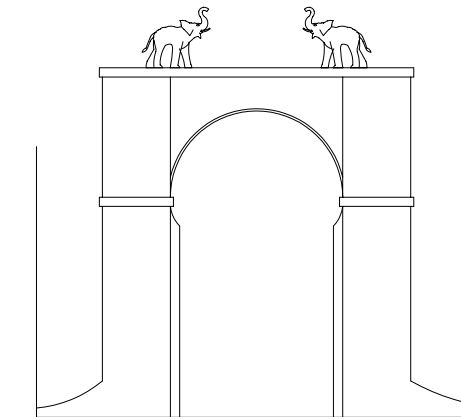
ROAD SIDE ELEVATION
SCALE: 1/16"=1'-0"



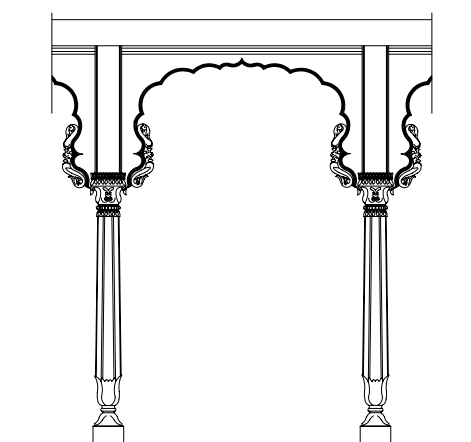
COLUMN ON UPPER FLOOR EXTERNAL FACADE
SCALE: 1/8"=1'-0"



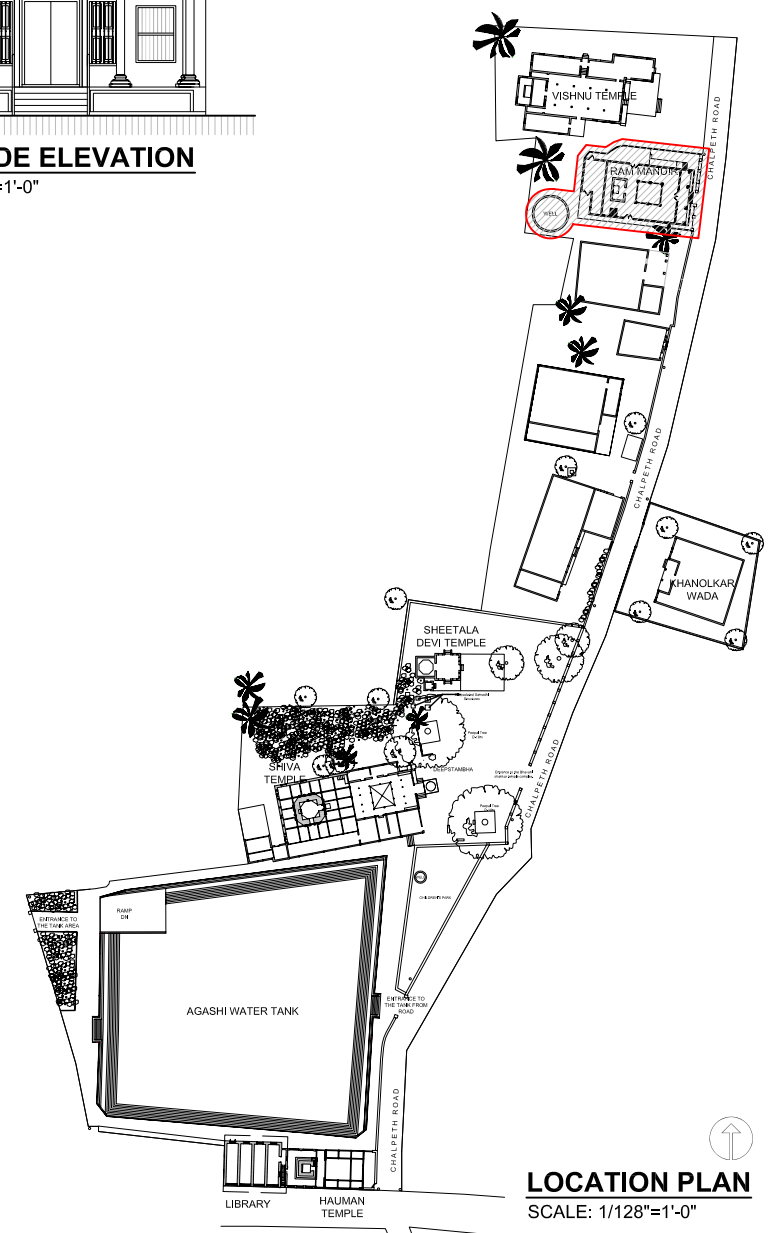
COLUMN IN THE GROUND FLOOR
SCALE: 1/8"=1'-0"



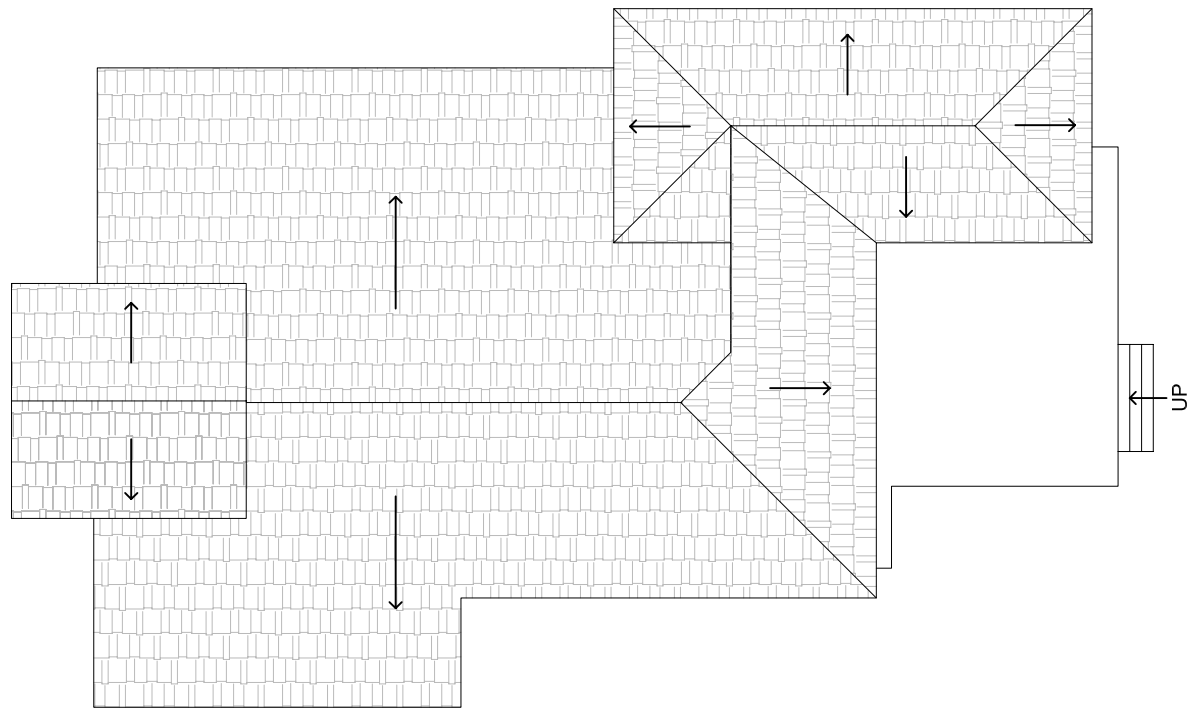
DETAIL: ELEVATION OF ENTRANCE GATE
SCALE: 1/16"=1'-0"



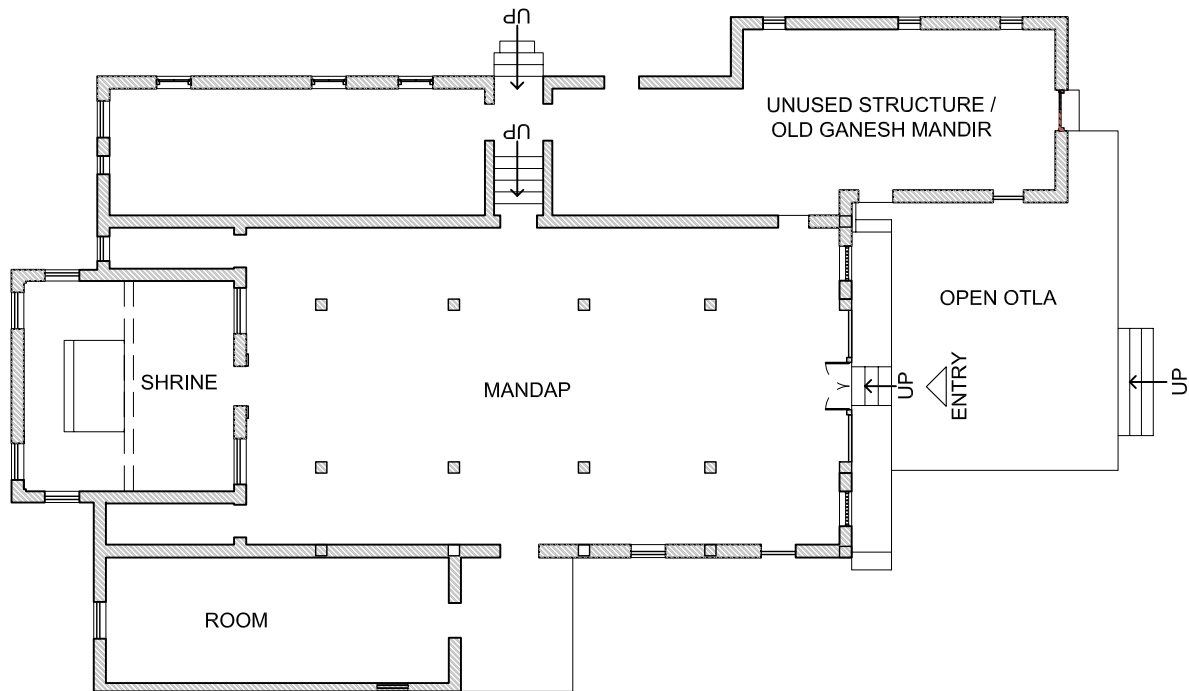
TYPICAL COLUMN AND ARCH DETAIL IN GROUND FLOOR
SCALE: 1/16"=1'-0"



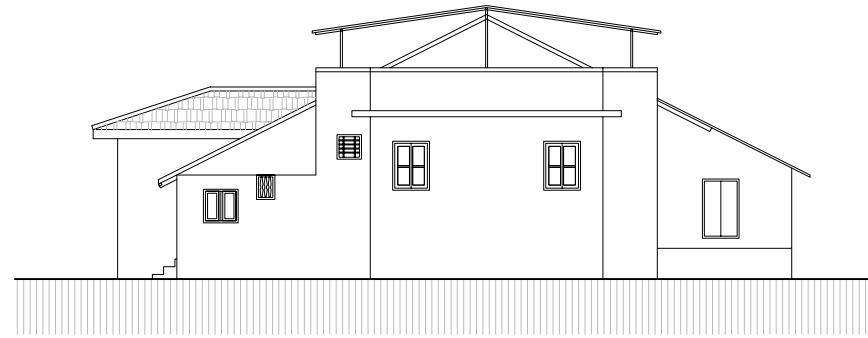
LOCATION PLAN
SCALE: 1/128"=1'-0"



ROOF PLAN
SCALE: 1/16"=1'-0"



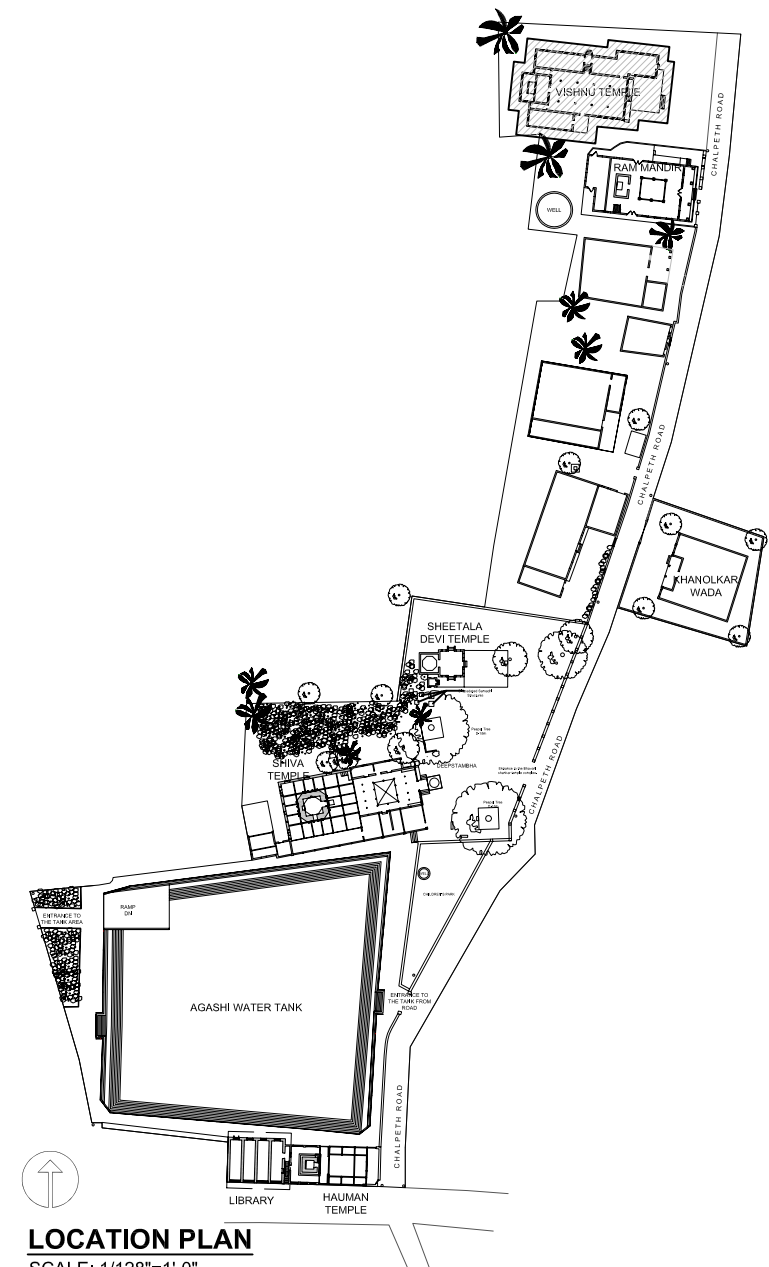
GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"



REAR ELEVATION
SCALE: 1/16"=1'-0"



FRONT ELEVATION
SCALE: 1/16"=1'-0"



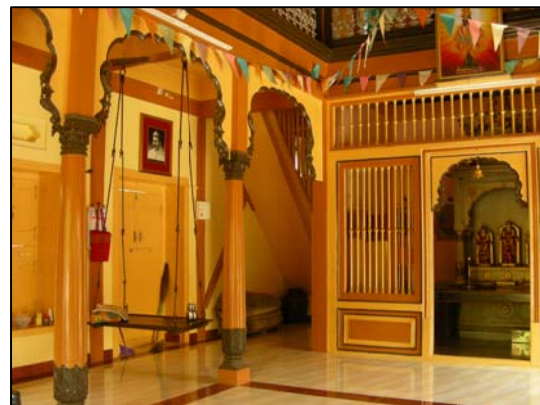
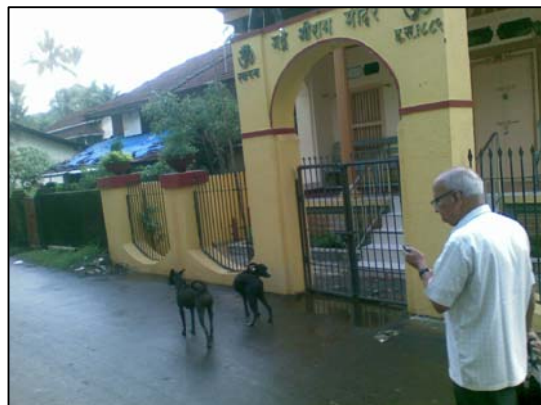
LOCATION PLAN
SCALE: 1/128"=1'-0"



HANUMAN MANDIR AND LIBRARY



LIBRARY



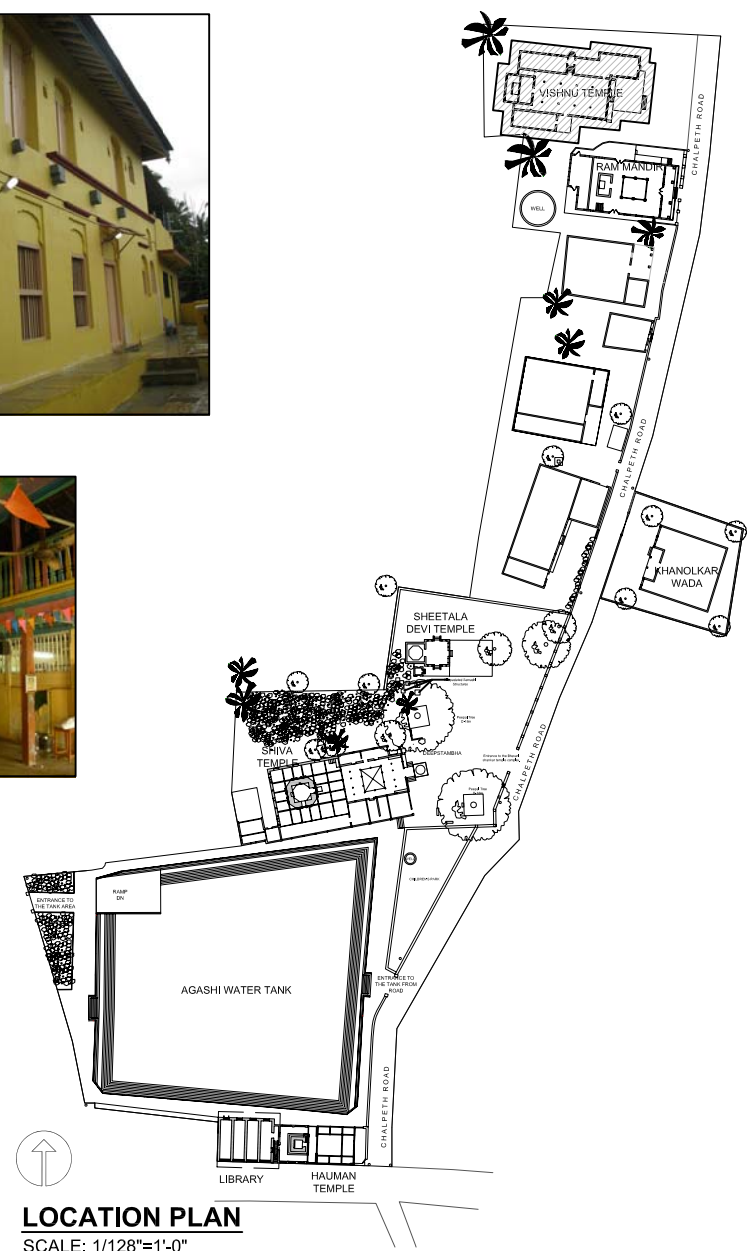
RAM MANDIR



BHAVANI SHANKAR MANDIR



VISHNU MANDIR MANDIR



2.0 Agashi Talav Heritage Precinct: Condition Assessment

The chapter develops a critical view towards the existing condition of the precinct and individual structures in detail. From the urban form level to the architectural details, various scales have been incorporated to offer in depth understanding of the site.

- The Agashi Talav Precinct
- The Buildings
- The Agashi Talav

The Agashi Talav Precinct

The Agashi Talav Precinct has potential to cater to the local and as well as the regional level. The overlook at the existing conditions can be classified in the following observations:

- **Visual Linkage**

The precinct is divided from the market street by line of buildings. The precinct is not visually accessible from the main street except the standing positing at the Agashi naka /node. Furthermore the visual access is not supported by the physical access to the tank [due to barricade at the Hanuman Mandir side]. The walk from Agashi naka to Devali allows the no. of vistas to unfold however the precinct comes to the user as an element of surprise and conscious effort to visit the space.

- **Accessibility**

The access to the precinct is through a gate of the barricaded boundary of the lake and other temples are accessed by a narrow street. The chance of occurrences is minimized with the fixed nature of the boundary.

- **Functional Usability**

The access to the Talav from the adjacent Bhavani Shankar Mandir was through the no. of steps leading to the side of the temple which is blocked at the present. The Talav precinct is used largely at the evening time as a public place. During the day time the children's garden is effectively used by the passing by children. The front open space of Bhavani Shankar Mandir is used as for the kirtan, bhajan of the temple. Two large trees are used as the shade giving device for the same. The Talav area is isolated from the temple even being in the same compound and occasionally used for the religious functions of the temple.

- **Segregation between Traffic and Pedestrian Movement**

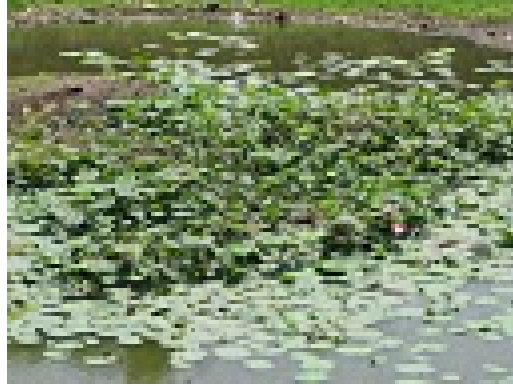
The precinct is surrounded by vehicular road and the pedestrian segregation is absent due to the lack of footpath and the space for the same. However the Talav is surrounded by the spacious footpath around which is protected by the barricade and the gate. This serves as the secured place for the children's play area. The trustees of the Talav precinct have allotted an area for the children's' garden and further barricaded it for its protection.

- **Infrastructure**

The precinct as an active public place necessitates accessibility to essential infrastructure such as Public toilet, clean and maintained space, garbage free environment and proper light and ventilation. The lack of toilet and drinking water facilities, the tank steps with seasonal moss [during rains], absence of dust bins – are the few observations on site.

The Agashi Talav

The Agashi Talav is not only a key ecological asset but is also a significant religious, social and cultural asset. The Talav presently appears to be in a state of poor maintenance with siltation and eutrophication as can be seen in the accompanying images. The health of the tank ecosystems in the region also has a significant impact on the ground water table.



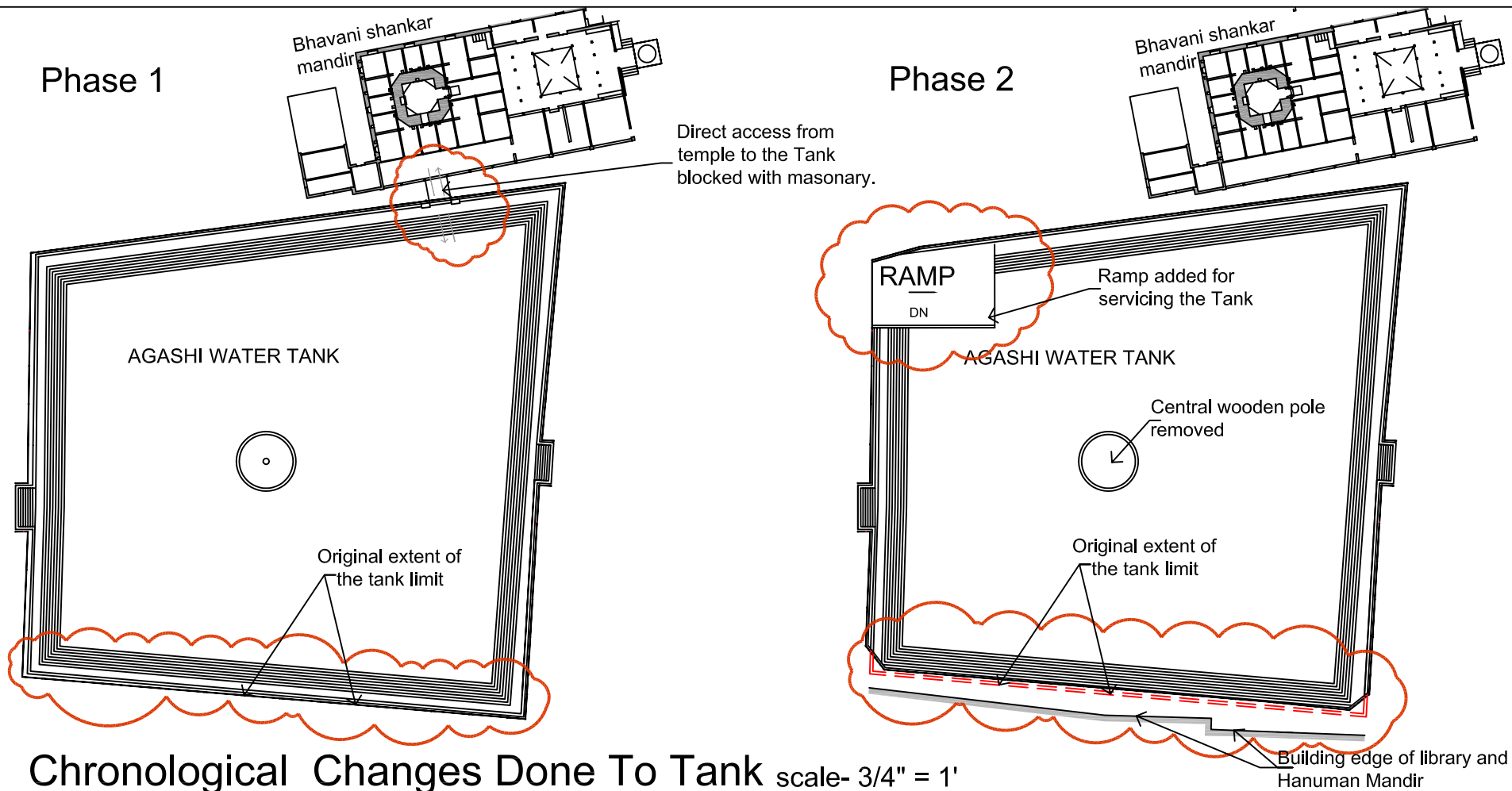
Siltation and Eutrophication in the talav

The Trustees are very much for the redevelopment and rejuvenation of the tank. According to them there used to be natural springs which continuously fed the tank with fresh water. These however have been blocked due to the gradual accumulation of silt and clay (due to Ganesh idol visarjan) over a period of years. Although the exact location of these springs is still a mystery, it is largely believed to be in the northwest corner, under the relatively later constructed ramp. Also, earlier there used to be a wooden pole in the centre of the tank.

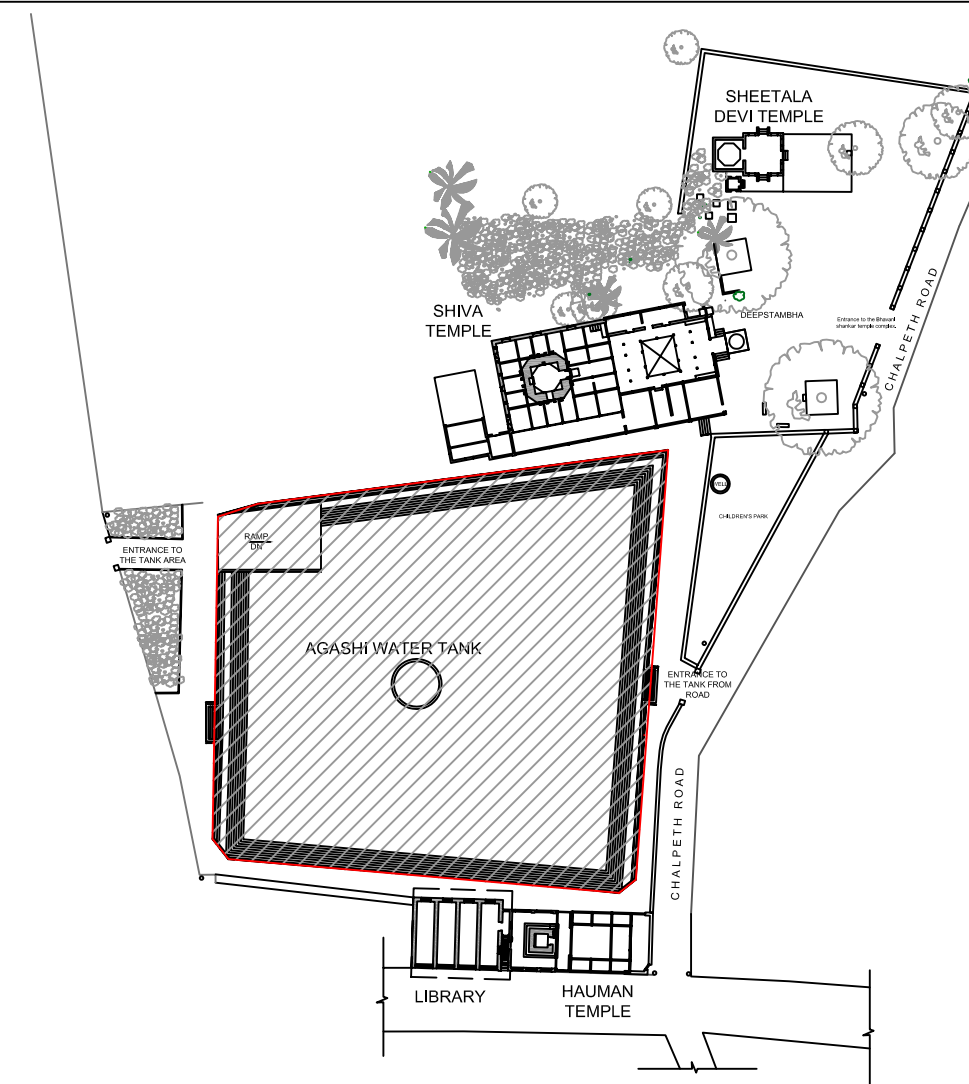
Somewhere in the corner, there was also an outlet channel in the niches that line the steps of the tank. The overflow water was led out into the creek and as a result the surrounding area of the tank never got flooded. However, today after massive rains the water from the tank occasionally spills out in the surrounding roads.

The most prominent structure in this area is actually the Agashi tank itself. In function and in planning it is, or rather was, similar to the Banganga tank in Mumbai. The large niches that dot the walls of the tank and the sculptural elements seen in some areas indicate the then importance attached to this water body. The Agashi tank, supposed to have some miraculous healing powers, was built by a relation of the ruler of Miraj in 1691 and was built in 1691 by Shankarji Keshav Phadke, Subhedar of Vasai. It should be noted that there is a mention of tanks with miraculous healing powers in the vicinity of Agashi.

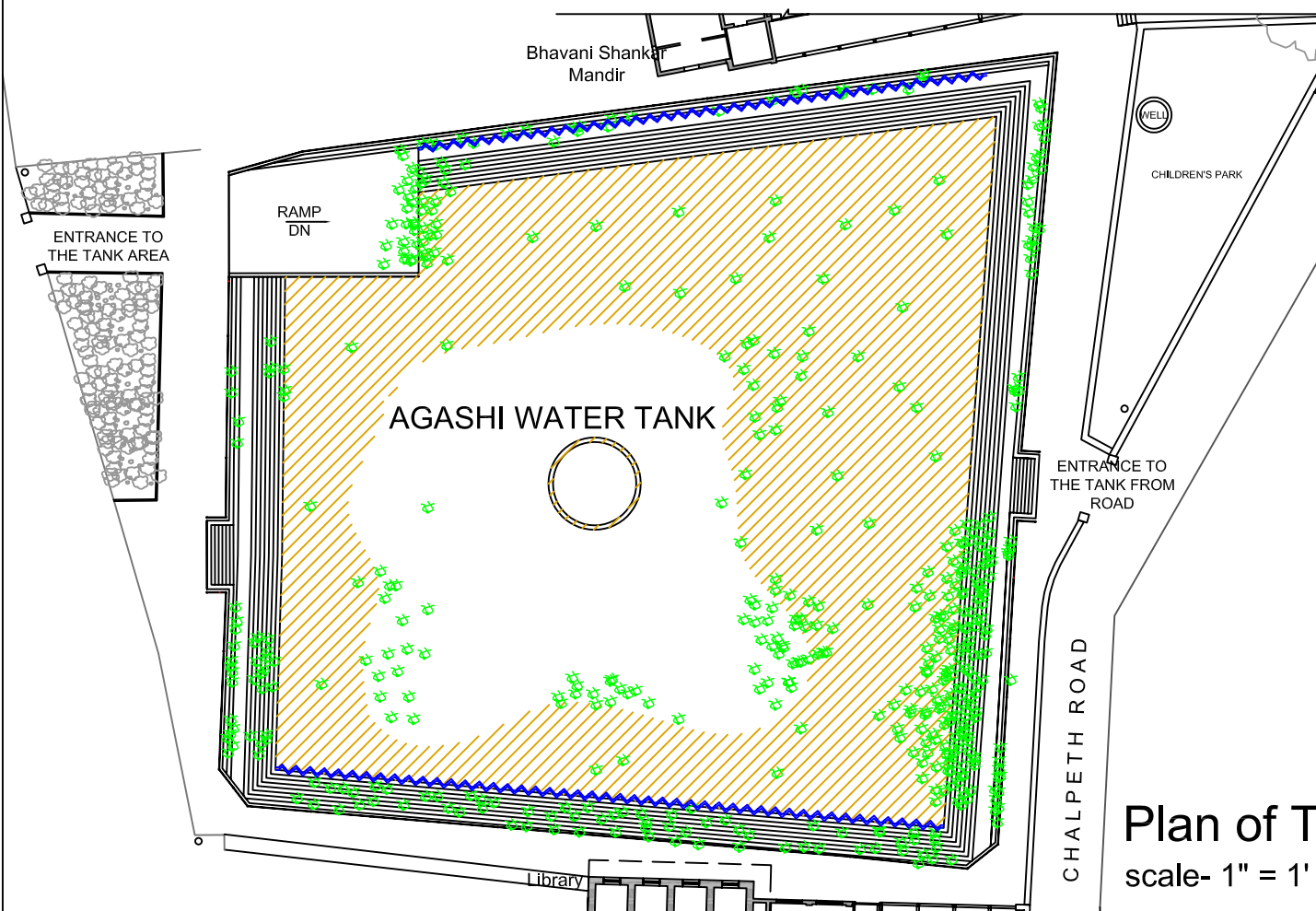
Today the tank lies in poor state of preservation. The tank is silted with dead of natural vegetation and Ganesh idol *visarjan*. Huge amount of vegetation seems to be growing along the steps and within the tank which seem to good breeding grounds for mosquitoes. At Many place along the steps and tank walls we can find pointing done with cement. Primitive inspection of the tank dose not show any kind major structural defects in the stone steps and tank walls built in local black basalt.



Chronological Changes Done To Tank scale- 3/4" = 1'



Location of tank scale- 1/2" = 1'



Plan of Tank

scale- 1" = 1'



Missing Wooden pole



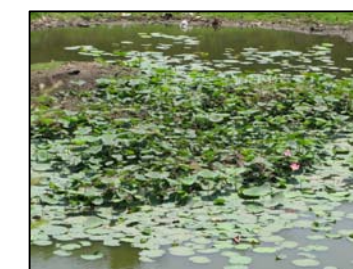
Repairs and pointing done in cement

LEGEND

- REPAIRS DONE IN CEMENT
- SILTATION
- VEGETATION GROWTH



Siltation in tank



Vegetation growth along the tank

INDIVIDUAL BUILDINGS :**HANUMAN MANDIR:****Development of the structure**

The Hanuman Mandir was built same time as the Bhavani Shankar Mandir, i.e. 1691. It is possible that it was even built by the same craftsmen as the elephant bas relief sculpture seen over the doorway of the garbhagriha is stylistically very similar to the same sculpture in the Bhavani Shankar Mandir.

Much more modest in scale, the Hanuman Mandir was considered to be at the edge of the village. The original temple would have been just the garbhagriha with a dome covering it. The walls on the three sides and the mandap in front would have added later. The mandap is covered with a hipped roof supported by wooden columns.

This temple directly abuts the busy Arnala-Agashi road. There is absolutely no buffer between these two entities.

Present defects:

Over all the Hanuman Mandir is in fair condition.

Structural defects:

Although no major structural faults are seen in the overall building, there seem to be some problems with the wooden joinery especially along the road side. Some of the teakwood members are not in alignment.

No termite infestation is seen in the structure.

However rising dampness is seen in the walls and the external plaster seems to be damaged in a few areas.

The roof is in an ok condition but water seepage is seen in some areas.

Non-structural defects:

Since the windows do not have chajjas or any such protective elements rain water easily enters the building, especially from the south side. This results in accumulation of rain water.

Also, in some areas it has created rot in the wooden frames of the door and windows.

For security purposes iron grills have been installed in the window openings. However these are quite incongruous.

Also, perhaps to combat rising dampness, the bricks walls have been clad with ceramic tiles internally and with granite tiles externally. This does not go well with the original character of the building.

Stone surfaces have been painted over.

LIBRARY:

The Library building abuts the Hanuman Mandir directly only its western edge. Built in ____ the structure is a good example of vernacular architecture of this period that has colonial influences. The building has been further extended on the western side. Although a two storied structure the Library is only on the first floor while the lower storey is occupied by shops. The access to the Library is through a staircase that runs on its eastern edge.

The building has a good setting, with one side facing the main road while the other side faces the Talav.

While the original part of the building is covered with a Mangalore tiled roof, the extension is covered with corrugated AC sheet roof.

The building is of load bearing brick masonry.

A balcony runs on three sides of the structure and might have even run along the western side before the extension was done. This balcony is supported by teakwood brackets.

Compared to the neighboring Hanuman Mandir, the Library building looks quite ornate especially due to its ornate elements like decorative fascia boards, wooden and iron finials etc and the cast iron railings along the balcony.

Present defects:

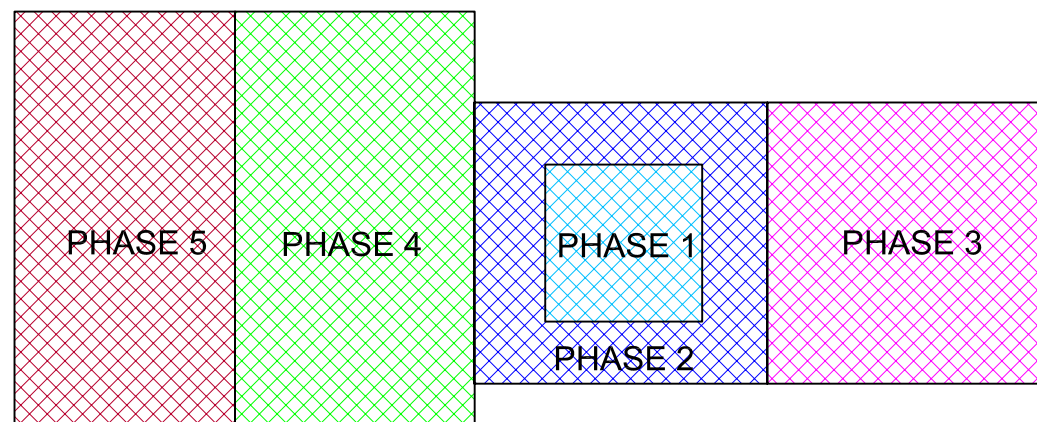
Over the entire Library building is in fair condition but the roof is need of repairs.

Although no major structural faults are seen in the overall building, there seem to be some problems with roof members. Some members have rotted away while some like the fascia board are missing in certain areas.

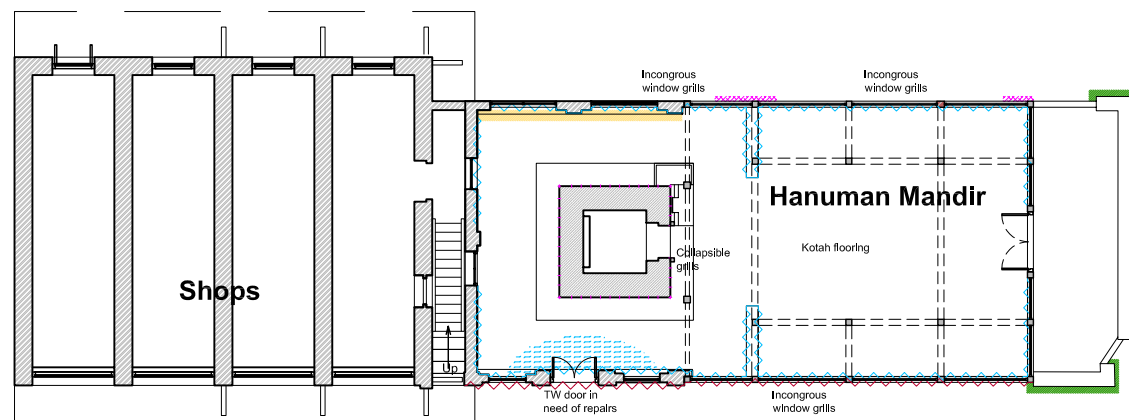
Leakage is seen especially through the AC sheet roof along the wall edges.

No termite infestation is seen in the structure.

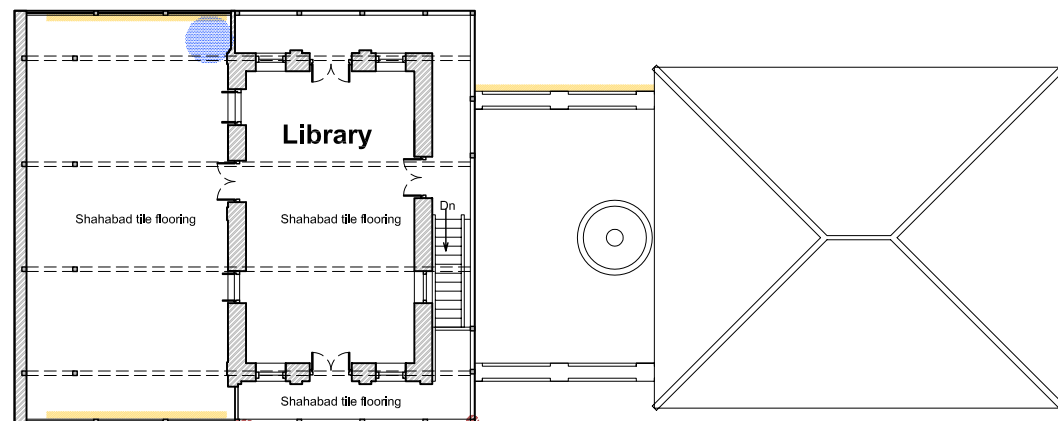
Dampness is seen in the walls and the external plaster seems to be damaged in a few areas.



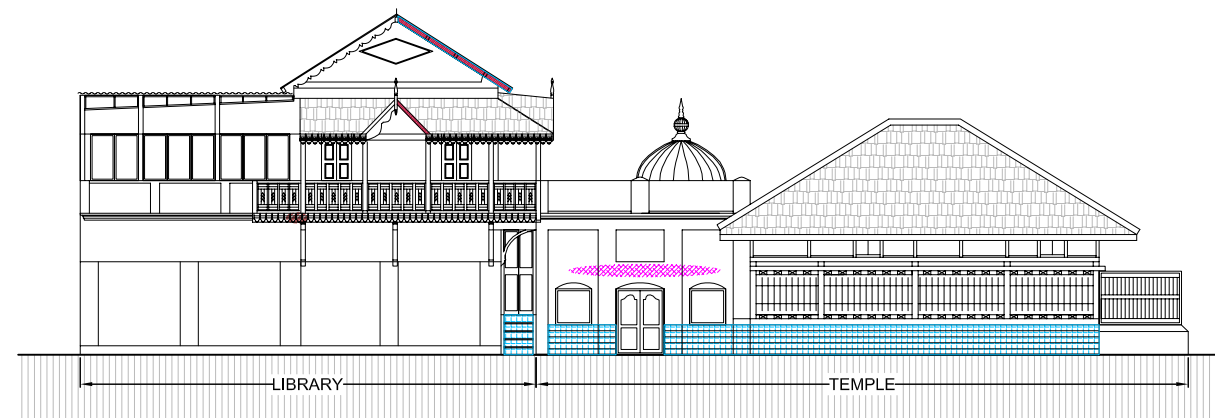
CHRONOLOGICAL DEVELOPMENT
SCALE: 1/16"=1'-0"



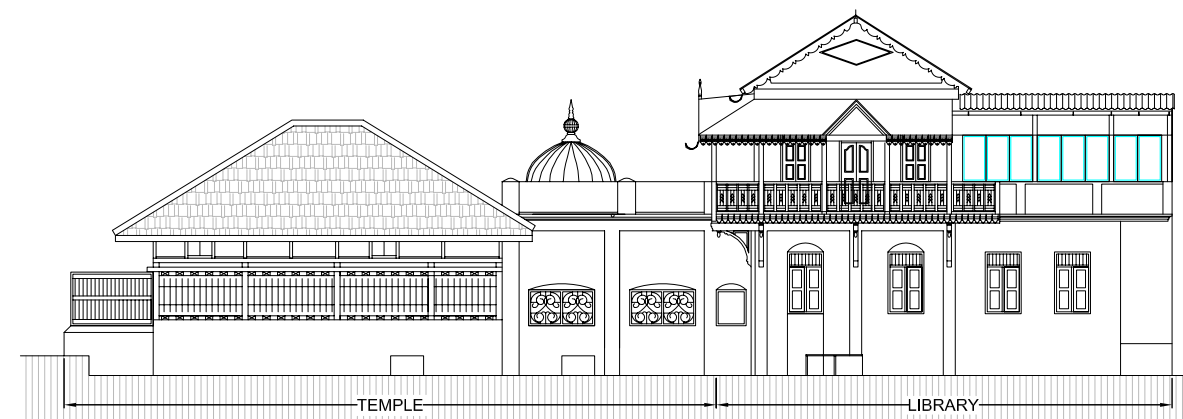
GROUND PLAN
SCALE: 1/16"=1'-0"



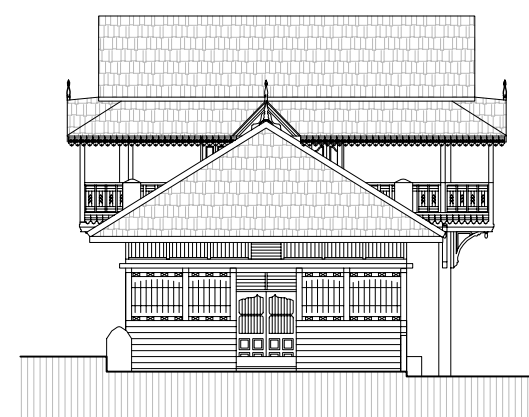
FIRST FLOOR PLAN
SCALE: 1/16"=1'-0"



ELEVATION ALONG ARNALA ROAD
SCALE: 1/16"=1'-0"



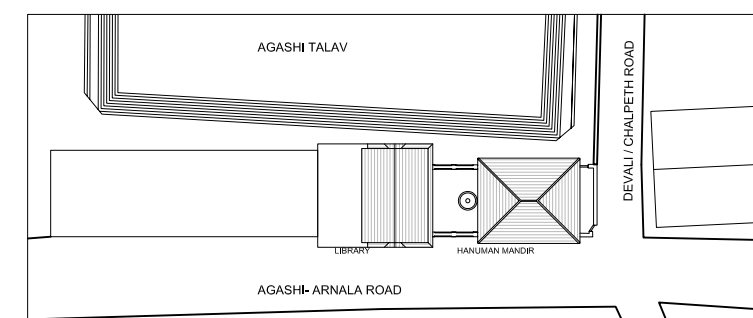
ELEVATION ALONG AGASHI TANK
SCALE: 1/16"=1'-0"



FRONT ELEVATION
SCALE: 1/16"=1'-0"

LEGEND

- SEEPAGE STAINS
- MISSING OR BROKEN ELEMENTS
- RAIN WATER ACCUMULATION
- MOSS & VEGETATION
- DAMAGED/ ROTTEN TEAKWOOD MEMBERS
- LAYERS OF PAINT
- RISING DAMP/ DAMPNES IN WALLS
- PLASTER IN POOR CONDITION
- CERAMIC TILE CLADDING
- VEGETATION GROWTH
- PAINT ON STONE SURFACES
- VEGETATION GROWTH



LOCATION PLAN
SCALE: 1/64"=1'-0"



View of the temple from Agashi Naka



Interiors of the temple looking at the shrine



Accumulation of rain water



North facade of Hanuman Mandir & Library



Walls clad with ceramic tiles



Large grille in front of the entrance



Stone surface painted over in oil paint



Masonry dome over the shrine

HANUMAN MANDIR



Front facade of the library



Interiors of the extension on the west side



Signs of leakage through the roof



Shops on the lower level



Common wall between old and new part



Wooden members of roof in need of repairs



The library (original area)



Corrugated AC sheet roof over the extension



Some of the tw members are rotting away

SARVAJANIK VACHANALAY (LIBRARY)

BHAVANISHANKAR MANDIR:**Development of the structure**

The most important temple in the precinct, the Bhavani Shankar Mandir dates back to 1691 and was built by Sardar Phadke of Sangli. This act of piety was done as an act of gratitude when he was reportedly cured of some disease after bathing in the Agashi tank.

The temple is a very good example of Maratha style temple architecture during the Peshwa period. It is linear in form and oriented in the east-west axis with the entrance at the eastern end.

The garbhagriha is octagonal in plan and surmounted by a dome. The present dome of the kalash looks relatively shorter to the overall dimensions of the temple and this gives speculation to the fact that there could have been a different kalash earlier. It is also reported the present dome is actually different from the one seen from inside and there is a room in the space enclosed by these two domes. However, this cannot be verified presently as there are no indications of or access to such a room.

The garbhagriha, constructed in black basalt stone, is further enveloped by a columned hall. The wooden pillars of this area are intricately carved and support large wooden beams that create the attic space above. The attic in turn is covered by a Mangalore tiled roof supported by wooden bullies.

Originally the temple would have consisted only of these two spaces, namely the garbhagriha and columned hall surrounding it. This is borne out by the fact that the plinth ornamentation runs on all four sides including the east where today it is adjoined by the sabhamandap. However, the ornamentation is still seen on this edge rising above from the floor level of the sabhamandap.

The sabhamandap follows the typology of a typical vernacular temple but is on a larger scale. There is a peripheral gallery on the upper level originally meant as a segregated space for women. This gallery is supported by plain and slightly adorned wooden columns. Access to this space is through a small steep wooden staircase in the northeast corner of the columned hall.

The sabhamandap was relatively open to three sides with half walls and lattice screens enclosing this particular space. However, during 1950s the south side was enclosed with a verandah that subsequently cut out the access, both actual and visual, to the Agashi tank. This verandah has half walls and lattice work that permits good cross ventilation.

The north side would have also been enclosed around this time and houses the family of the priest.

The relative importance of this temple is seen by the presence of the “nagaarkhana” on the upper level of the main entrance of this structure. Traditionally only important temples would have had this room over the main entrance and where musicians would play religious songs or provide music during rituals and festivals. Access to this space is only through an external wooden staircase.

Right in front of the main entrance is the deepastambh. This structure is unique not only in its location but also in its form. Usually deepastambhs are placed on one side of the entrance and take the form of a shaft with many upturned brackets on which lamps would be placed. This particular deepastambh is very crude and seems to have been made of salvaged material of brick and stone. Ornamentations, probably part of the original temple, are embedded on the surface in a random manner.

In the recent past two new structures were added on the western end of the south verandah.

A distinctive feature of the Bhavani Shankar Mandir is the unique bass relief sculptures on the external walls of the garbhagriha. Indeed, some of these might not have been seen in any temples of the

region and perhaps even beyond. Amongst these are the five headed cow and calf panel, peacocks, tree flanked by elephants etc. Much study needs to be done in these unique sculptural panels that do not adhere to any known iconographical scheme.

The Bhavani Shankar Mandir is placed in a large site with a large front space. A recently built Shitaladevi Mandir is located on the north of the temple. Many shrines or “samadhis” are placed in between these two temples. Once very well connected to the Talav, the temple now seems disconnected with the water body.

Present defects:

Over all the Bhavani Shankar Mandir is in relatively good condition.

Structural defects:

Although there were no significant structural problems seen in the structure like cracks, settling of floors, leaning of walls etc, there were a few trouble areas that need immediate attention.

The roof is leaking at a few areas, especially at the walls edges. This is leading to constant seepage of water during rains and also leading to dampness in the walls. Over a period a time this leads to weakening of the structure.

Fortunately no termite infestation is seen in the building. This can be attributed to the fact that due to the lattice work on the south and west façade of the building, good cross ventilation is maintained in the structure.

Some of the teakwood beams that support the attic have weathered away and are rotting in some areas. The water seepage might be a major cause for this damage.

Some of the stone brackets that support the wooden beams are broken.

Since the roof does not project out a lot from the building edge, the external walls are susceptible to weathering due to exposure to the rain. Also there is little or no plinth protection, a result of which the external wall surfaces have gotten soiled and damaged. This factor is contributing a lot to the rising damp in the brick masonry walls.

The external plaster is especially damaged along the north and west side. It should be noted that there is no plinth protection on these sides. Another factor for the poor condition of the plaster is the water seepage through the roof and also lack of periodic maintenance.

Vegetation growth like peepal plants is seen in a few places, like a corner of the hexagonal drum of the kalash. The roots of these plants penetrate deep into the masonry thereby weakening it and also promoting water seepage.

Non-Structural defects:

Apart from the defects mentioned above there are some defects which are not structural but nevertheless affect the overall character of the building.

Prime amongst these are the soiled or stained wall surfaces especially along the southern façade. Lot of these is caused by algae or moss growth.

Flaking of paint is also seen in area where dampness of walls is seen.

The wooden boarding of the attic is missing in certain areas.

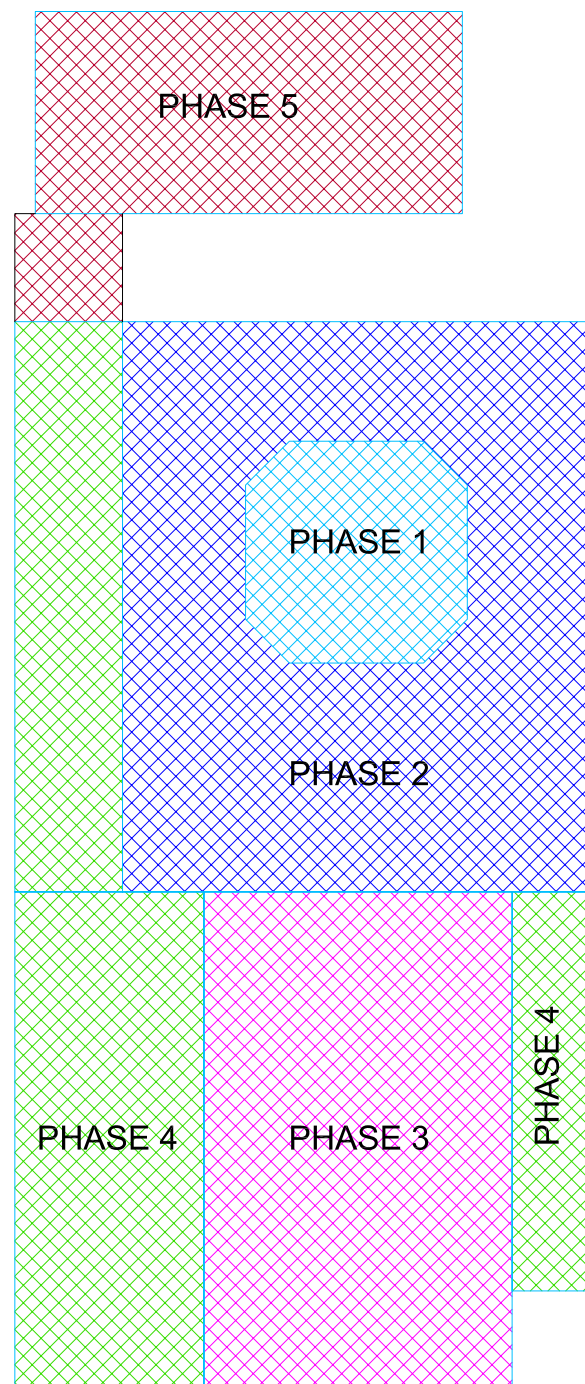
The stone surfaces have been painted over with oil paint. It is only in the attic area that the original stone surface is seen. This paint retains moisture in the walls as it stops the stone and its joints from breathing. Also the layers of paint have obscured some of the sculptures beyond recognition.

Some of the wall surfaces have been covered with ceramic tiles and this looks very much out of place.

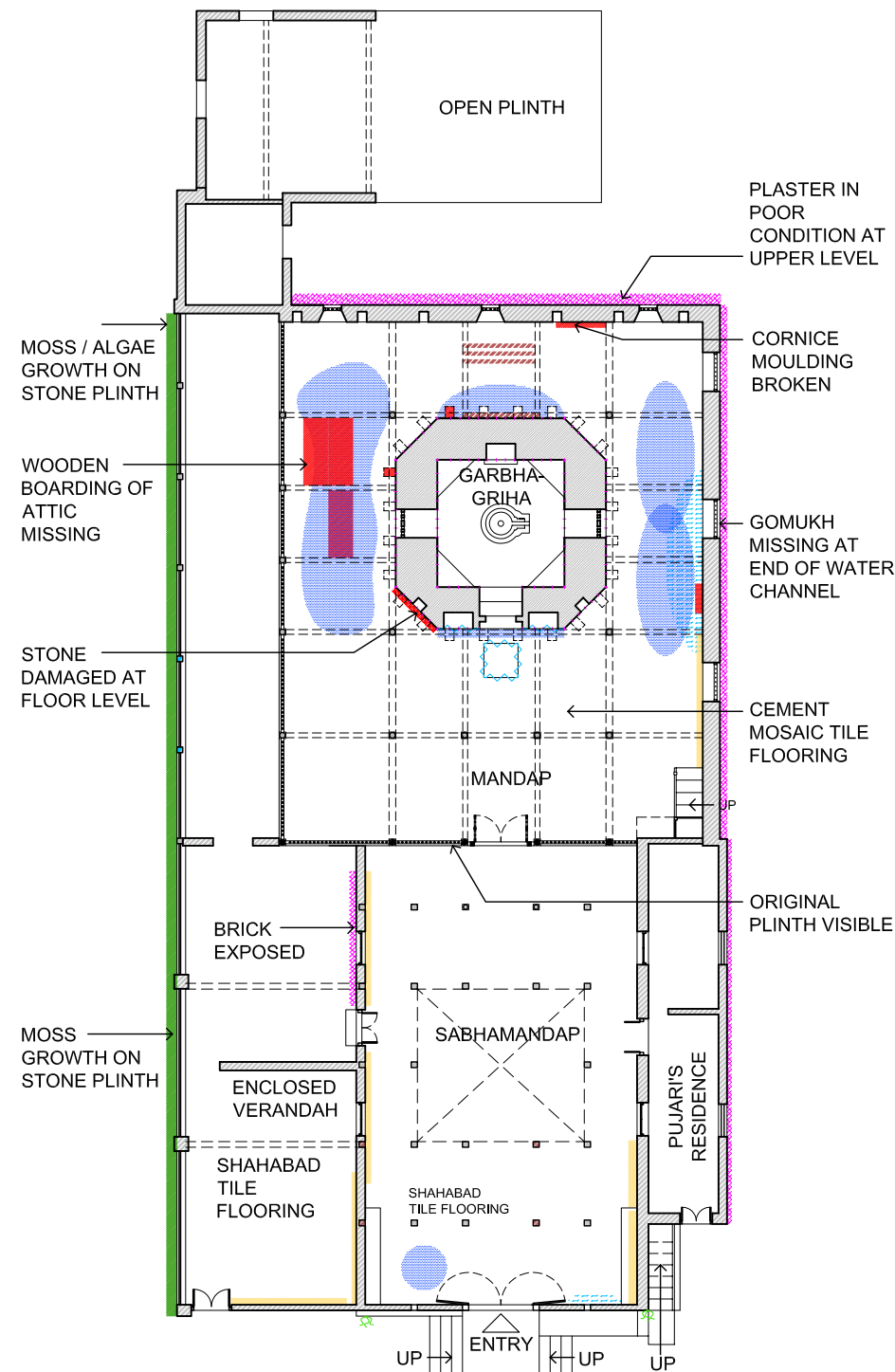
The teakwood columns have also been painted over in oil paint that reduces the inherent richness of wood.

The flooring of the garbhagriha has been changed to ceramic tiles as the earlier stone flooring would supposedly stay damp and promote algae growth.

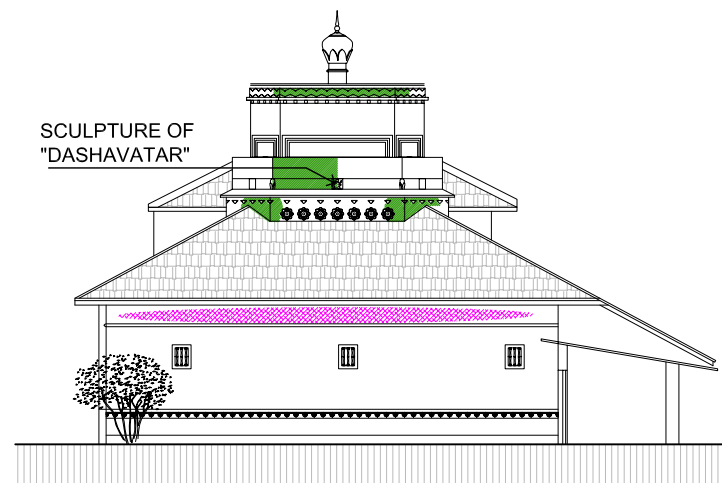
An exhaust fan put along one of the stone jail windows completely mars the beauty of this architectural element.



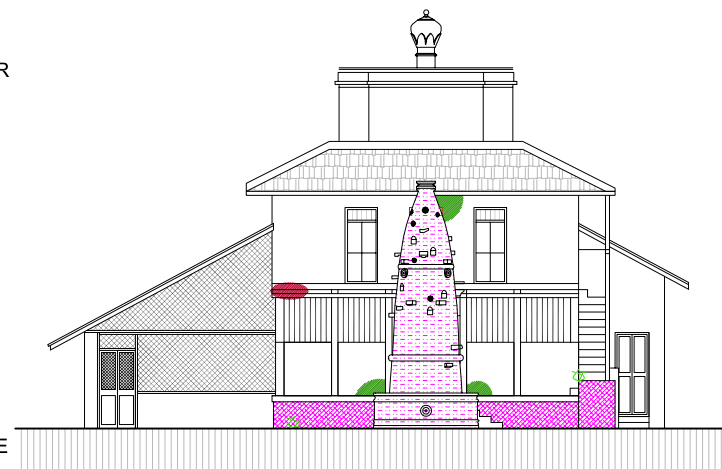
CHRONOLOGICAL DEVELOPMENT
SCALE: 1/16"=1'-0"



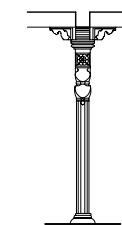
GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"



REAR ELEVATION
SCALE: 1/16"=1'-0"



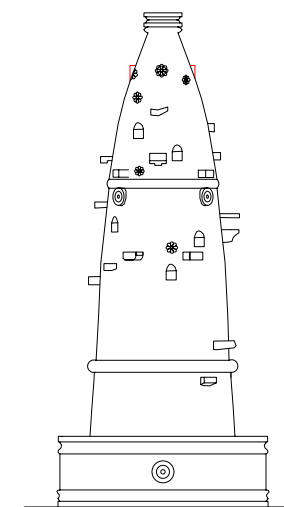
FRONT ELEVATION
SCALE: 1/16"=1'-0"



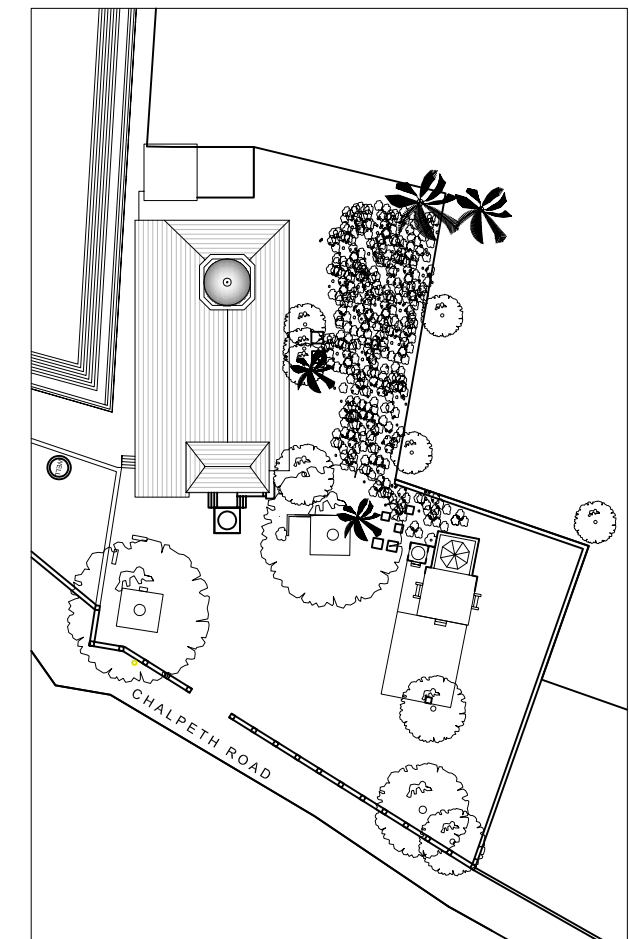
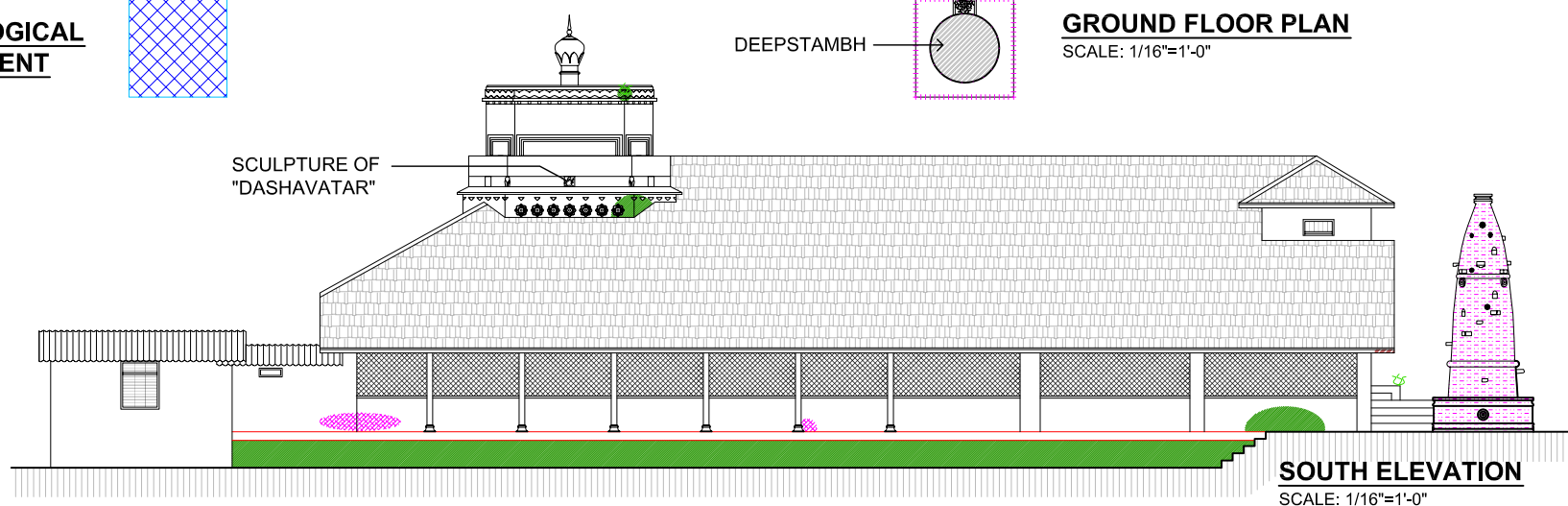
DETAIL: COLUMNS IN INNER HALL
SCALE: 1/8"=1'-0"



DETAIL: COLUMNS IN SABHAMANDAP
SCALE: 1/8"=1'-0"



DETAIL: DEEPASTAMBH
SCALE: 1/8"=1'-0"



LOCATION PLAN
SCALE: 1/64"=1'-0"

LEGEND

- SEEPAGE STAINS
- MISSING OR BROKEN ELEMENTS
- RAIN WATER ACCUMULATION
- MOSS & VEGETATION
- DAMAGED/ ROTTEN TEAKWOOD MEMBERS
- LAYERS OF PAINT
- RISING DAMP/ DAMPNES IN WALLS
- PLASTER IN POOR CONDITION
- CERAMIC TILE CLADDING
- VEGETATION GROWTH
- PAINT ON STONE SURFACES



Front facade of the temple



South facade of the temple



Rear facade of the temple



North facade of the temple

BHAVANISHANKAR MANDIR



The octagonal garbhagriha



Columned hall around the garbhagriha



Sabhamandap of the temple



Enclosed verandah on the south side

BHAVANISHANKAR MANDIR



Attic over the columned hall



Broken stone bracket



Missing boarding of the attic floor



Gallery on the upper story



Garbhagriha rising above the attic



Damaged /weathered teakwood beams



Stains caused by water



Stone surface of deepastamba painted over

BHAVANISHANKAR MANDIR



Damaged stone



Flaking of paint and rising dampness



Unique five-headed cow sculpture



Ceramic tile cladding



Flaking of paint and rising dampness



Other sculptural panels



Exhaust fan in stone jali of garbhagriha



Exposed brickwork in south verandah



Dilapidated samadhis in the compound

BHAVANISHANKAR MANDIR

RAM MANDIR:

The Ram Mandir is the most ornate of all the listed structures. It is a private temple following the typology of both, a house and a temple and was built in 1885.

The ground plus one storey structure is made of load bearing brick masonry. Teakwood beams support the floor and the entire structure is covered with a Mangalore tile roof supported by wooden bullies.

Stylistically it belongs to the Maratha “wada” architecture with certain European influences. The ground floor is fronted by a verandah with European styled columns.

The structure has not undergone major transformation from its original form. However, a RCC framed structure has been added to rear as living quarters. Overall the structure has been very well maintained.

The Ram Mandir displays the grandeur of its patron, the Gadre family. The interiors, of the ground floor especially, are quite ornate with the intricately carved wooden columns, brackets, and arches with inverted cusps; all typical of Maratha style architecture.

Coloured glass is inserted in the rectangular niches and ventilators in the ground floor.

The shrine is formed by an enclosure created by vertical rails. The large ground floor acts very well as a large hall.

The upper story acted as a segregated space for women during functions held in the temple. Today it is used more for living purposes.

The plot in which the building sits is defined very well by a boundary wall. The open space is largely paved with Shahabad tiles.

A very old well is present in the rear of the structure and supposedly contains an inscription in Modi script.

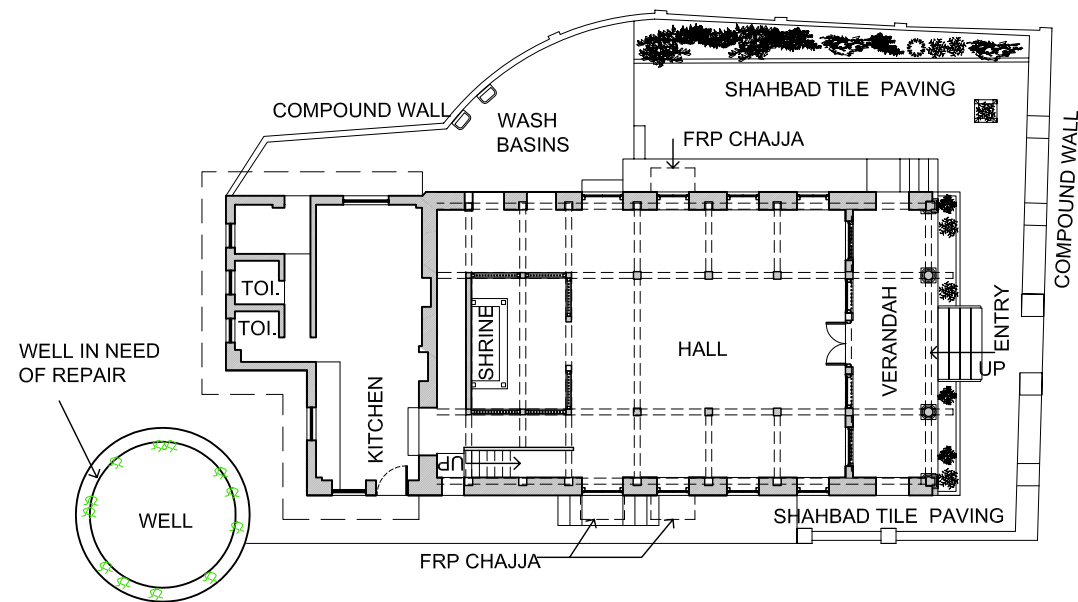
Externally the building looks like a “wada” covered with a hipped roof. The fascia board is very ornate and is very different from what is seen in the area.

The building has been painted externally in a yellow colour that looks out of place in this area. However, it has been seen that some of the old buildings were painted over externally but maybe not in this colour.

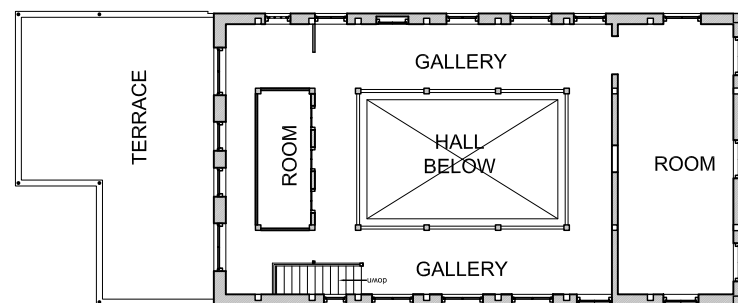
The wooden members have been painted in oil paint that reduces the original richness of that structure.

The Ram Mandir completed 125 years in 2009 and as part of the celebration the entire structure was renovated.

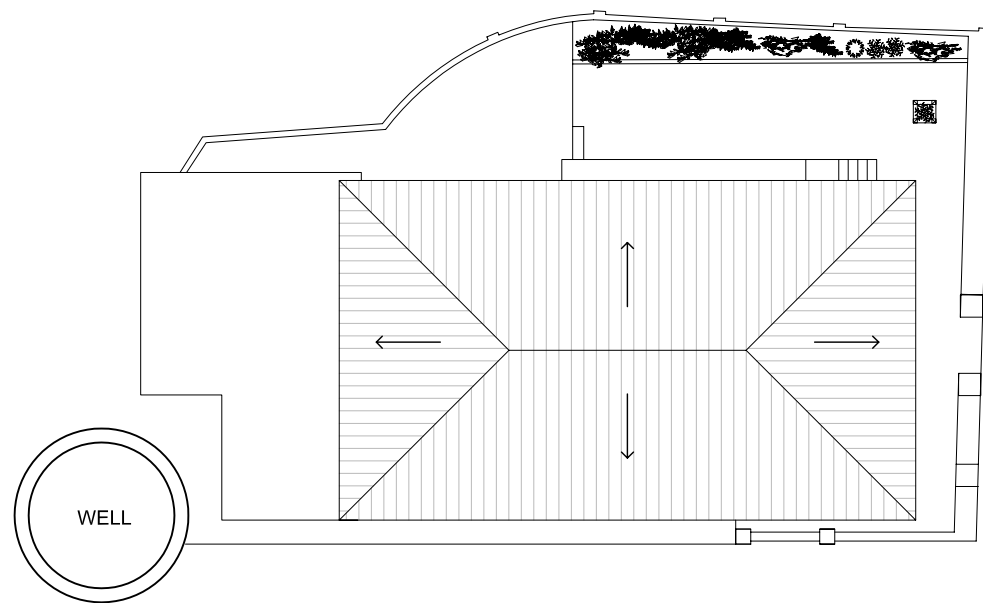
As such not many noteworthy defects were seen in the structure.



GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"



FIRST FLOOR PLAN
SCALE: 1/16"=1'-0"



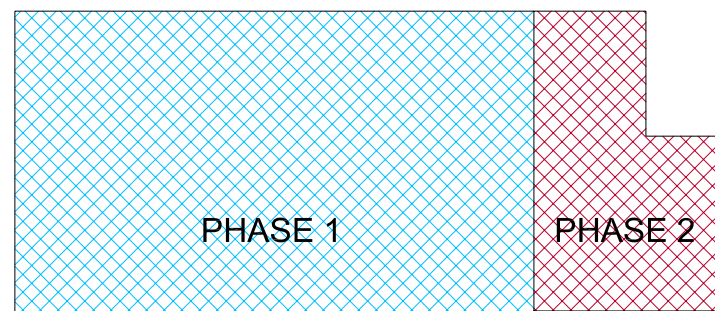
ROOF PLAN
SCALE: 1/16"=1'-0"



NORTH SIDE ELEVATION
SCALE: 1/16"=1'-0"



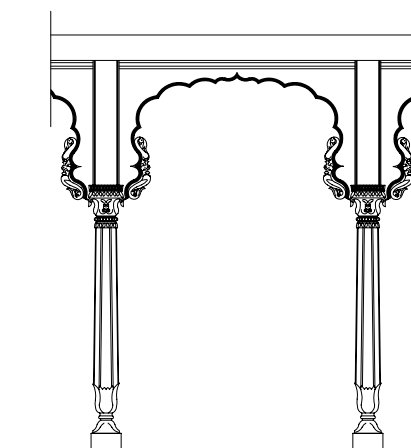
SOUTH SIDE ELEVATION
SCALE: 1/16"=1'-0"



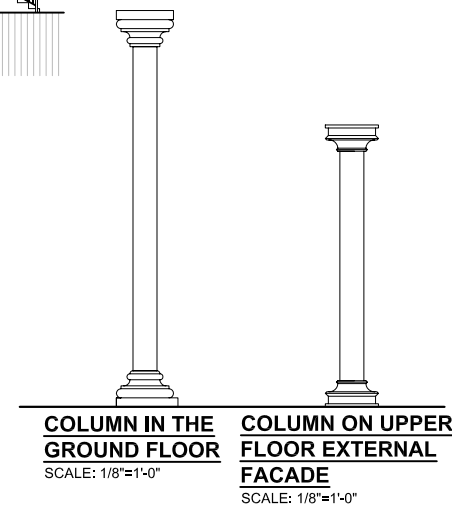
CHRONOLOGY OF DEVELOPMENT
SCALE: 1/16"=1'-0"



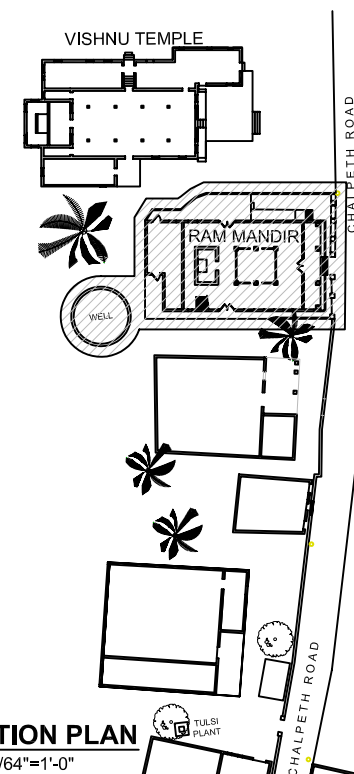
ROAD SIDE ELEVATION
SCALE: 1/16"=1'-0"



**TYPICAL COLUMN AND ARCH
DETAIL IN GROUND FLOOR**
SCALE: 1/16"=1'-0"



DETAIL: ELEVATION OF ENTRANCE GATE
SCALE: 1/16"=1'-0"



LOCATION PLAN
SCALE: 1/64"=1'-0"

LEGEND

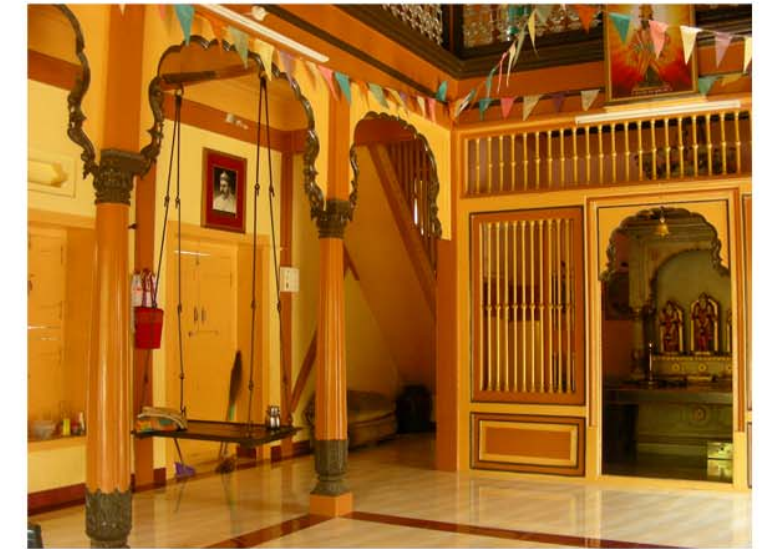
- SEEPAGE STAINS
- MISSING OR BROKEN ELEMENTS
- RAIN WATER ACCUMULATION
- MOSS & VEGETATION
- DAMAGED/ ROTTEN TEAKWOOD MEMBERS
- LAYERS OF PAINT
- RISING DAMP/ DAMPNES IN WALLS
- PLASTER IN POOR CONDITION
- CERAMIC TILE CLADDING
- VEGETATION GROWTH
- PAINT ON STONE SURFACES



View of the temple from Devali



Shahabad tile paving in the open areas



The ornate interiors



Front facade of the Ram Mandir



The front verandah with ceramic tile flooring



The main shrine



Rear facade showing the extension



The old well in a dilapidated condition



The residential area behind the building

RAM MANDIR

VISHNU & GANESH MANDIR:

Situated next to the Ram Mandir, the Vishnu Mandir in contrast is the most modest of all the temples in the precinct. It is also the most modified amongst all the structures. It was built in the early -mid 18th century.

Development of the building:

Initially the building was two separate structures, each dedicated to Vishnu-Laxmi & Ganesh respectively. However, in the last decade, the old idols were discarded. A new shrine was constructed in RCC at the western end of the Vishnu Mandir. New marble idols of Laxmi, Vishnu, and Ganesh & Saraswati were installed together in this structure.

The roof profile also changed with this modification. Both the Vishnu Mandir & Ganesh had Mangalore tiled roof hipped at both ends. However with the amalgamation of the two structures, the hipped end of the Vishnu Mandir was changed to a gable end.

The Ganesh Mandir is no longer in use. Side ancillary structures had been added as living quarters. A large plinth fronts the building and the structure itself is at a large setback from the road. There is no proper site demarcation as such.

The flooring of the Vishnu Mandir has been changed to Kotah flooring with marble strip inlays.

Although the interiors of the structure are sparse the newly installed ornate woodwork at the entrance of the shrine.

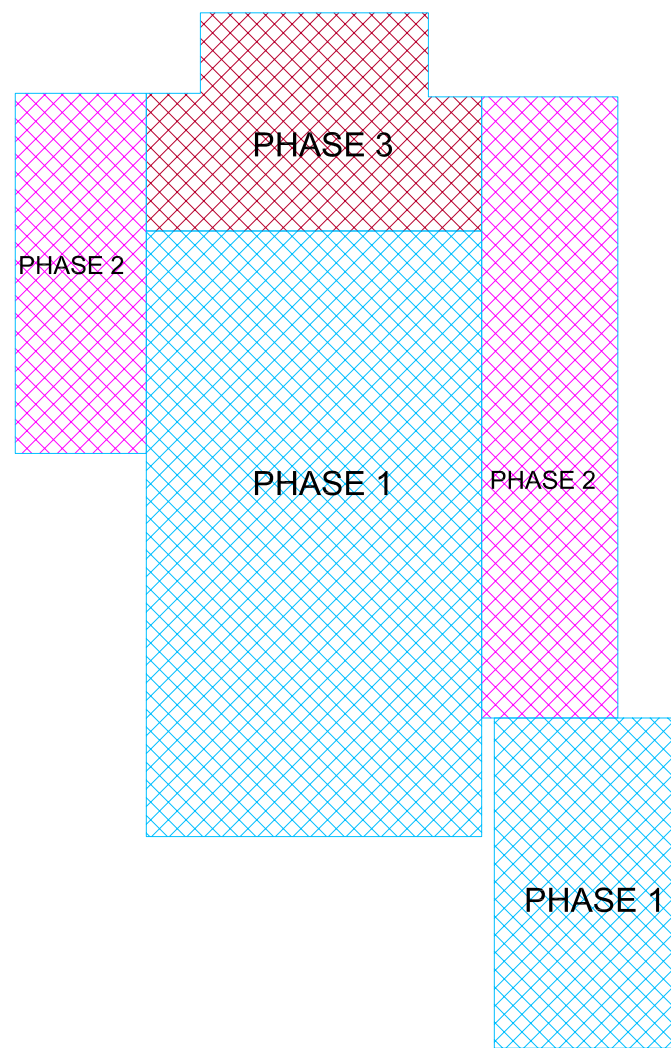
Structural defects:

Like the Bhavani Shankar Mandir the Vishnu Mandir also does not have adequate or any plinth protection. This leads to dampness in walls and deterioration of external plaster.

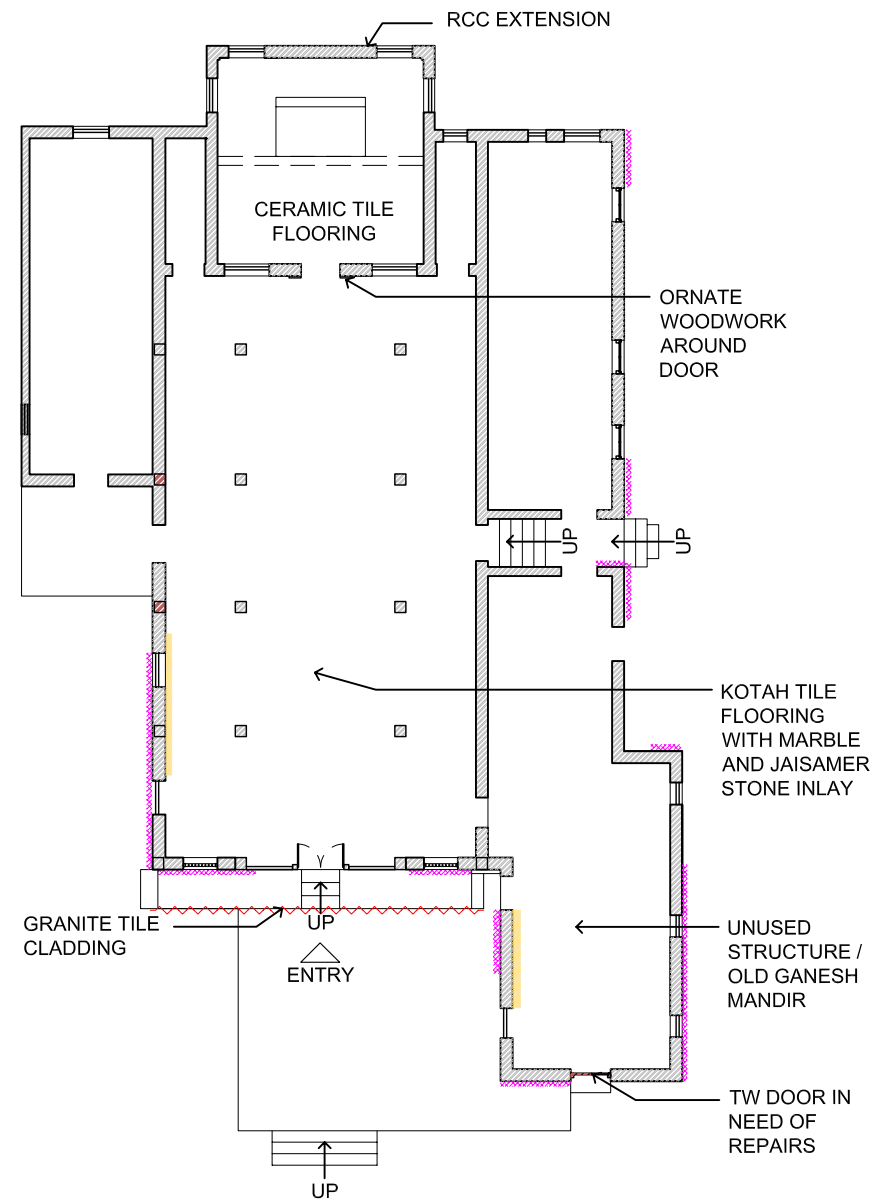
The external plaster in the rear portion of the structures is in poor condition and at places the brick surface is exposed.

The roof is in fair condition but is damaged at the junctions.

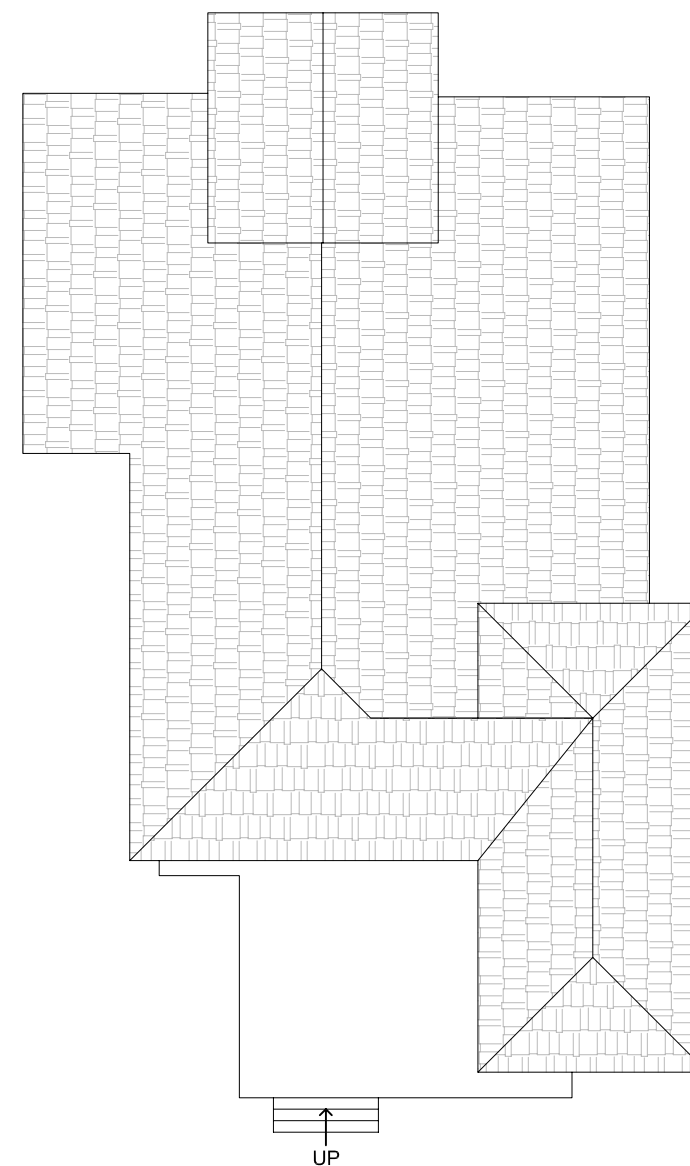
There is large vegetation growth at the rear of the structure.



CHRONOLOGICAL DEVELOPMENT
SCALE: 1/16"=1'-0"



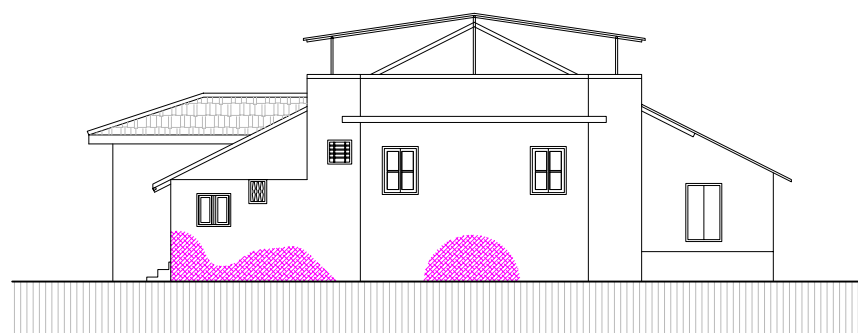
GROUND FLOOR PLAN
SCALE: 1/16"=1'-0"



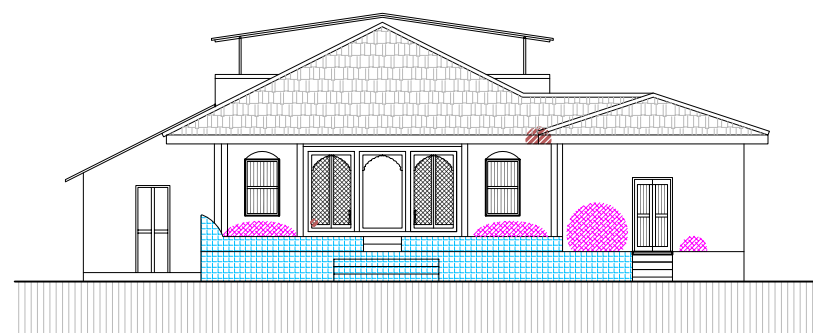
ROOF PLAN
SCALE: 1/16"=1'-0"

LEGEND

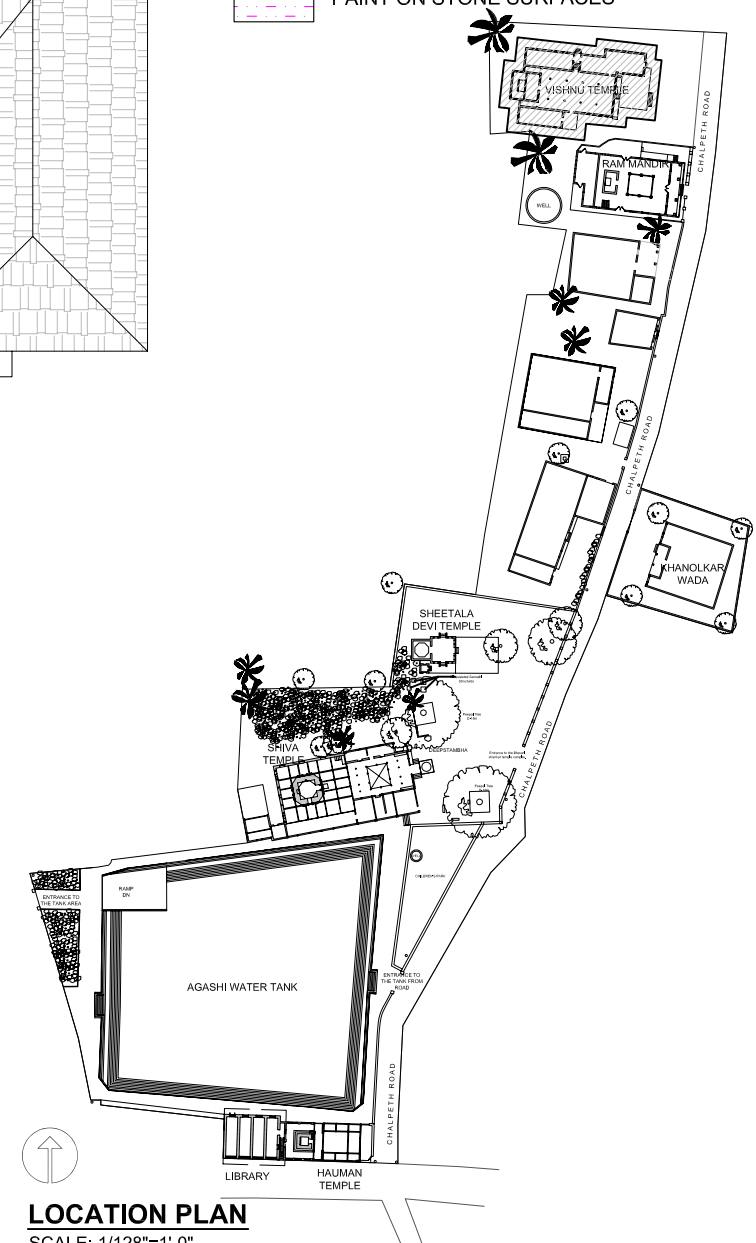
- SEEPAGE STAINS
- MISSING OR BROKEN ELEMENTS
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- MOSS & VEGETATION
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- LAYERS OF PAINT
- RISING DAMP/ DAMPNES IN WALLS
- PLASTER IN POOR CONDITION
- CERAMIC TILE CLADDING
- VEGETATION GROWTH
- PAINT ON STONE SURFACES



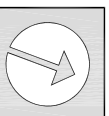
REAR ELEVATION
SCALE: 1/16"=1'-0"



FRONT ELEVATION
SCALE: 1/16"=1'-0"



LOCATION PLAN
SCALE: 1/128"=1'-0"





View of the temple from Devali



Interiors of the temple looking towards west



The ornate woodwork framing the doorway



Rear facade of the temple



View looking towards east



Damaged plaster along the northern facade



The new idols on a common platform



Some of the tw posts have worn out

VISHNU MANDIR

Khanolkar wada
Access not allowed.

Bibliography

Bantley I., Alcock A., Murrain P., McGlynn S., Smith G., *Responsive Environments-A manual for Designer*, The Architectural Press, London, 1985.

CRIT Final Report of the Documentation And Preparation Of Conservation Guidelines For Heritage Buildings And Precincts In Vasai – Virar Sub – Region: Vol 1

Cunha, J Gerson da, *Notes on the history and antiquities of Chaul and Bassein*, 1876.

Forman Richard T.T. & Godron Michel, *Landscape Ecology*, John Wiley & Sons, Canada, 1986.

Gazetteer of the Bombay Presidency, Vol XIII, Part 1, Thana, 1882

Gazetteer of the Bombay Presidency, Vol XIV, Thana, Places of Interest, 1882

Hough Michael, *Cities & Natural Process*, Routledge, Great Britain, 2004

Imperial Gazetteer of India, The: Vol V, 1908

Jamel Akbar, *Crisis in the built environmen'*, Singapore: Concepts Media Pvt Ltd, 1988

Kincaid, Charles Augustus; Parasnis, Rao Bahadur Dattatraya Balavant, *A history of the Maratha people*, 1918.

Lynch Kevin, *The Image of The City*, The MIT Press, England, 1996

Mcharg Ian L., *Design with Nature*, John Wiley & Sons, Inc., United States, 1992

Nanda, Vivek, *Urban morphology and the concept of a "type" – a thematic and comparative study of the urban tissue*; Undergraduate thesis, CEPT, University – Ahmedabad, 1989

Rapoport Ammos, *House Form and Culture*, Prentice Hall, INC, Englewood Cliffs, N.J., 1969

Shirvani, Hamid, *'Beyond public architecture'*, New York: Van Nostrand Reinhold, 1990

<http://onevasai.com/History.aspx>

<http://vasaiker.com/maps-of-vasai>

<http://www.east-indians.net/Agashi.htm>