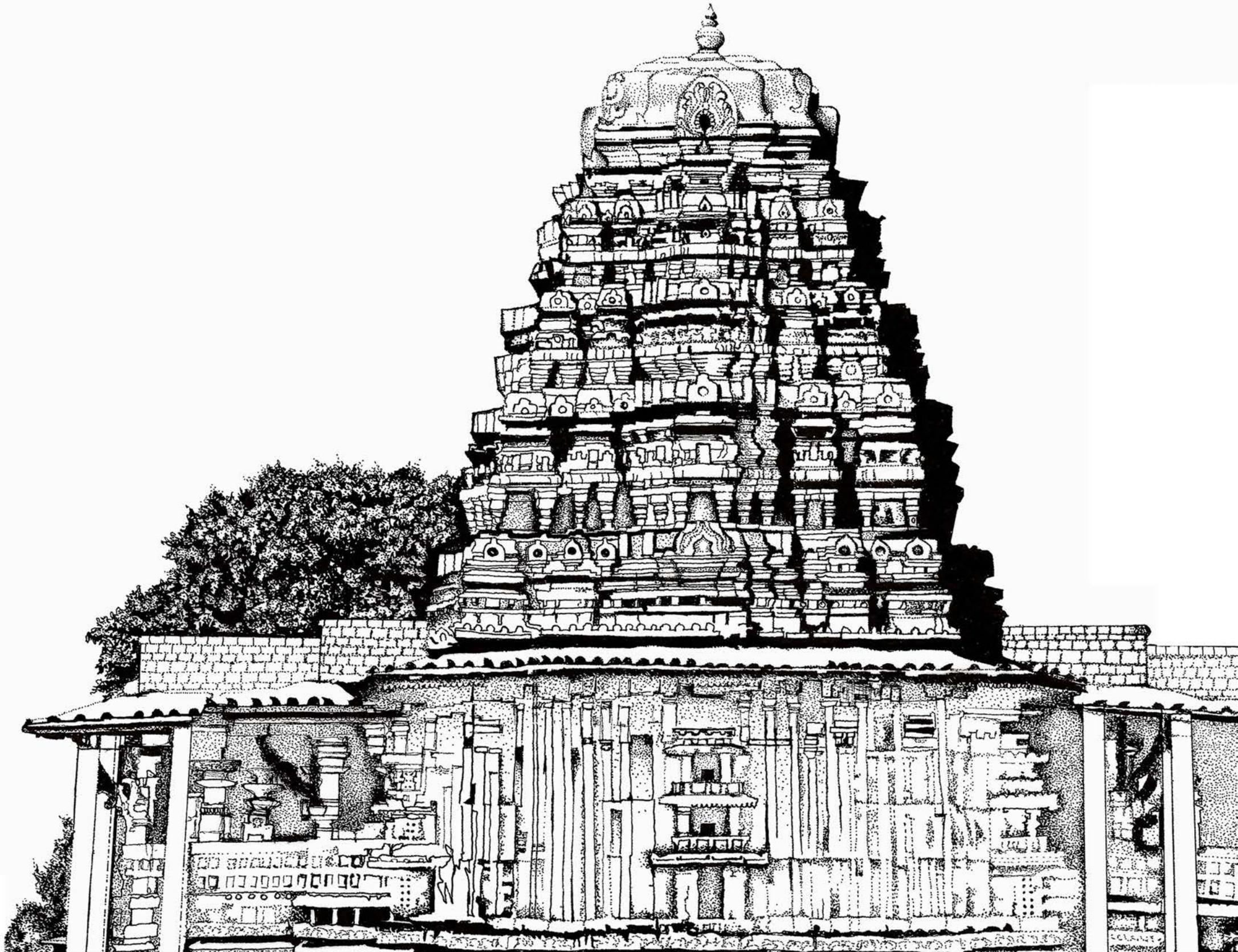


ANNEXURE III
Maps, Drawings and Illustrations



THE GLORIOUS KAKATIYA TEMPLES AND GATEWAYS
RUDRESHWARA (RAMAPPA) TEMPLE
AT PALAMPET (JAYASHANKAR DISTRICT), TELANGANA STATE, INDIA
AS WORLD HERITAGE SITE

Prepared by
Team of **GSV Suryanarayana Murthy**,
Conservation Architect

Coordination
Prof M.Pandu Ranga Rao,
Kakatiya Heritage Trust, Warangal

Cover Design, Inner Design
Kshetra Team.

ANNEXURE III – Maps, Drawings and Illustrations
NOMINATION DOSSIER- for inscription of
The Glorious Kakatiya Temples and Gateways
Rudreshwara (Ramappa) Temple at
Palampet (Jayashankar Bhupalpally District), Telangana State, India
as World Heritage Site

Cover
Front: Huntress *Madanika* of the Bracket figure and *Vimana*
Rear: *Sivatandava* pose on Ceiling in Dolerite

Hyderabad, Telangana State, India
November- 2017

Directorate of Archaeology and Museums Department
(Under Ministry of Youth Advancement, Tourism and Culture),
Government of Telangana
Opposite to Lepakshi Handicrafts Emporium,
Gunfoundry, Abids, Hyderabad – 500 001, Telangana State, India
Off: + 91-40-23234942 | Fax: +91-40-23234942
E-mail: dirtsarch@gmail.com

Geographical Maps

1. Rudreshwara Temple on World Map & Telengana State as a political entity on India Map
2. Rudreshwara (Ramappa) Temple, Jayashankar Bhupalpally district, Telangana State
3. Topography map of the Core zone and Buffer zone of the nominated property in its Context
4. Topography map of the Rudreshwara (Ramappa) Temple and its surroundings
5. Map of Buffer zone-Rudreshwara (Ramappa) Temple precinct
6. Map of Core zone-Rudreshwara (Ramappa) Temple precinct
7. Total Station survey Map of Rudreshwara (Ramappa) Temple

Geo-Cultural Maps of Deccan Plateau

- a) The Spread of Chalukyas
- b) The Chalukyas split mainly in Hoysala, Kakatiyas and Yadavas
- c) Expansion of Bahamani and Vijayanagara Kingdoms

Measured Drawing Plates

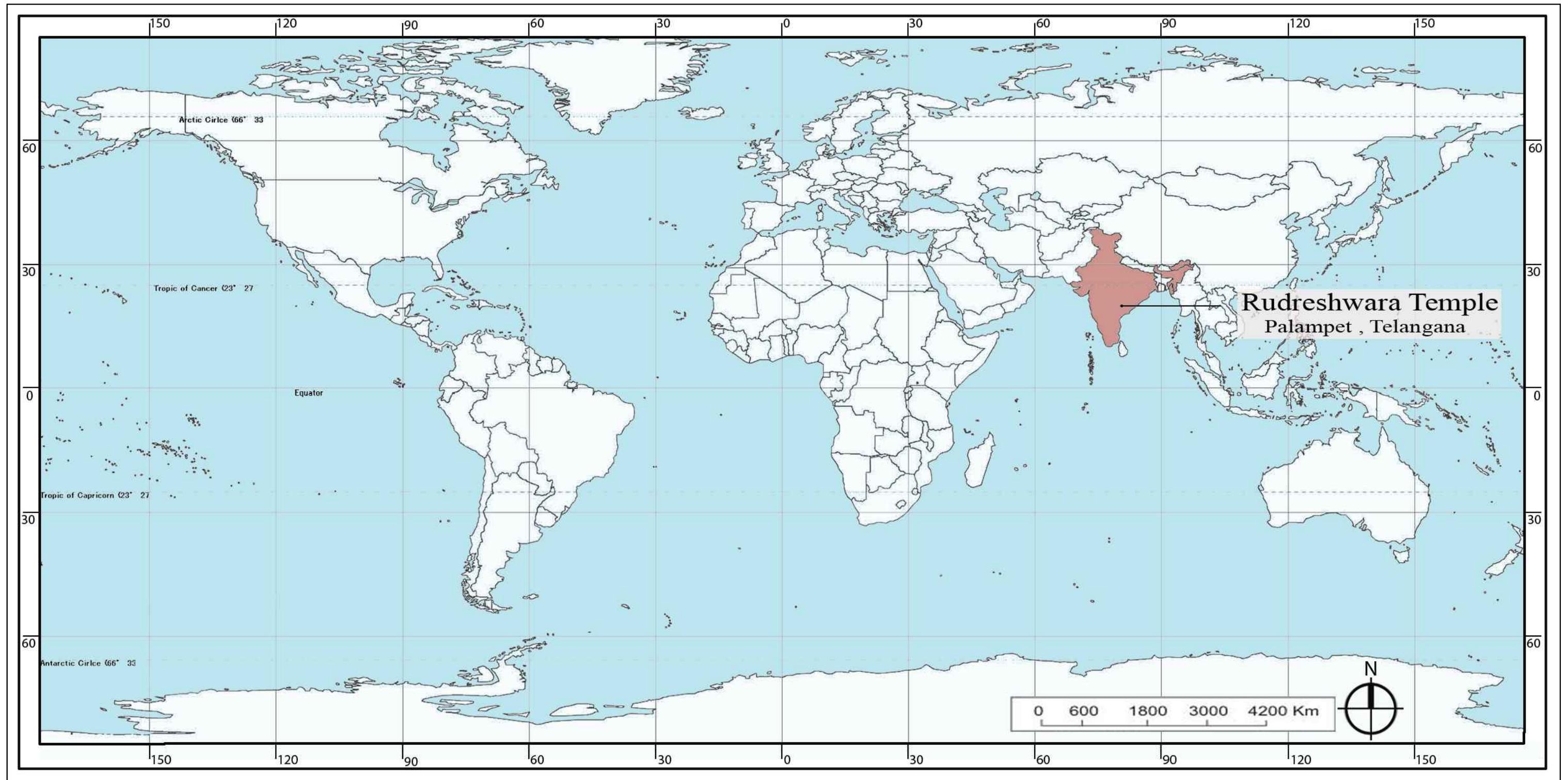
1. Rudreshwara (Ramappa) Temple Precinct – Aerial Plan
2. Rudreshwara Temple Plan and *Nandi Mandapa*
3. Rudreshwara Temple South Elevation & Longitudinal Section
4. Rudreshwara Temple East Elevation & Cross Section
5. *Kateshwara* Temple
6. *Kameshwara* Temple (*Kalyana Mandapa*)
7. *Pakashala* & Inscription Pillar
8. *Nandi Mandapa* - Ramappa Temple
9. *Devakosta* (Aedicule)– Ramappa Temple
10. *Vimana* – Ramappa Temple

11. *Upapitha. Adhisthana. Padavarga*. – Ramappa Temple
12. Kakatiyan Columns in Ramappa Temple precinct
13. *Padavarga* profile and *Kapota* – Ramappa Temple
14. *Kadalikakarana* – Ramappa Temple
15. Reflected Ceiling Layout and details – Ramappa Temple
16. Reflected ceiling plan of *Natya Mandapa* – Ramappa Temple
17. Architrave of *Antrala Dwara* – Ramappa Temple
18. *Madanikas, Gajayalas* as Lateral supports – Ramappa Temple
19. *Madanikas* – Lateral supports – Ramappa Temple
20. *Madanikas* - Lateral supports – Ramappa Temple

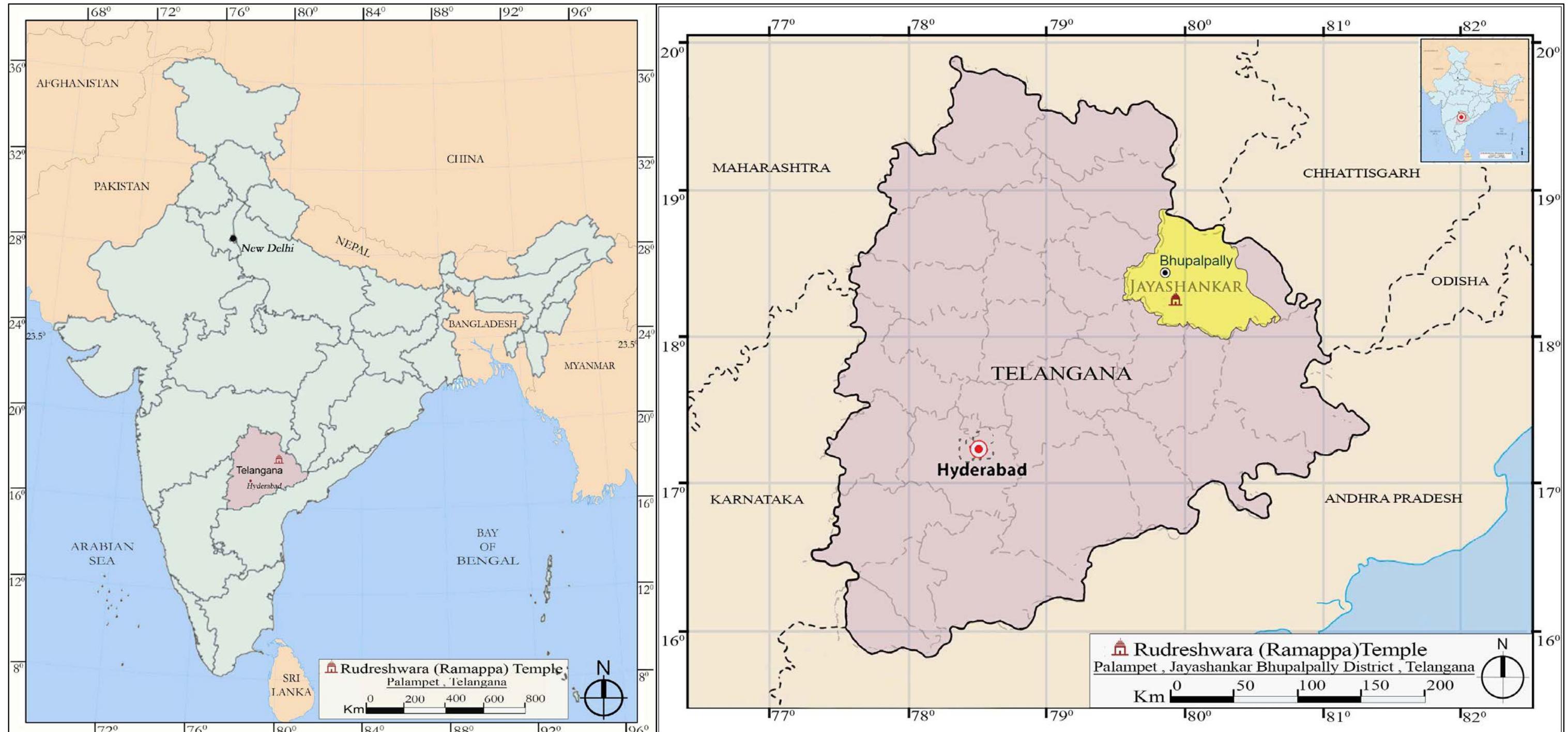
Illustrations for Criteria

1. Criteria (i)
2. Criteria (ii)
3. Criteria (iii)

Geographical Maps

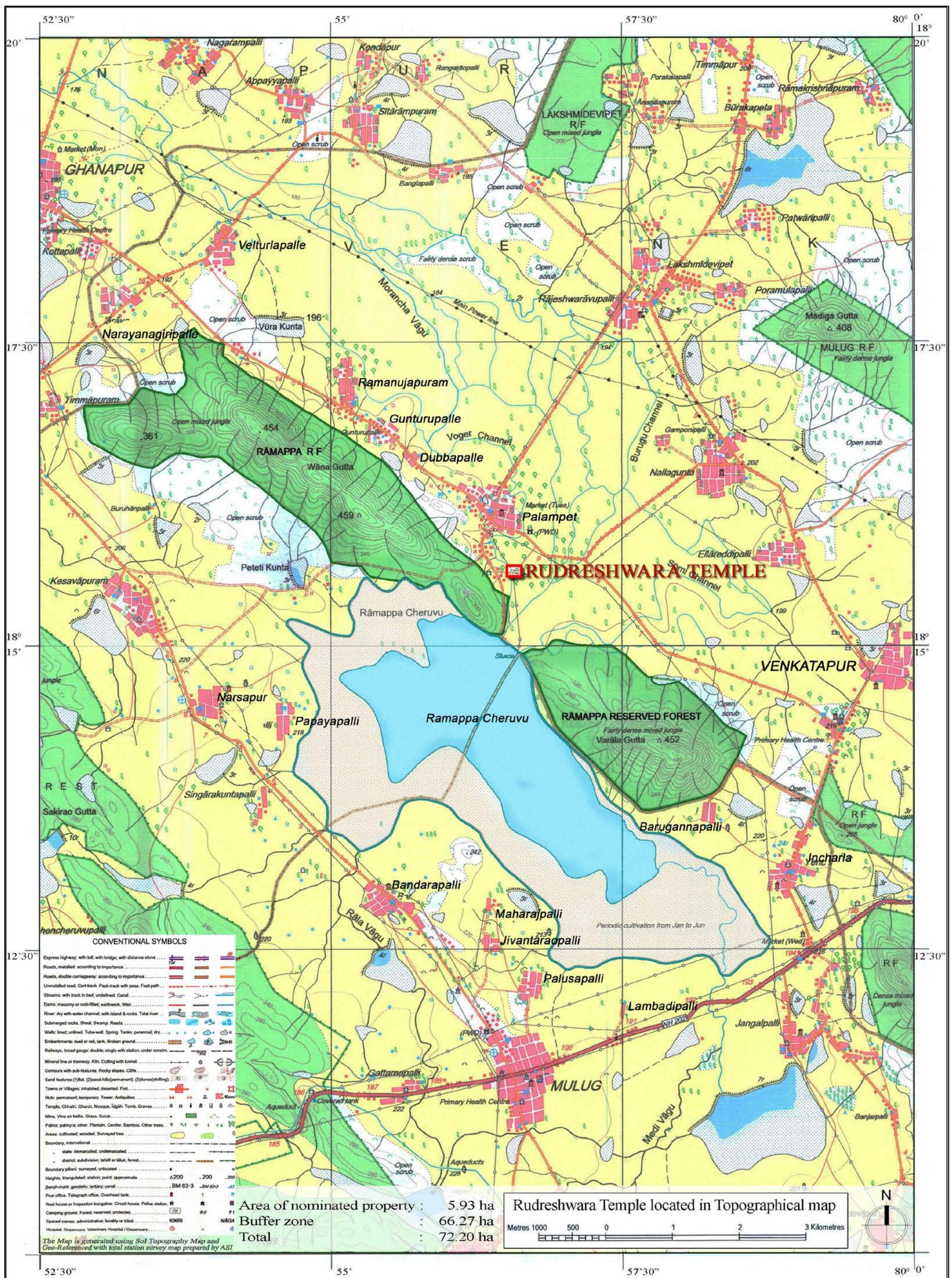


Rudreshwara Temple located on World Map



Telengana State as a political entity in India

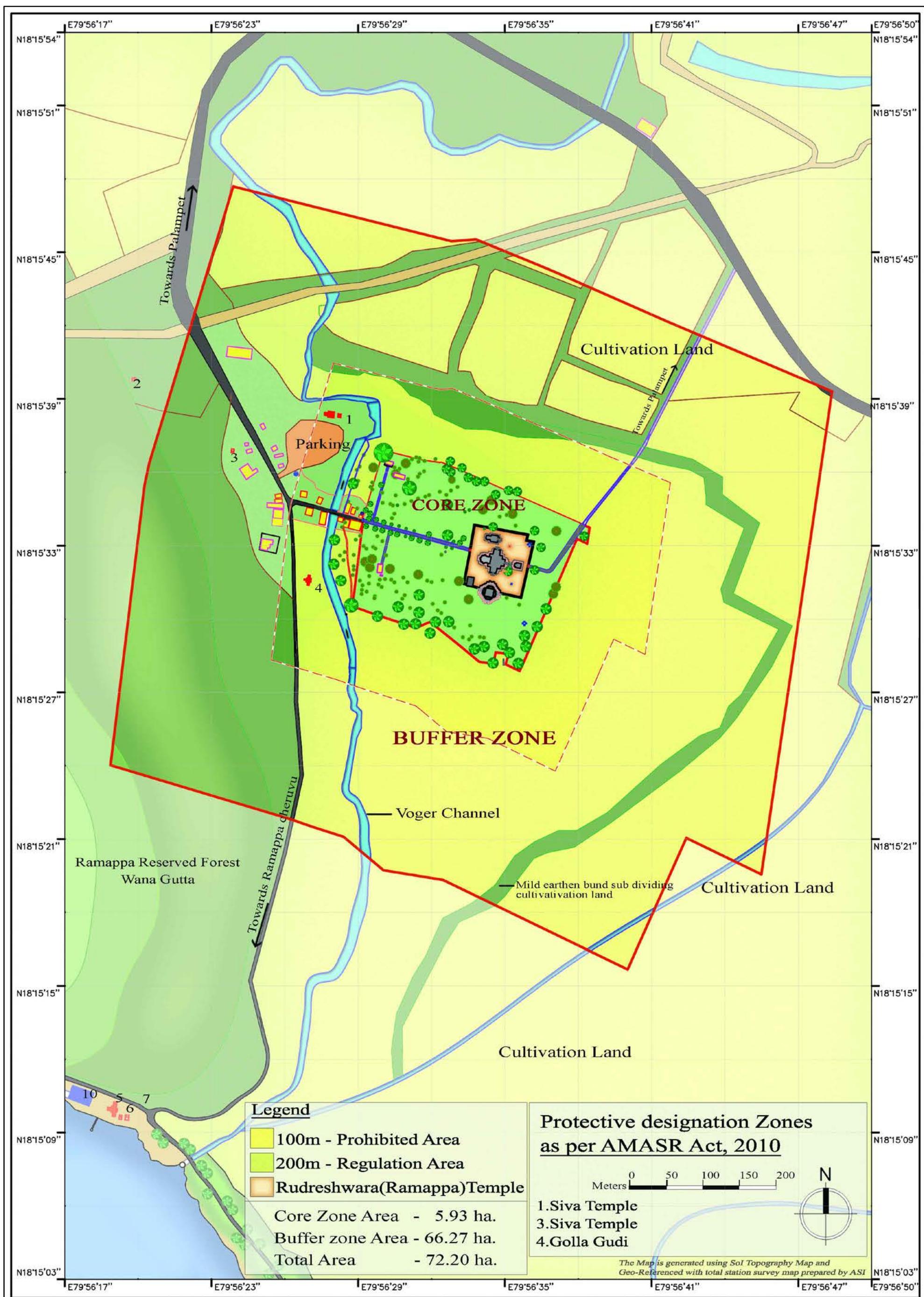
Rudreshwara(Ramappa) Temple,
Jayashankar Bhupalpally Dist; Telangana State



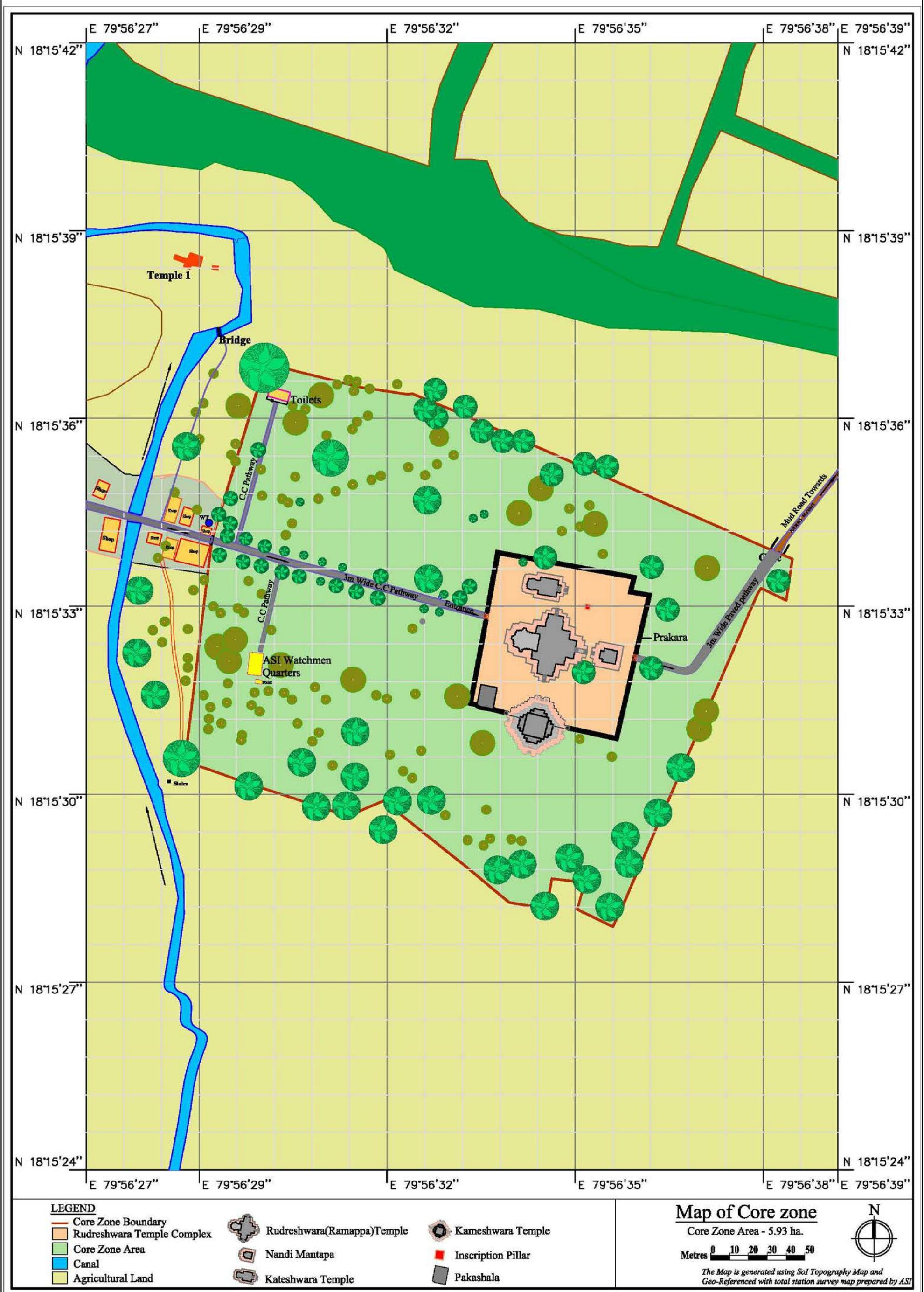
Topography map of the nominated property and its surroundings



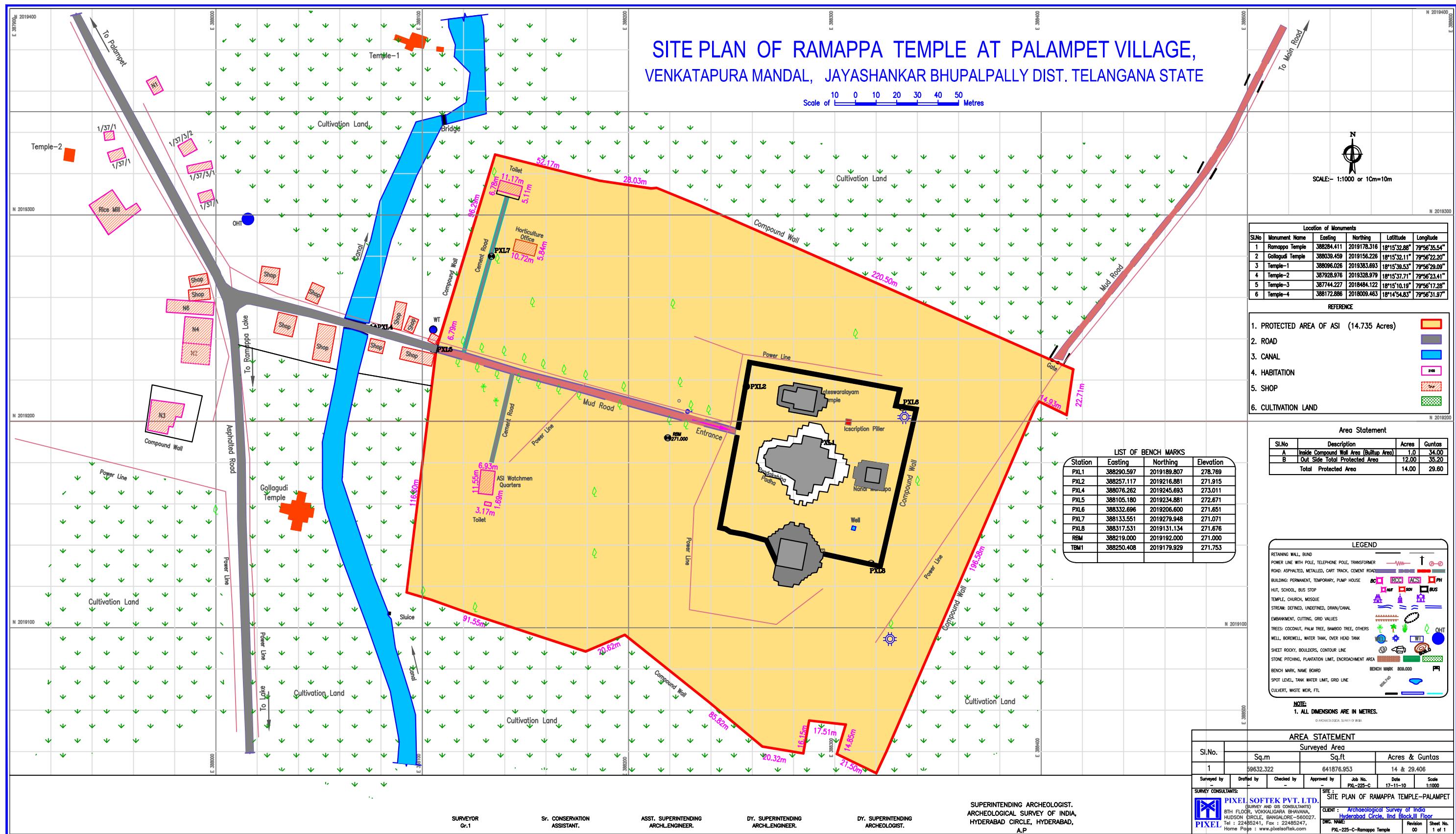
Topography map of the nominated property
- Rudreshwara (Ramappa) Temple



Map of buffer zone
Rudreshwara (Ramappa) Temple precinct

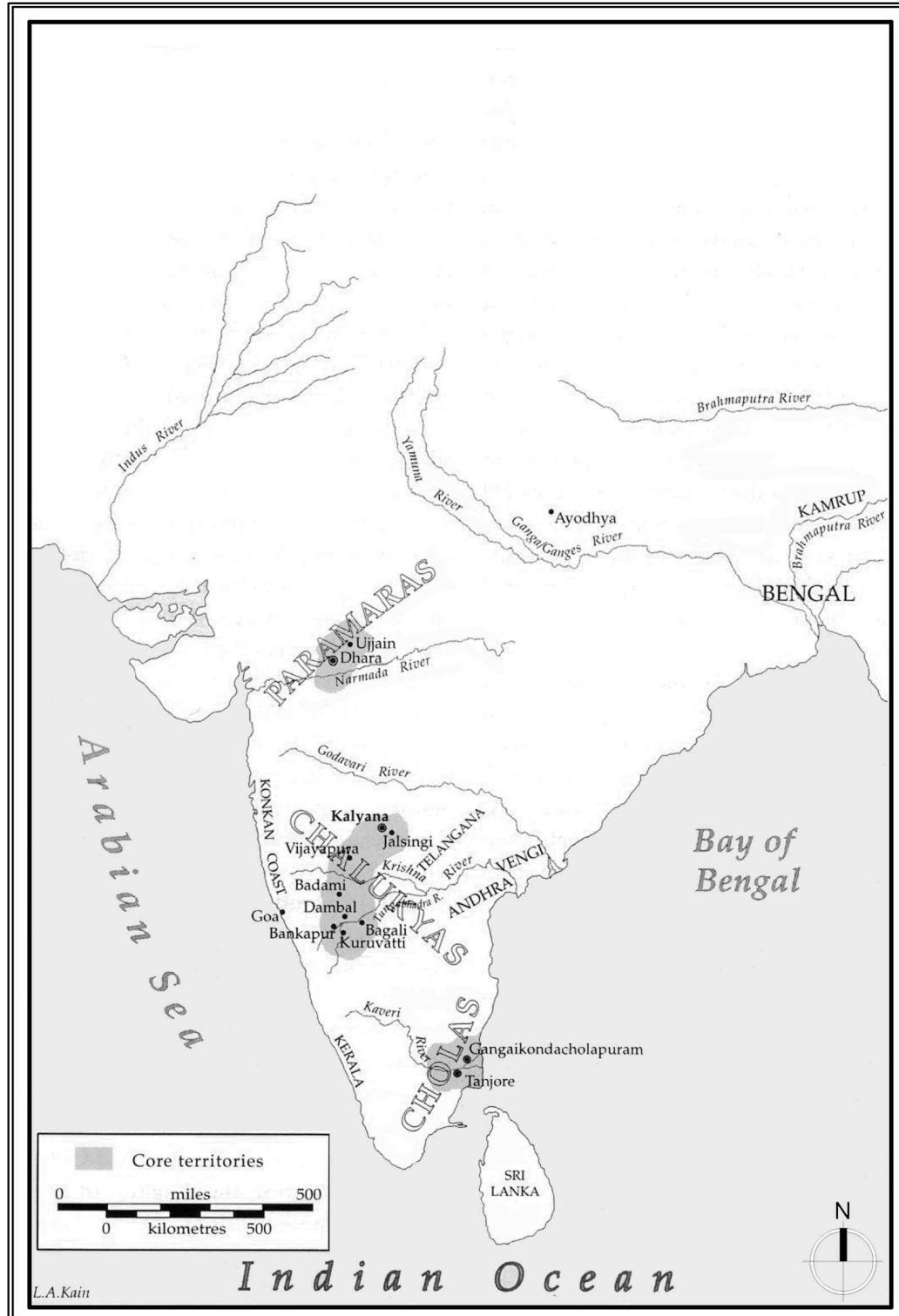


Map of Core zone
Rudreshwara (Ramappa) Temple precinct

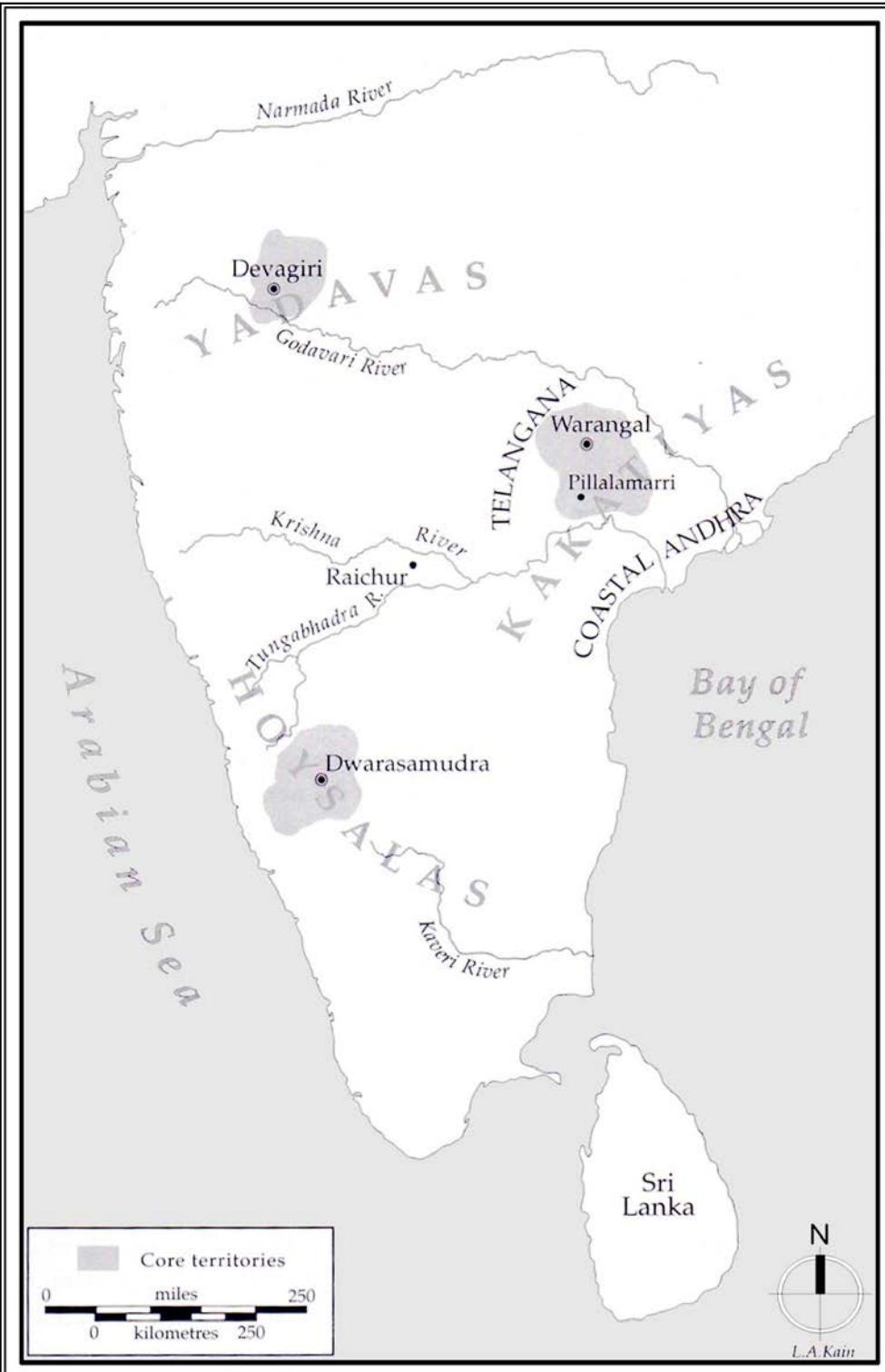


Total Station survey Map of Rudreshwara (Ramappa) Temple

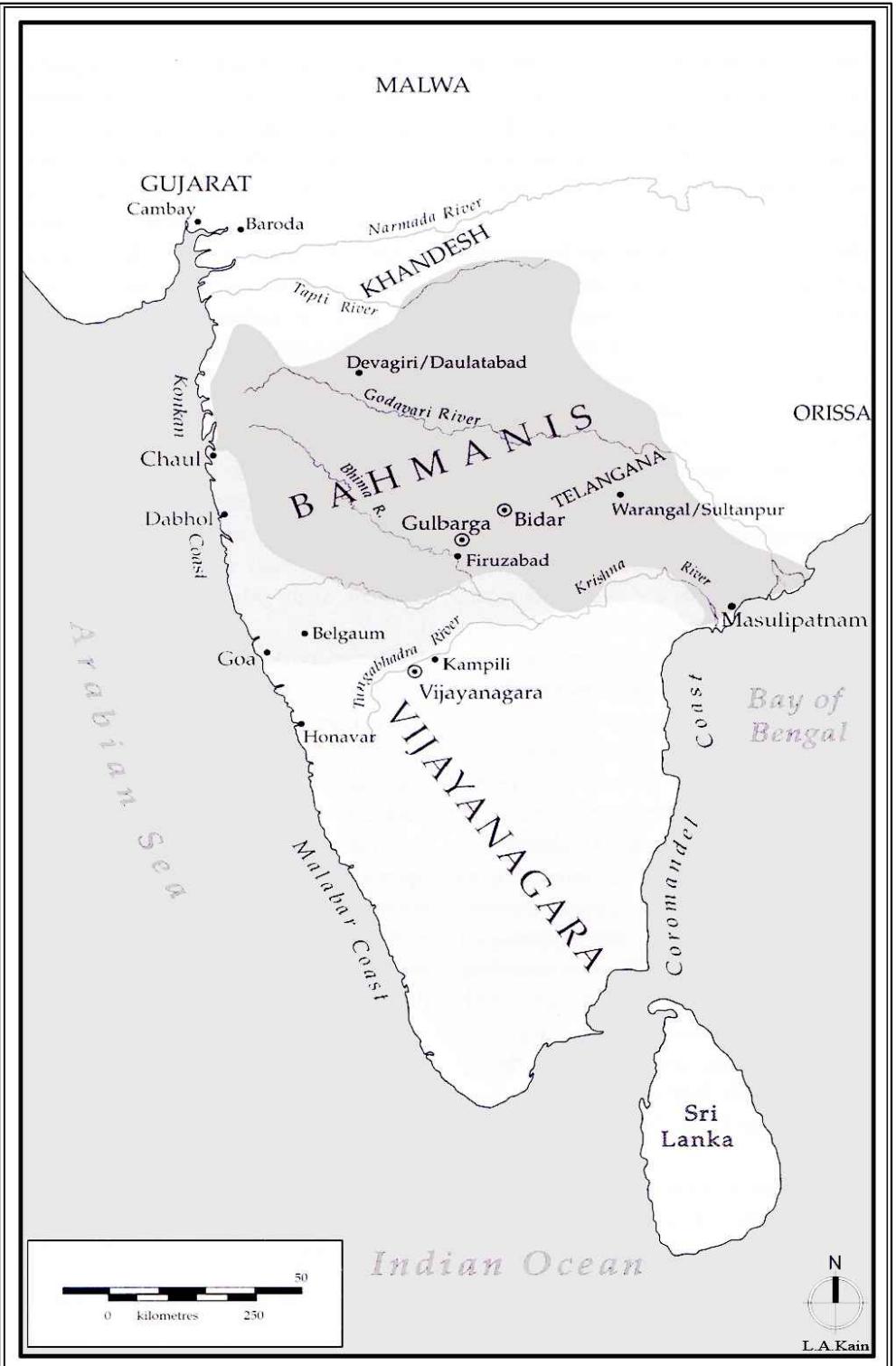
Geo-Cultural Maps of Deccan Plateau



The Spread of Chalukyas

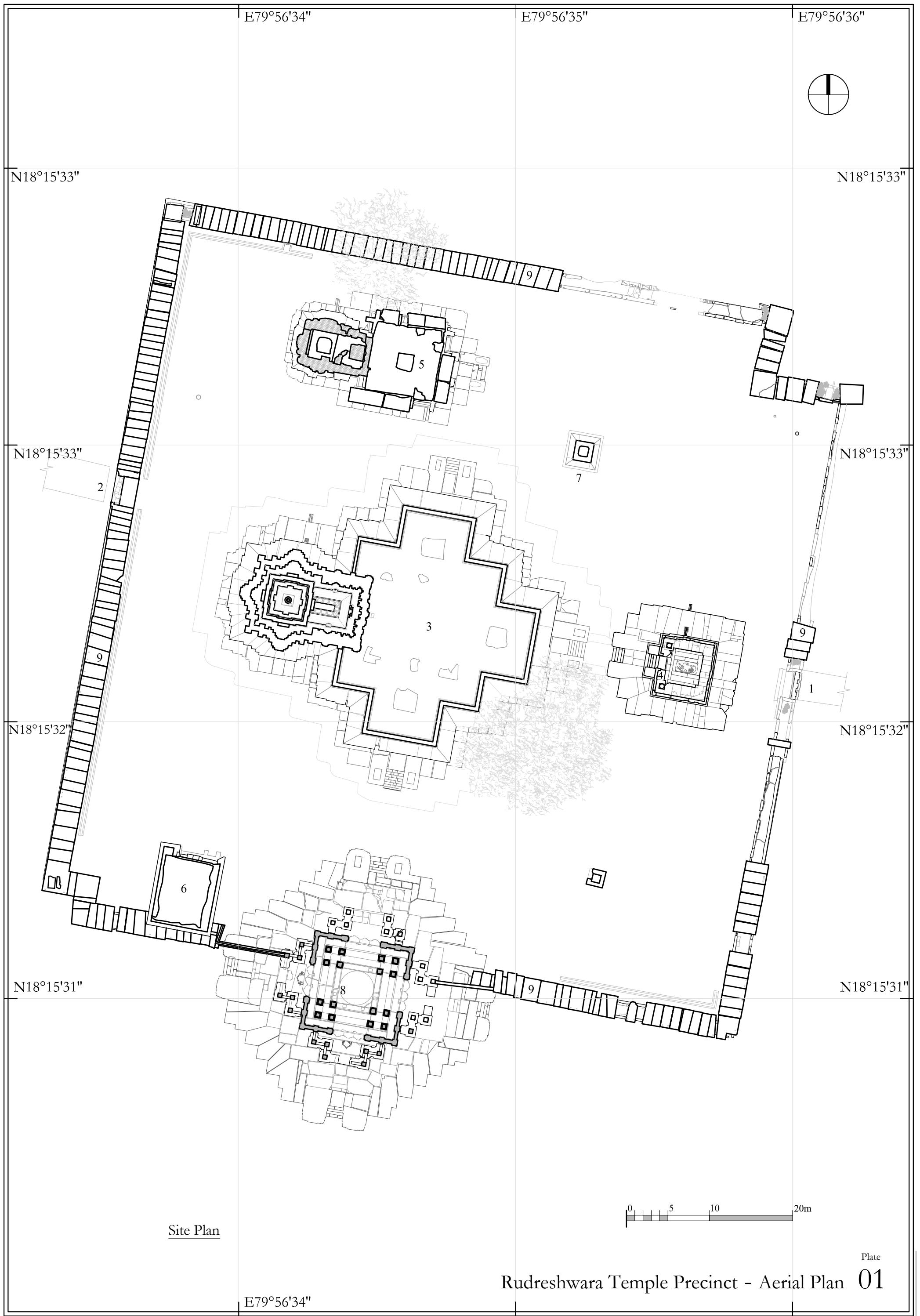


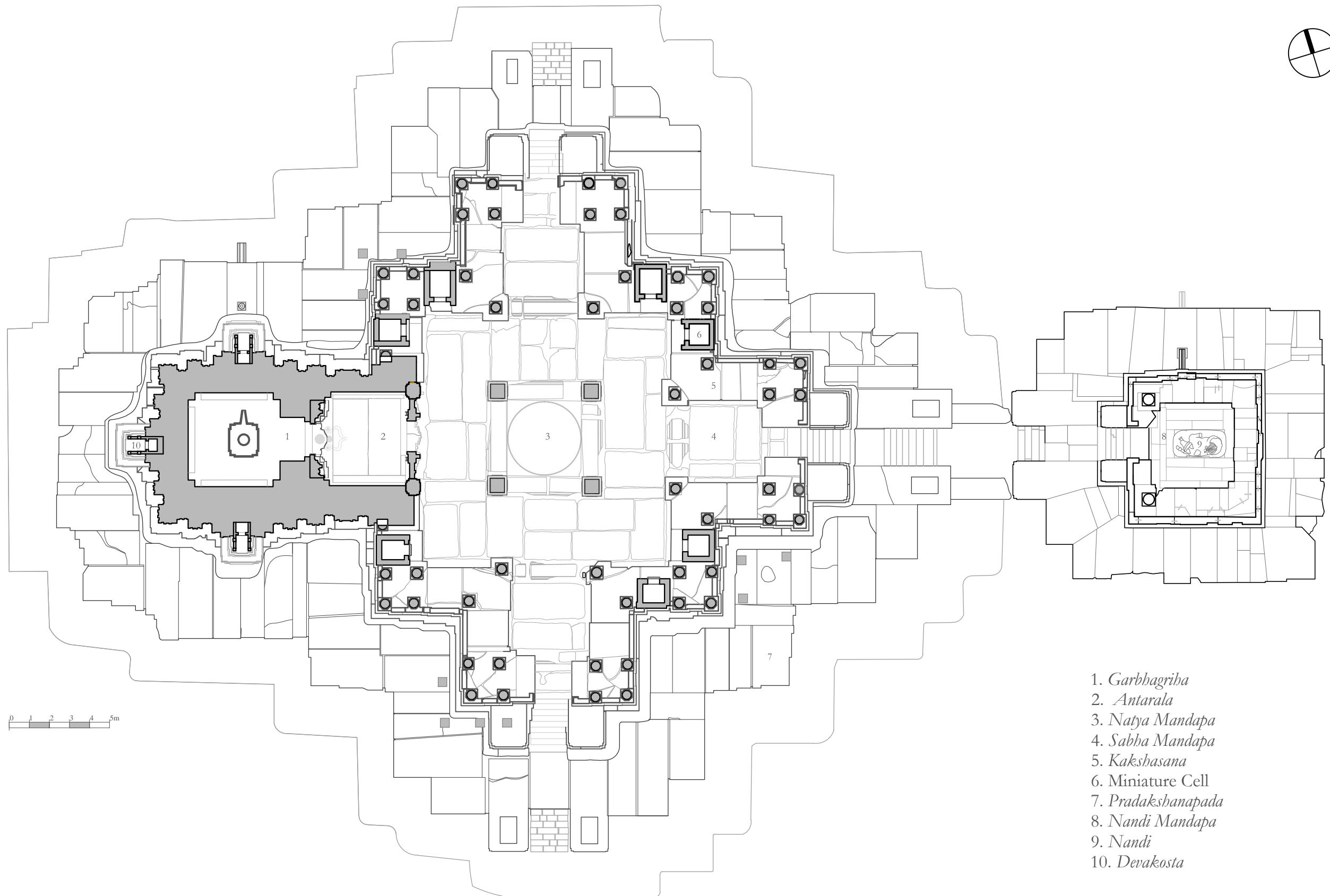
The Chalukyas split mainly in Hoysala,
Kakatiyas and Yadavas



Expansion of Bahamani and
Vijayanagara Kingdoms

Measured Drawing Plates

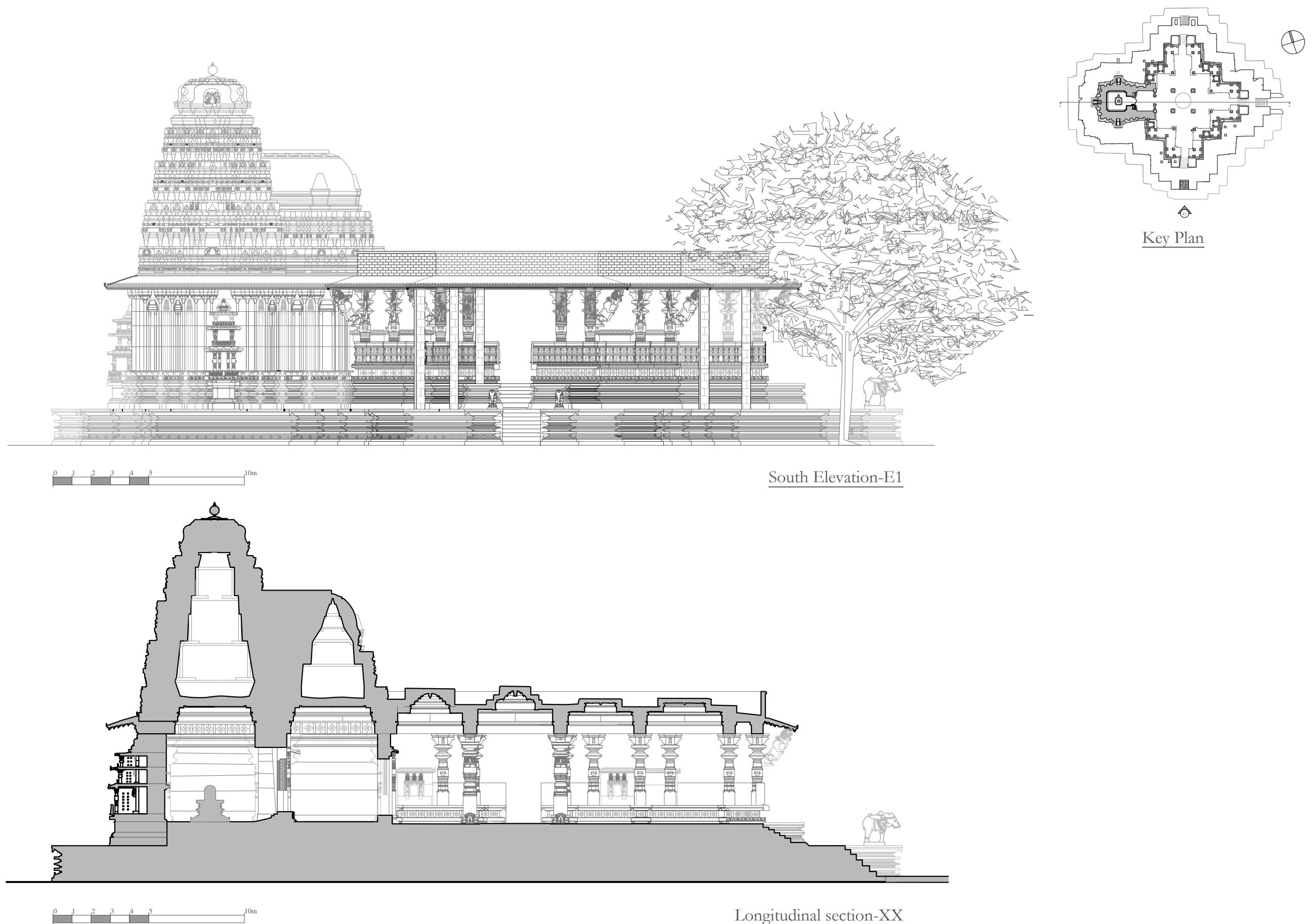




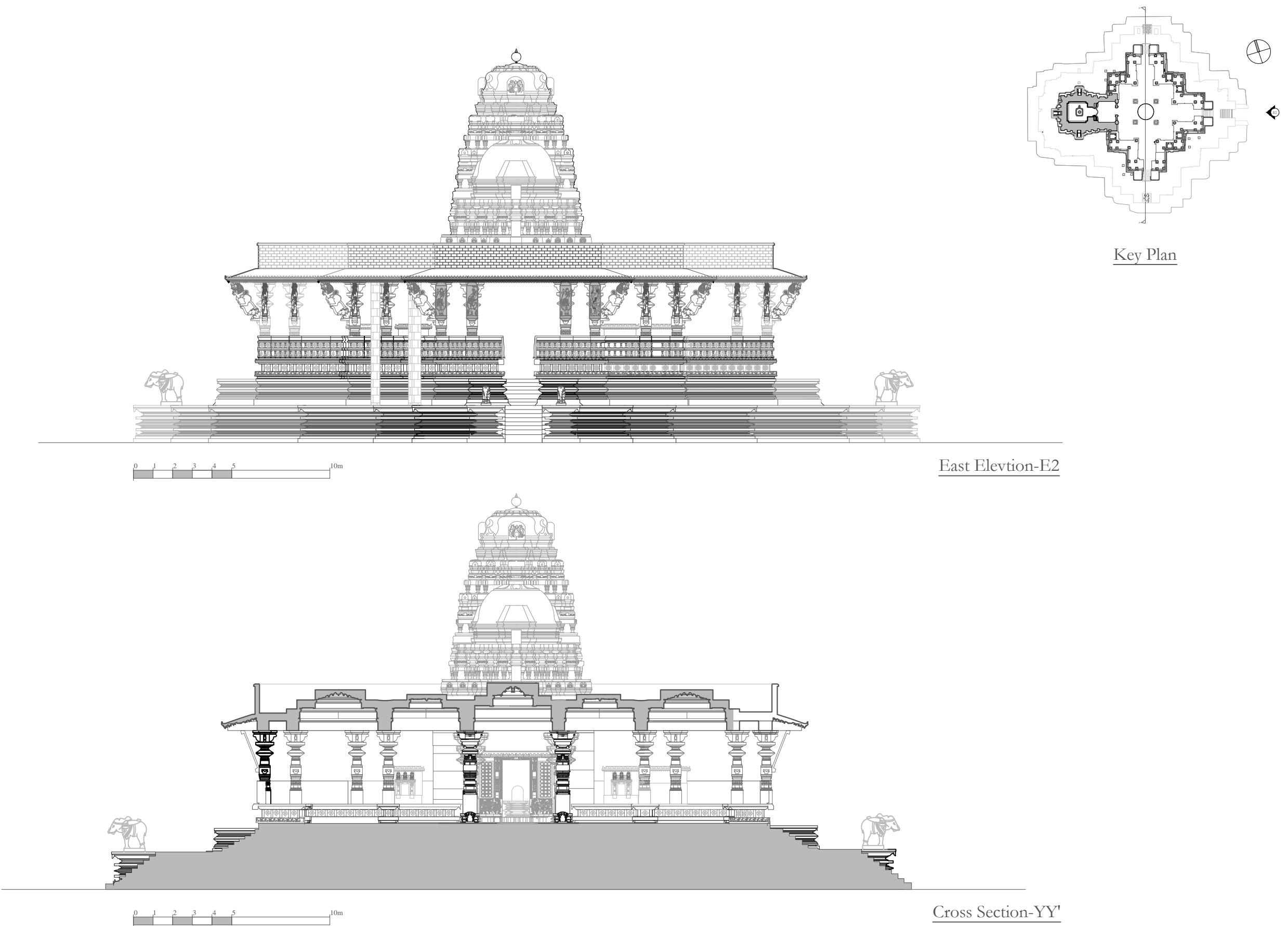
Rudreshwara Temple with *Nandi Mandapa*

Plate

02

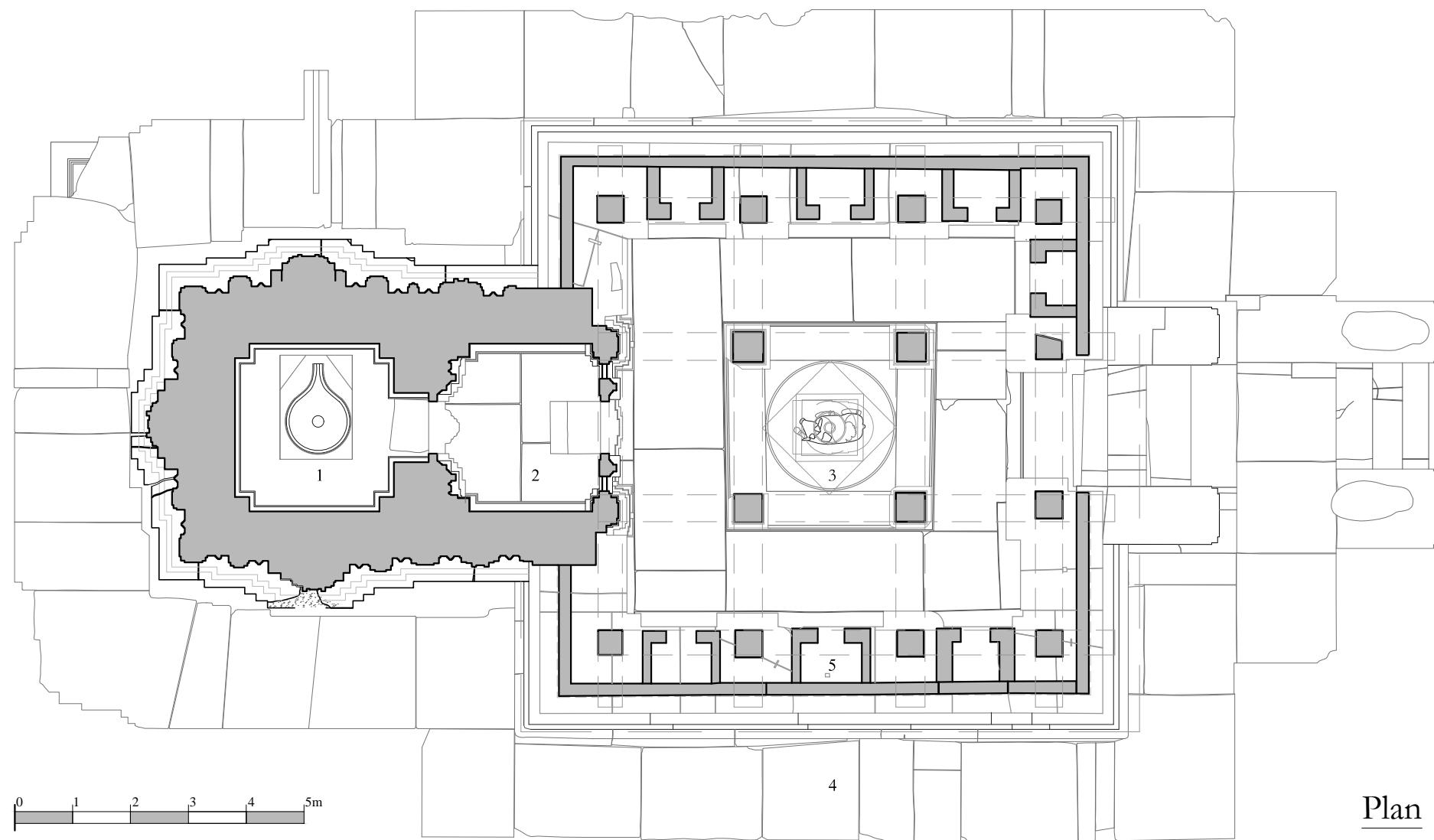
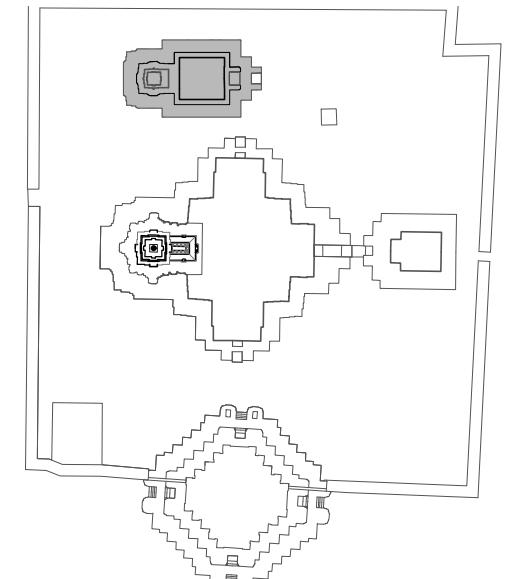
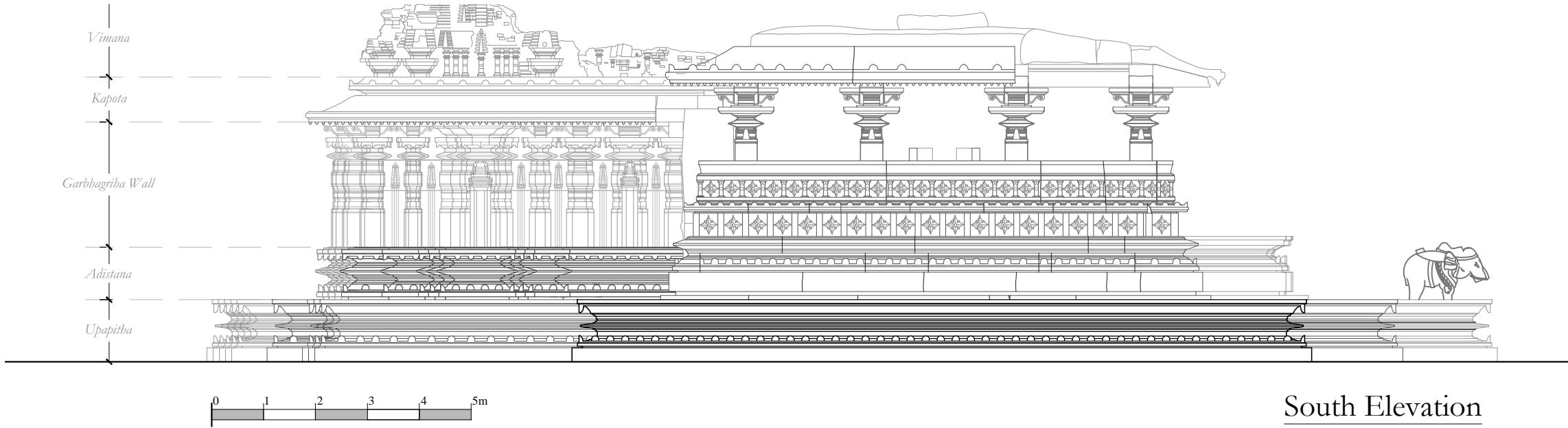


Rudreshwara Temple South Elevation & longitudinal section 03



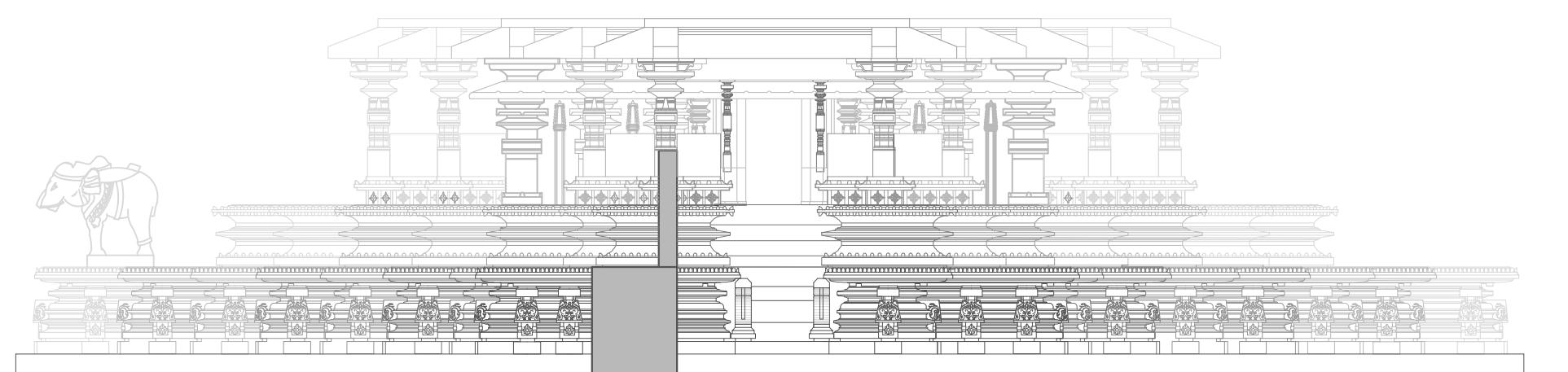
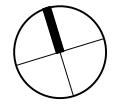
Rudreshwara Temple East Elevation & Cross Section 04

Plate

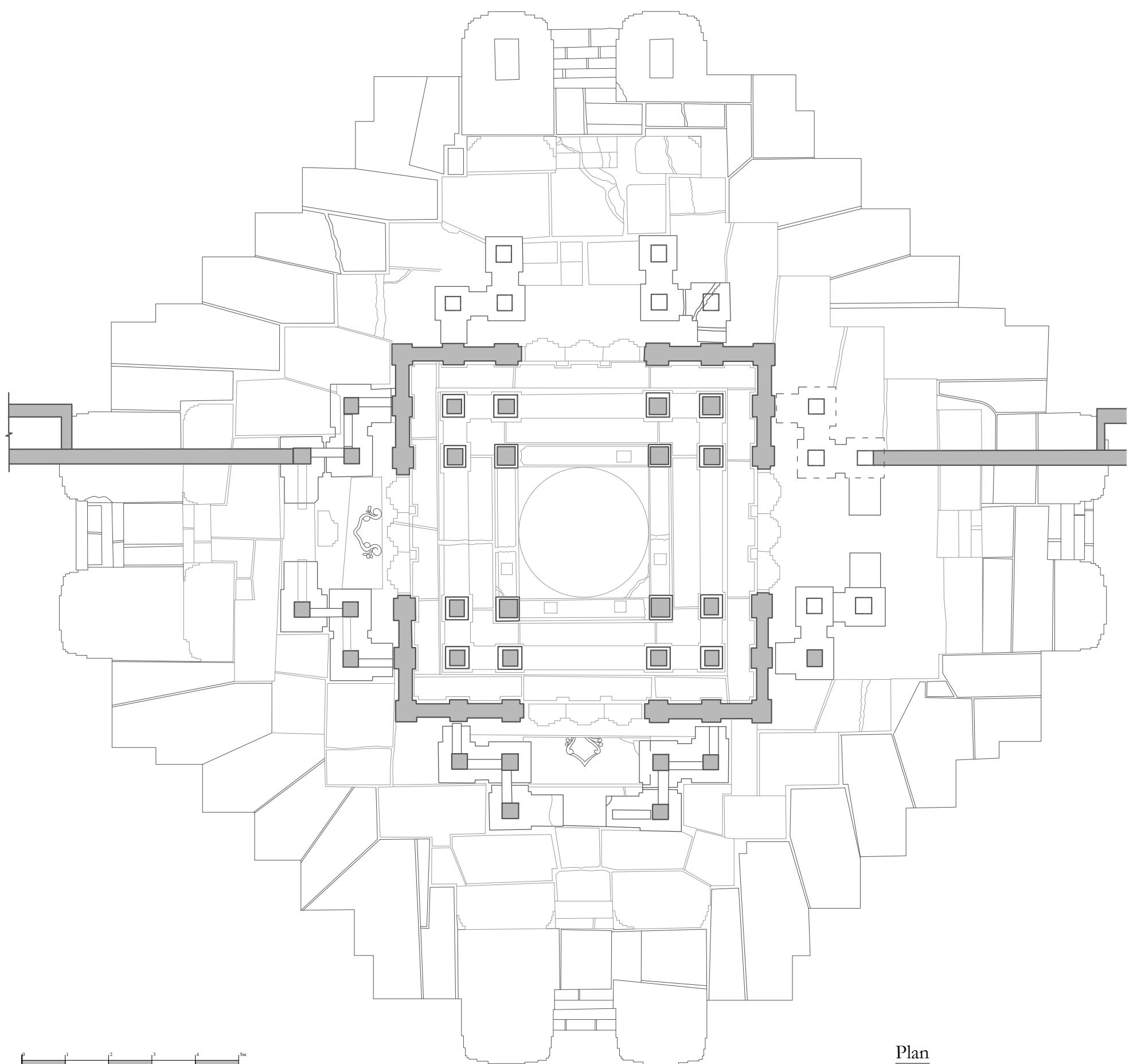


1. *Garbhagriha*
2. *Antarala*
3. *Mandapa*
4. *Pradakshinapatha*
5. Miniature cell

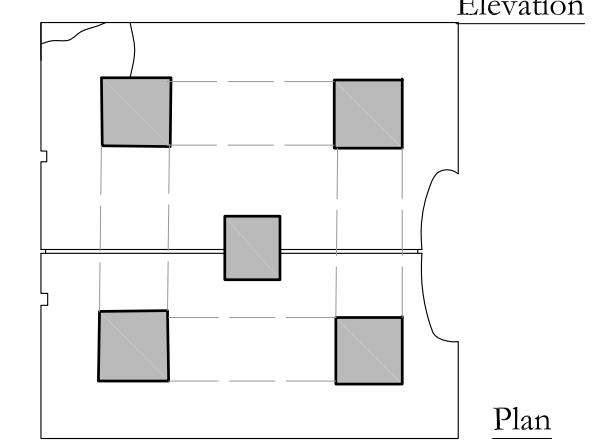
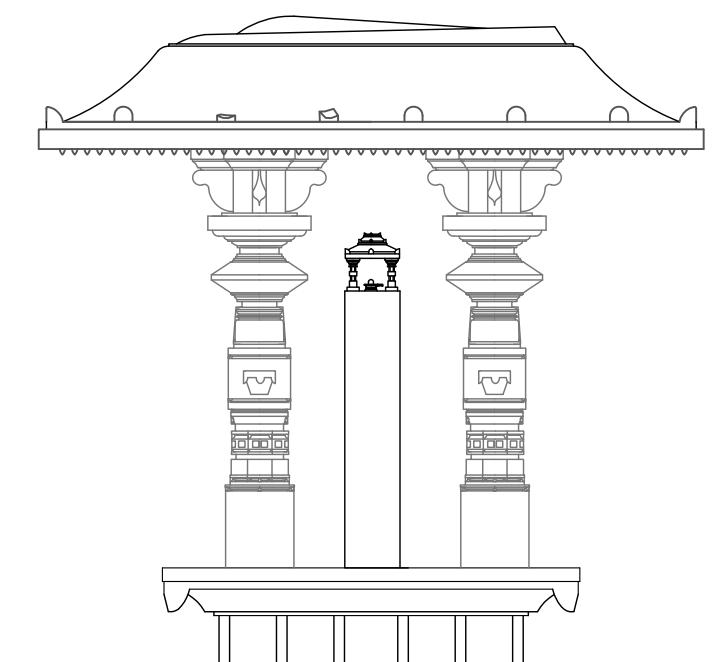
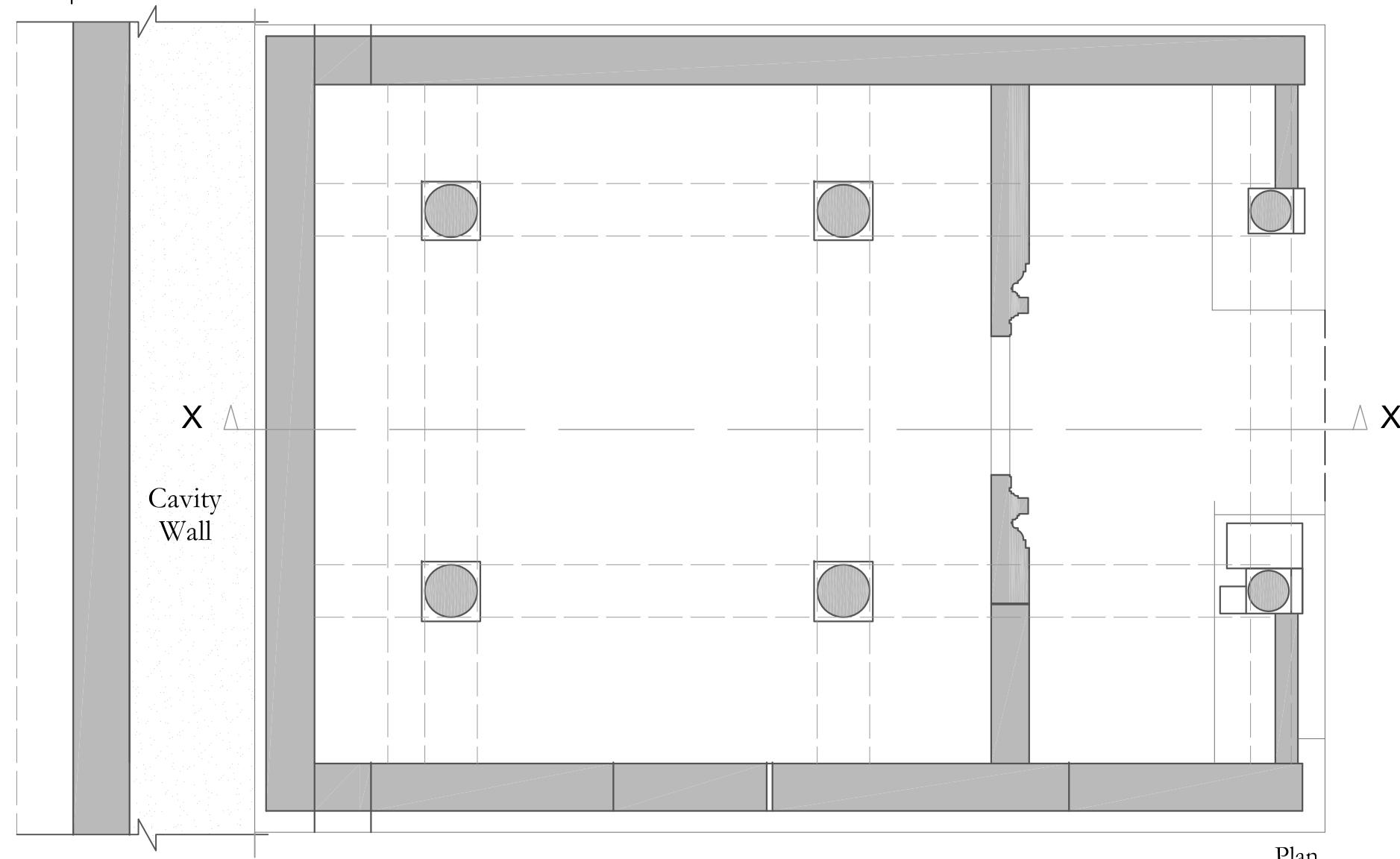
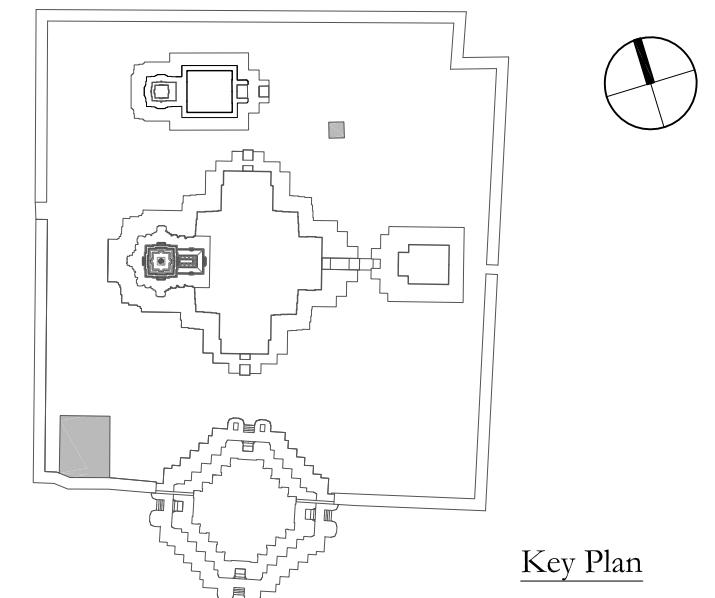
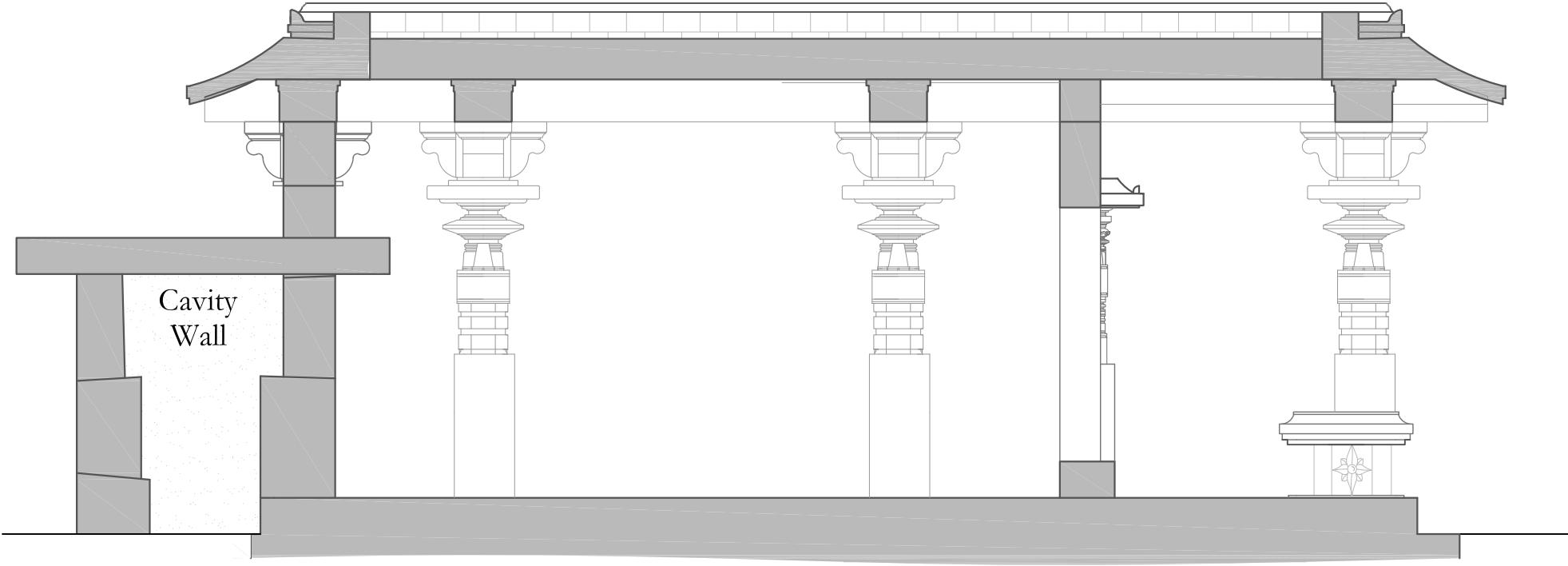
Plate



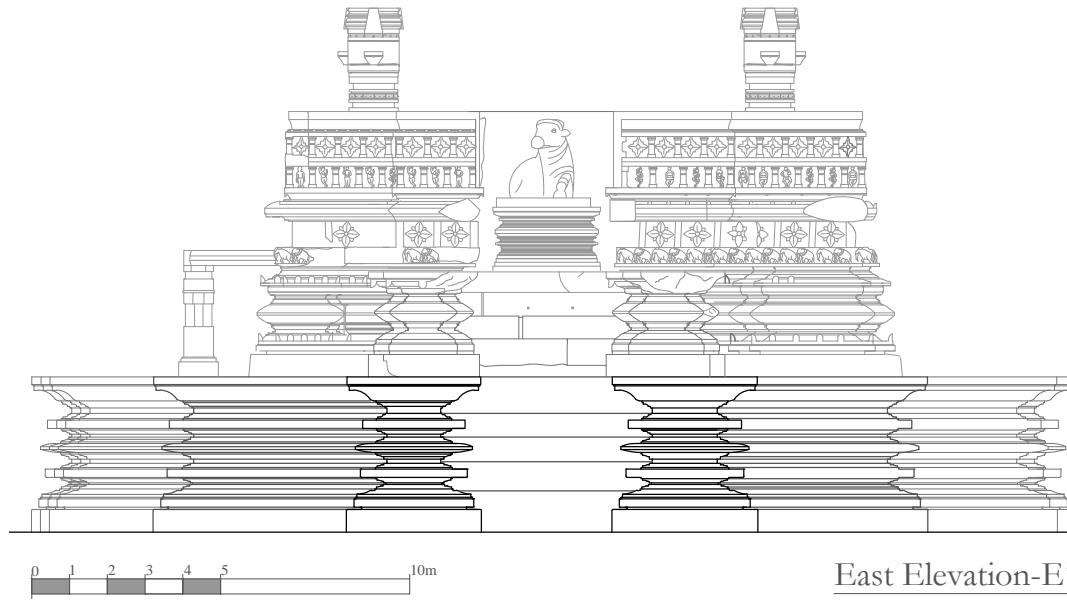
Elevation



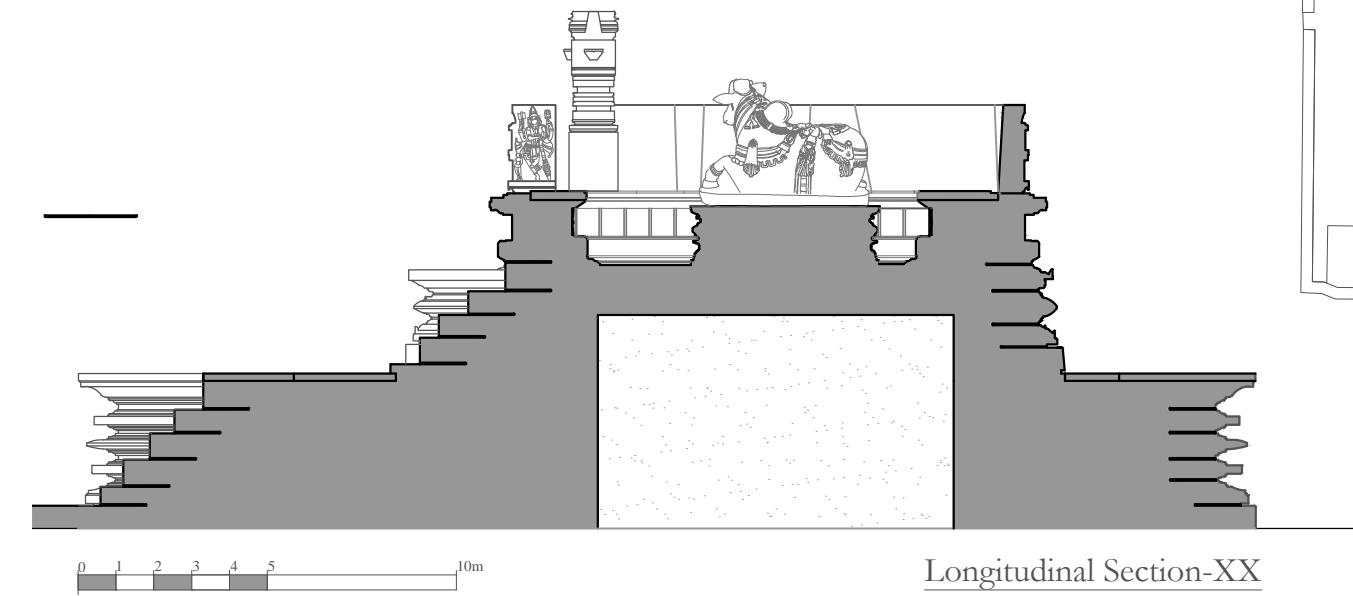
Plan



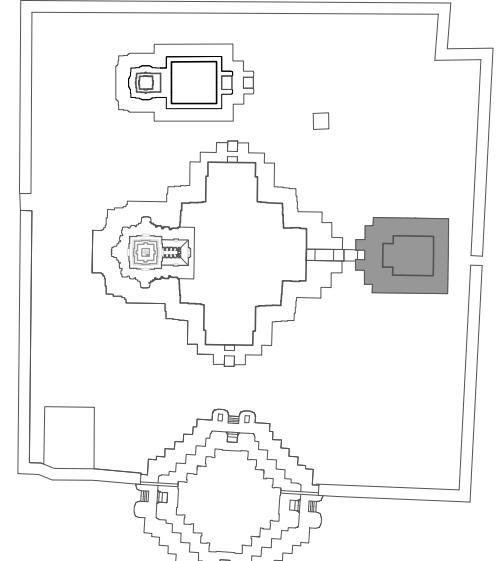
Pakashala & Inscription Pillar



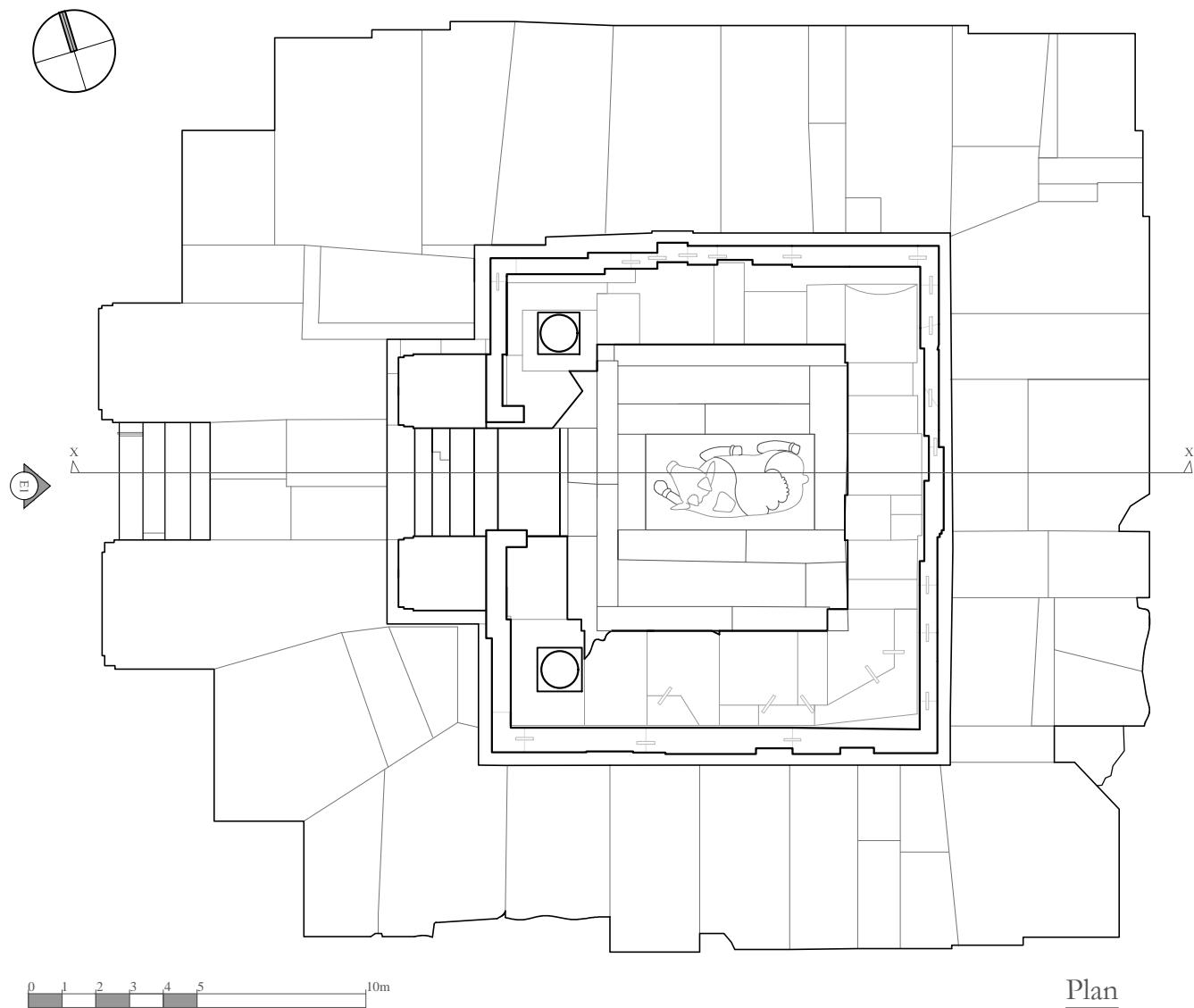
East Elevation-E1



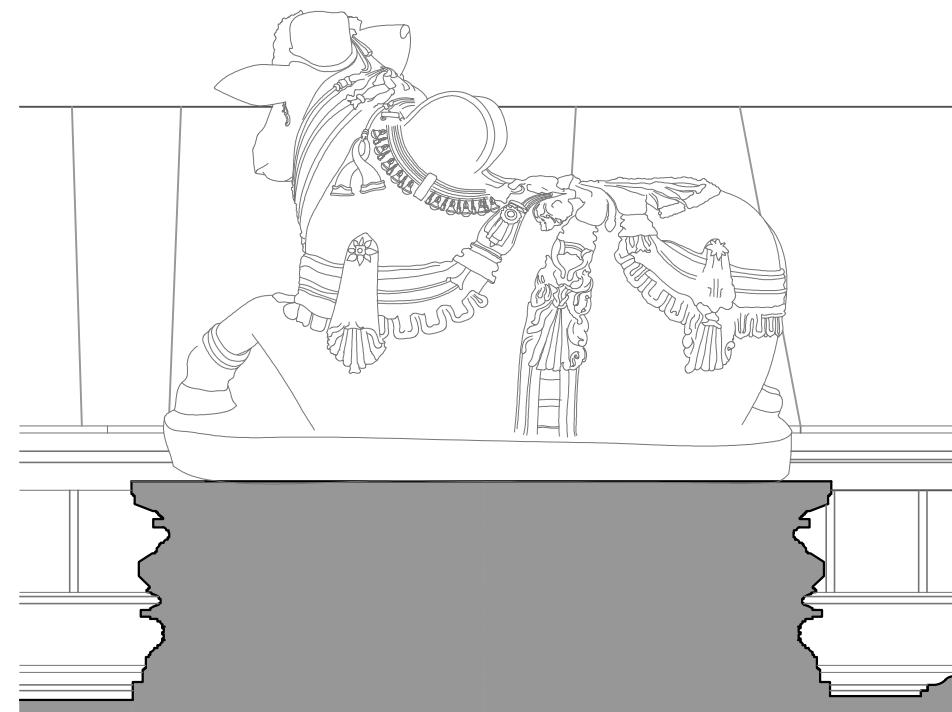
Longitudinal Section-XX



Key Plan

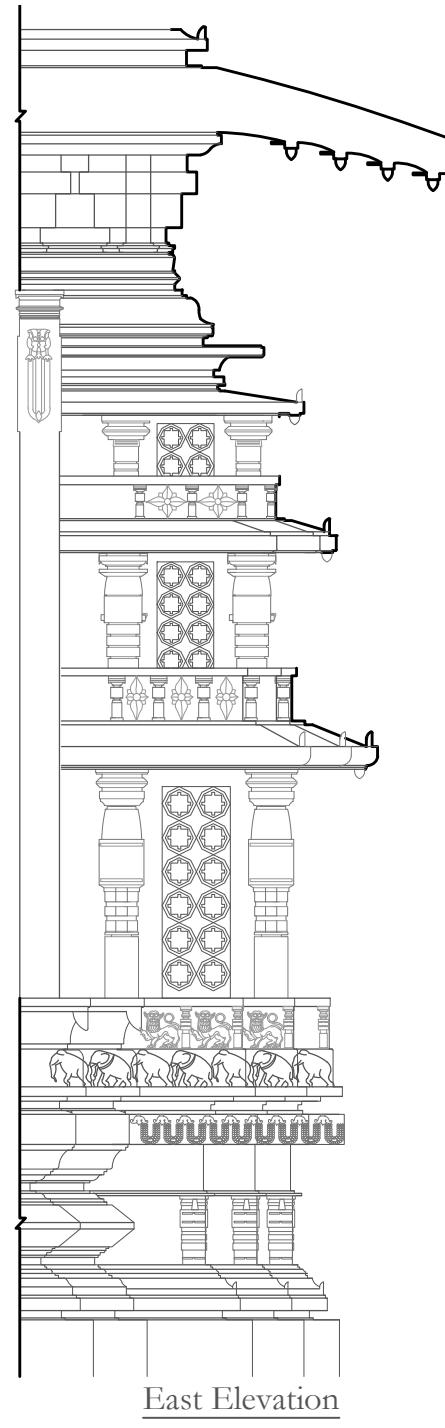


Plan

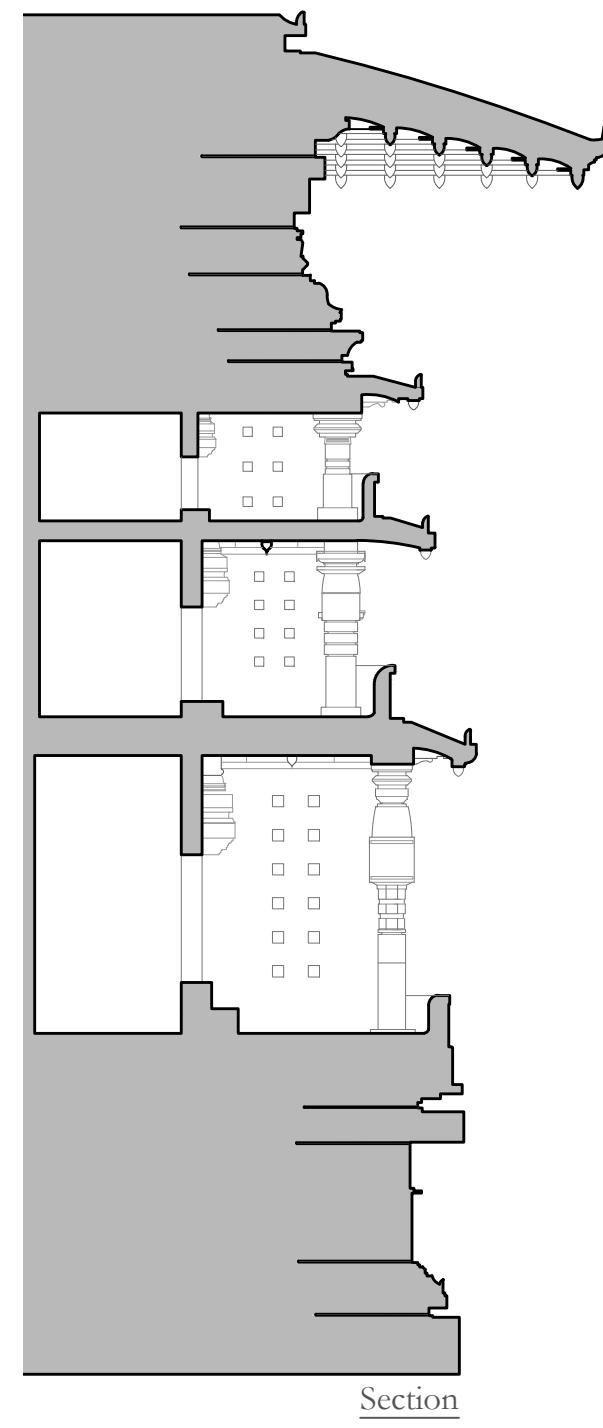
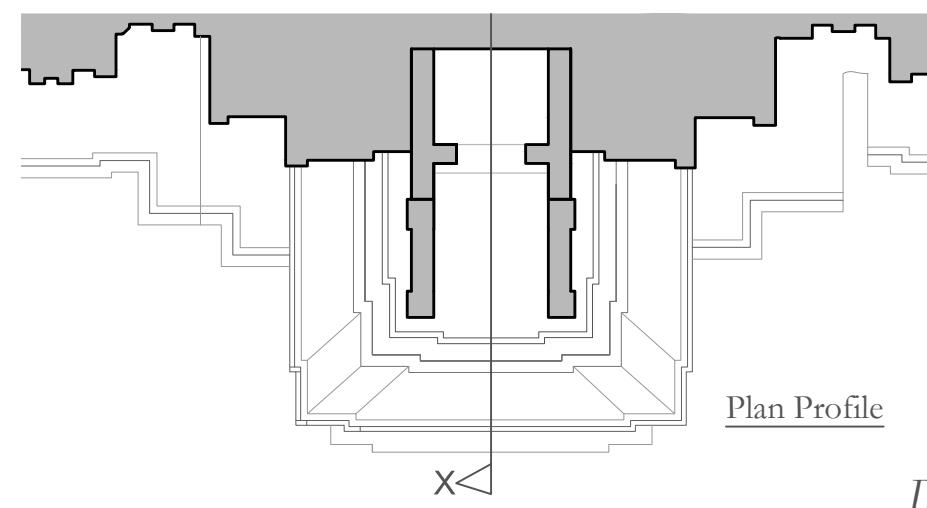
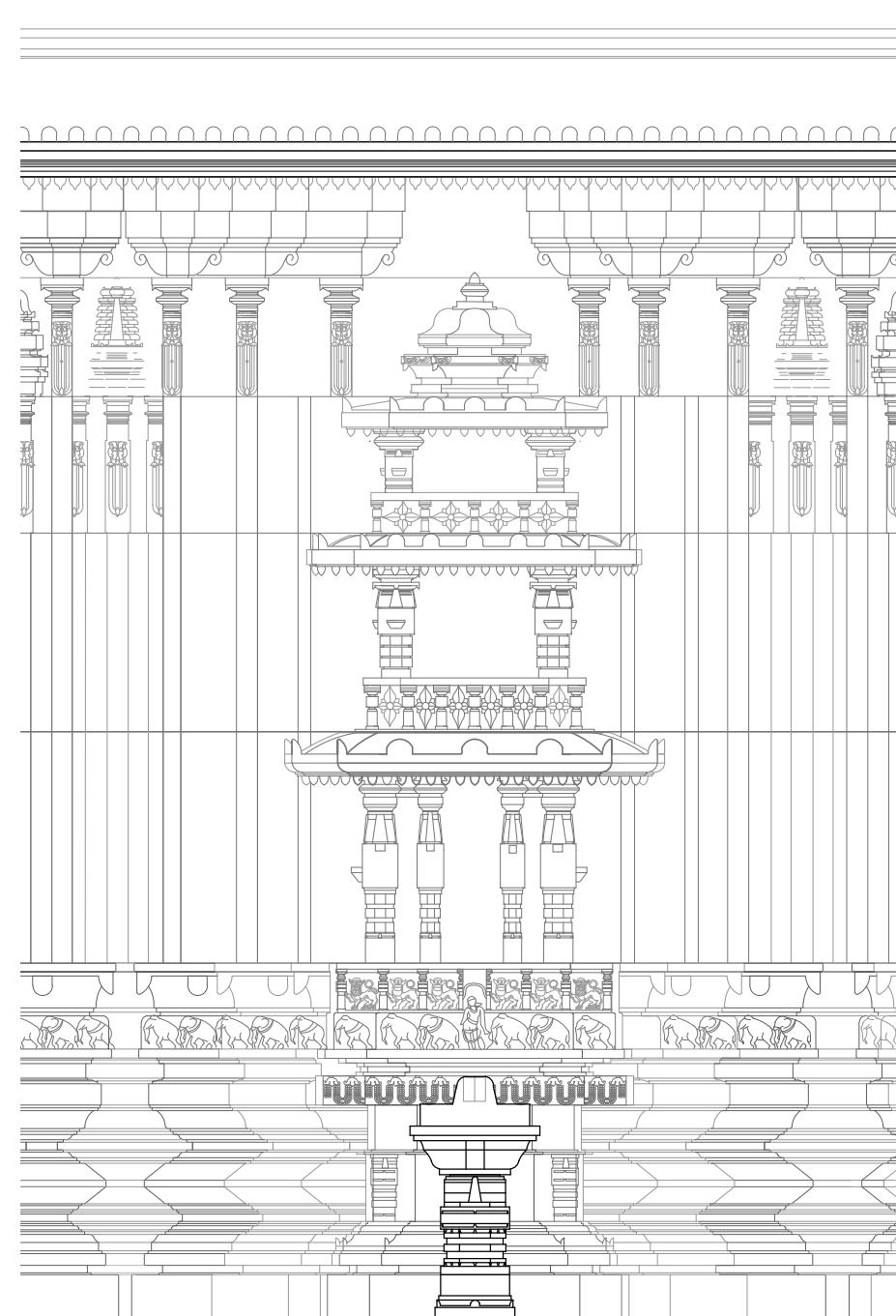


Nandi

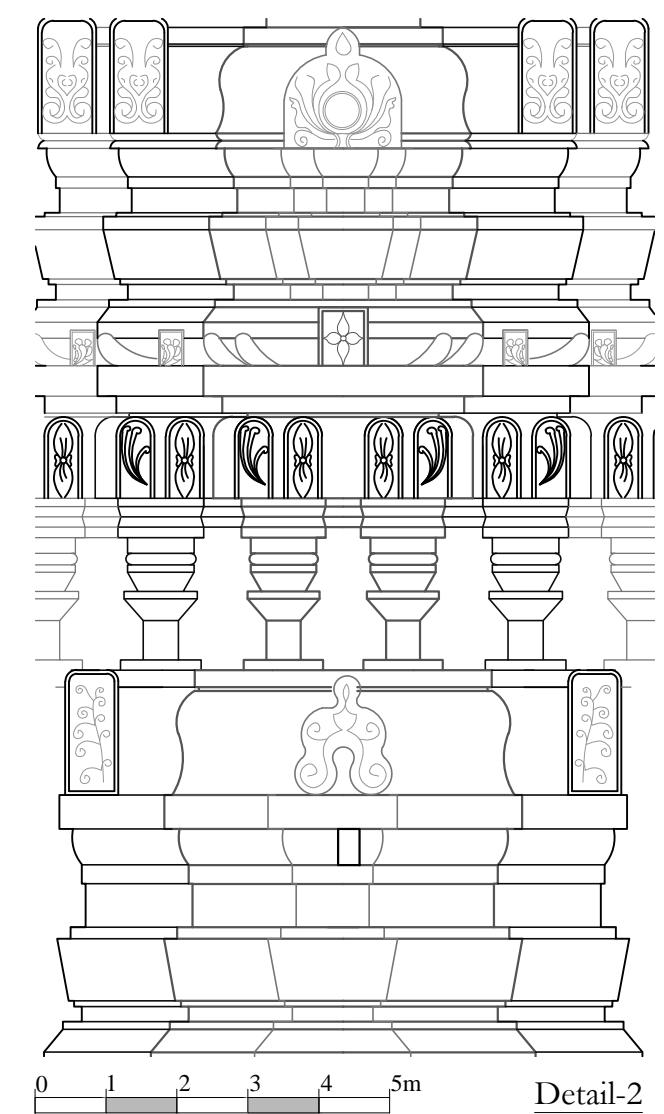
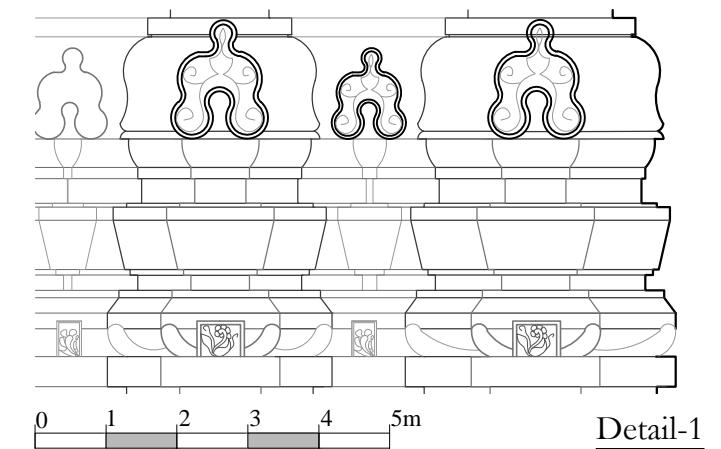
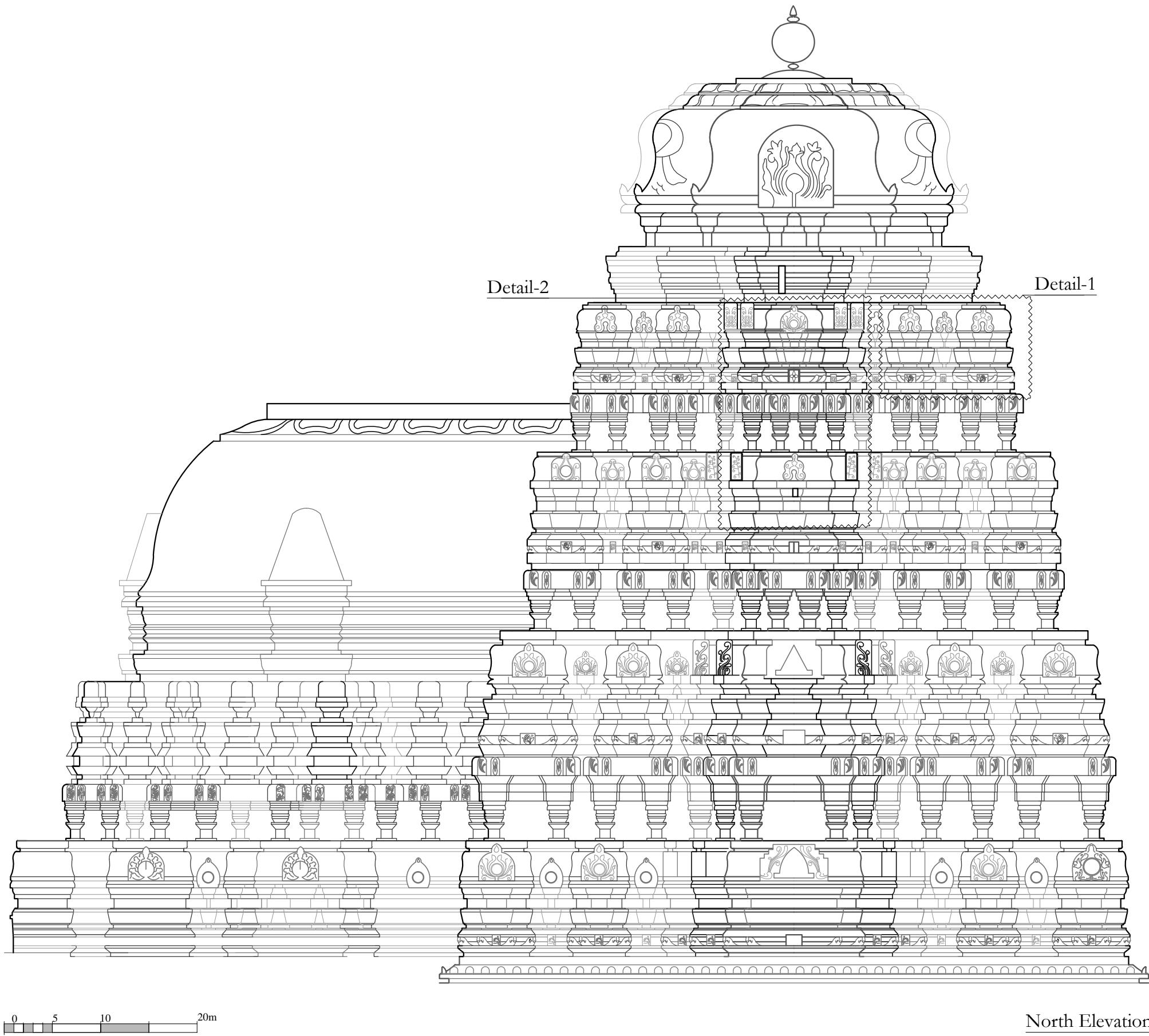
Nandi Mandapa-Ramappa Temple



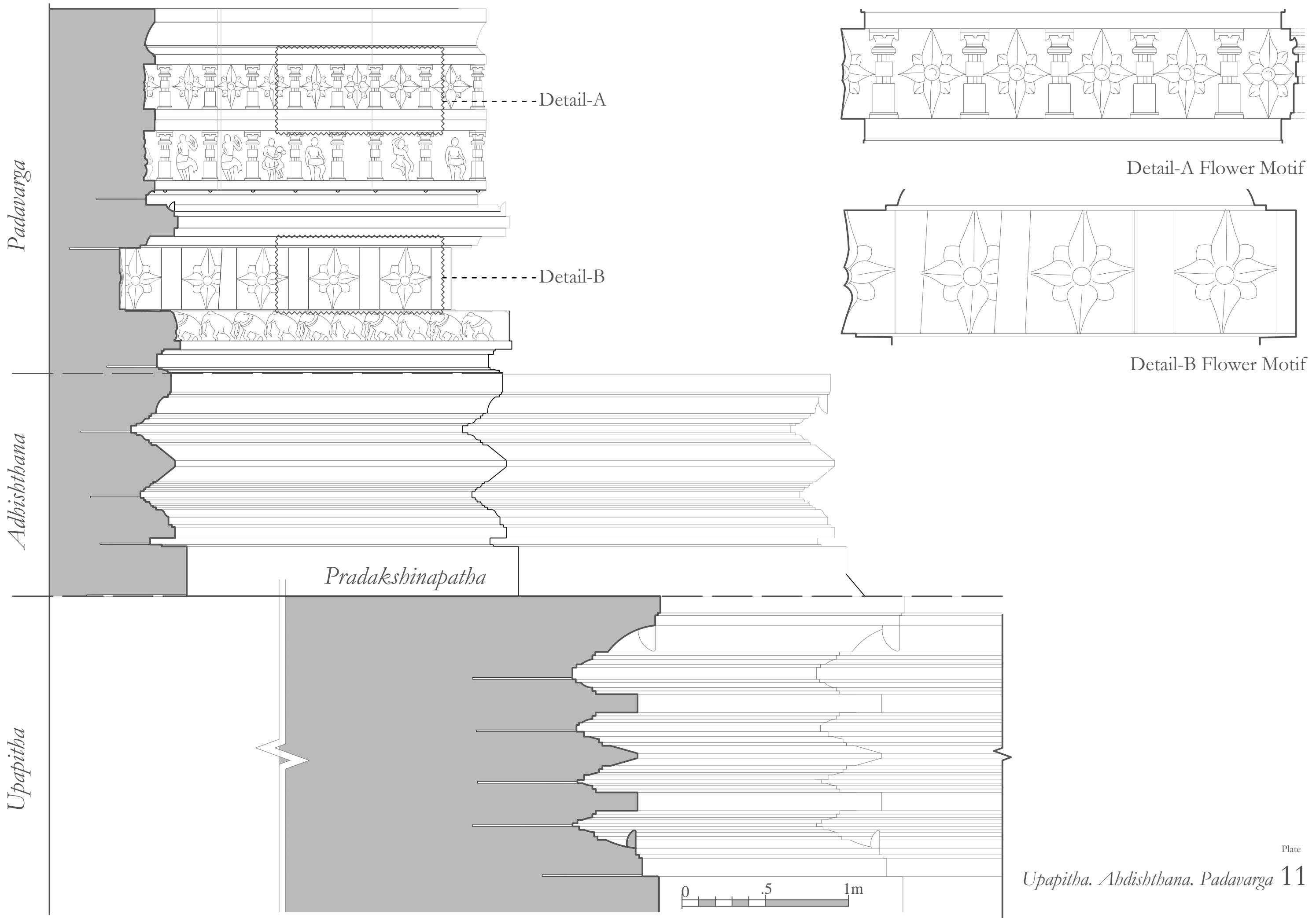
0 .5 1m



Devakosta (Aedicule)- North Face of Ramappa Temple 09

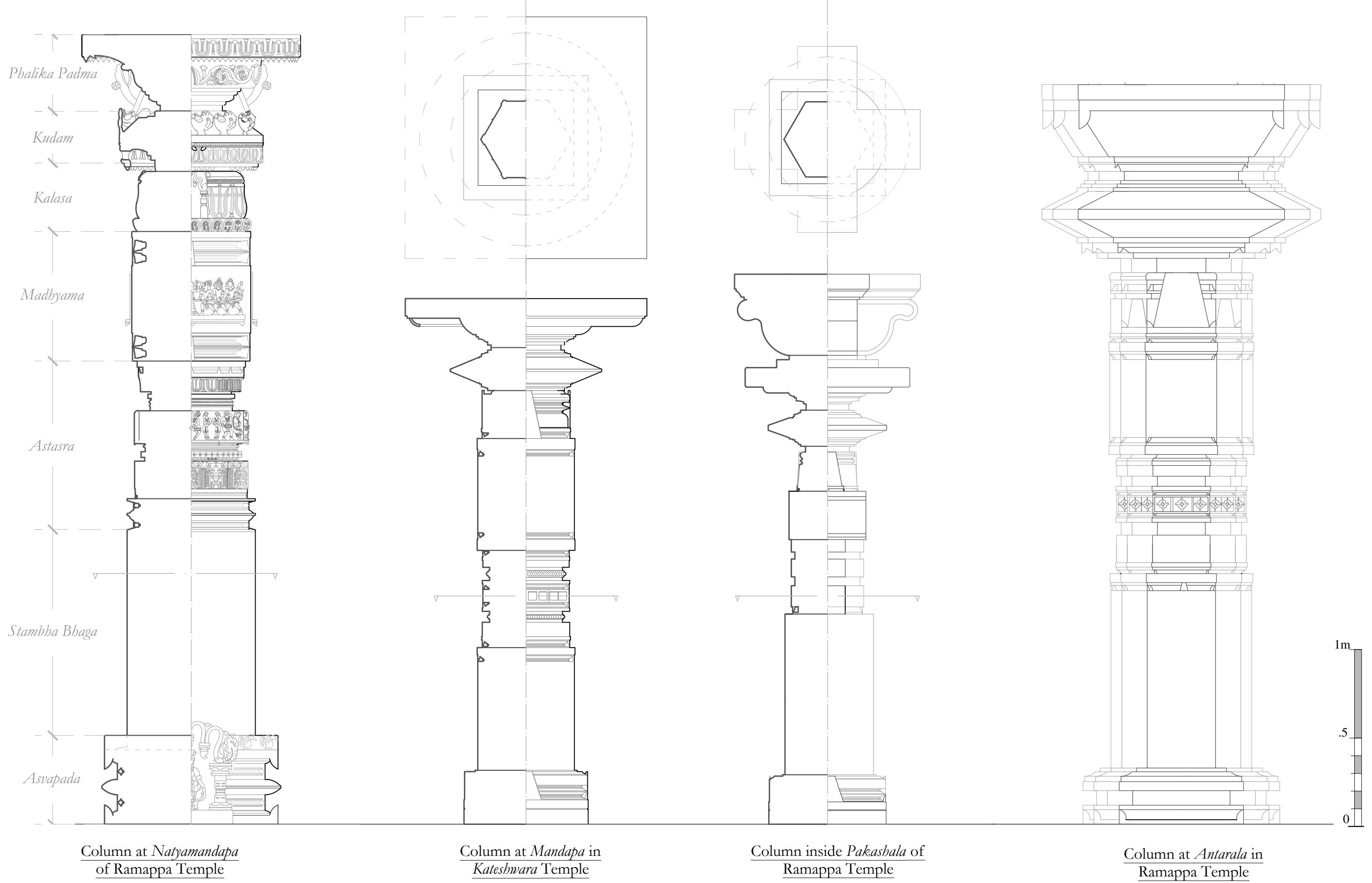


Vimana -Ramappa Temple



Plate

Upapitha. Abhishtana. Padavarga 11

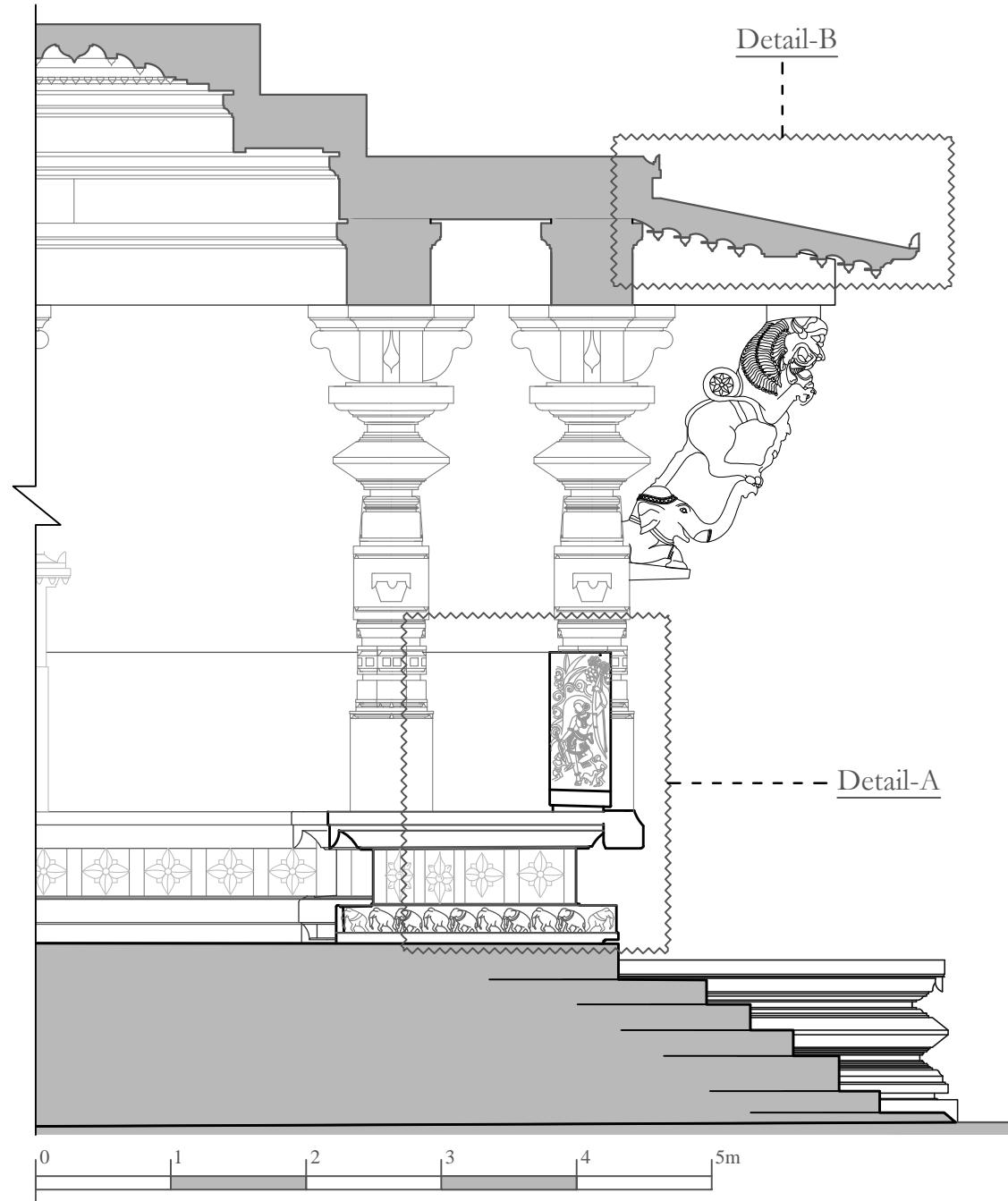


Column at *Natyamandapa*
of Ramappa Temple

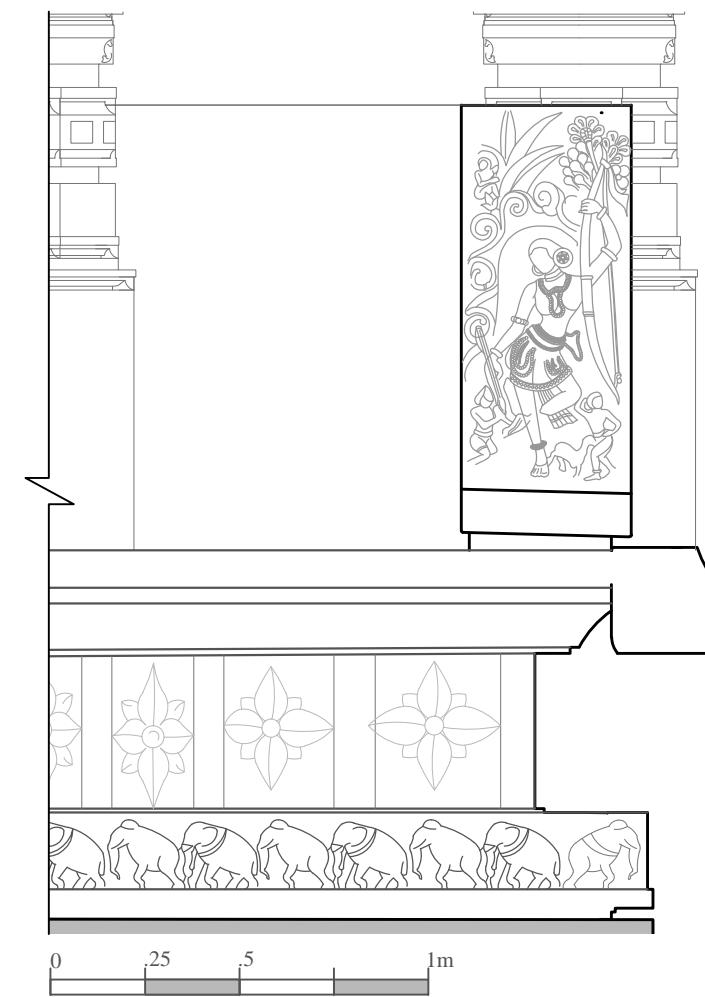
Column at *Mandapa* in
Kateshwara Temple

Column inside *Pakashala* of
Ramappa Temple

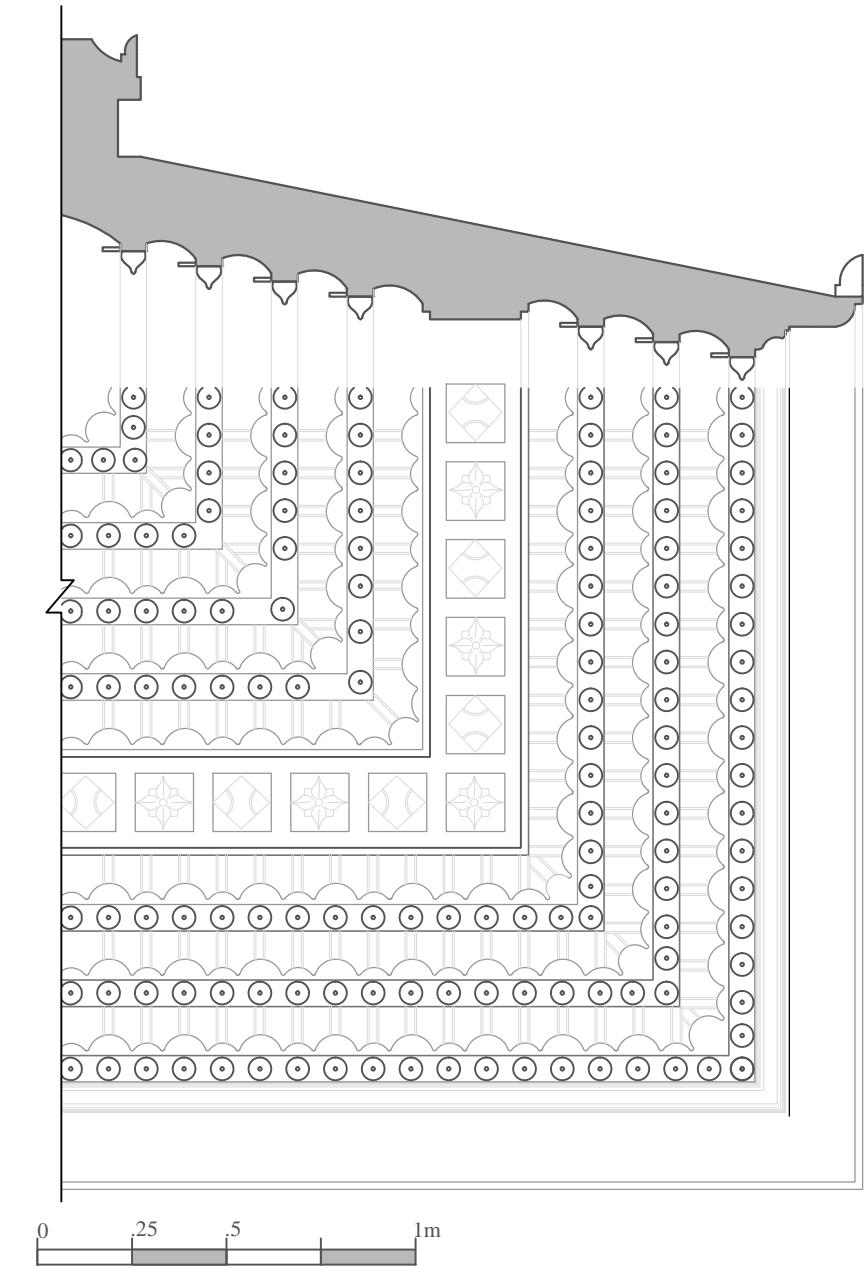
Column at *Antarala* in
Ramappa Temple



Padavarga Wall Sectional Profile



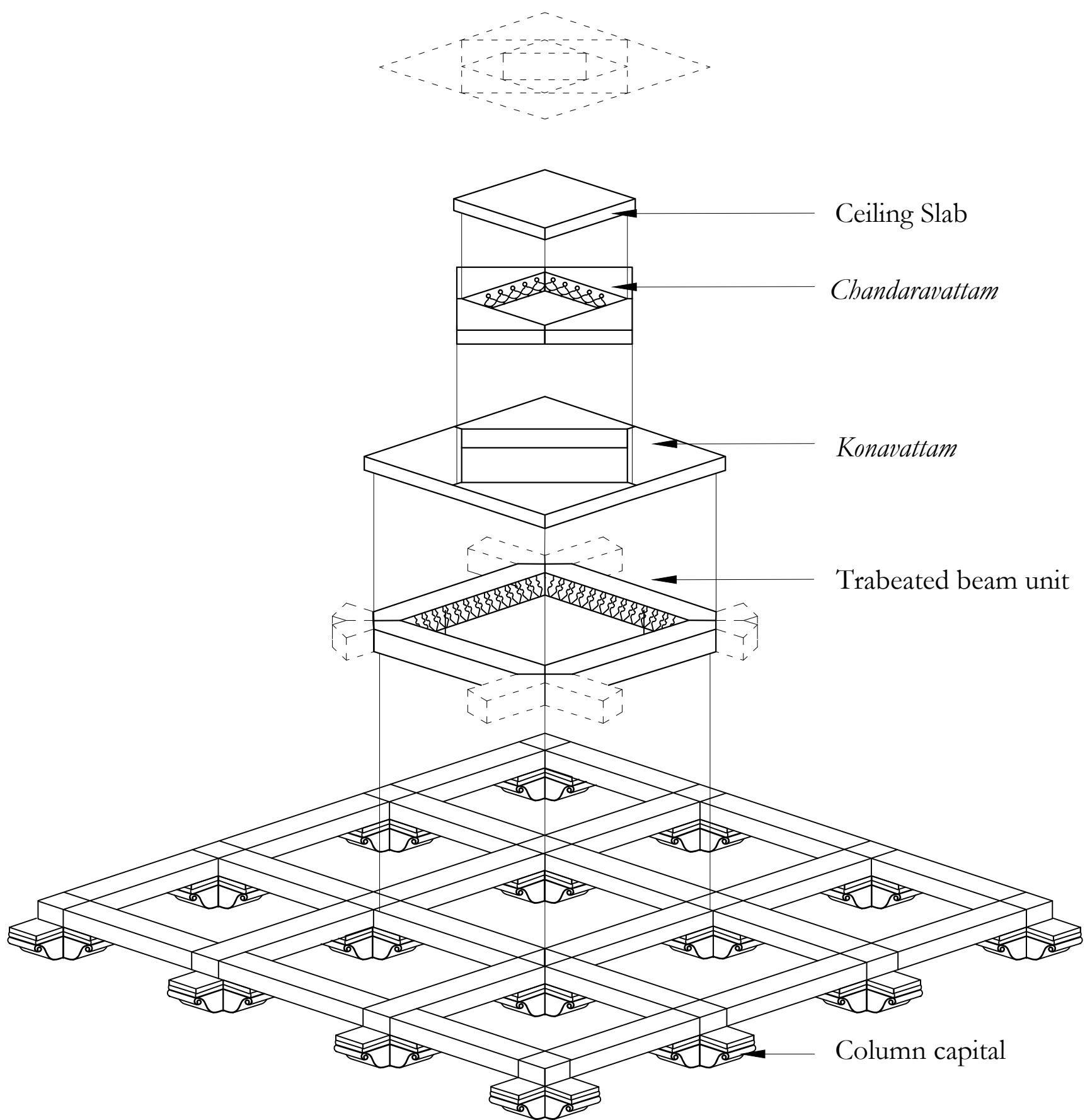
Kakshasana Section (Detail-A)



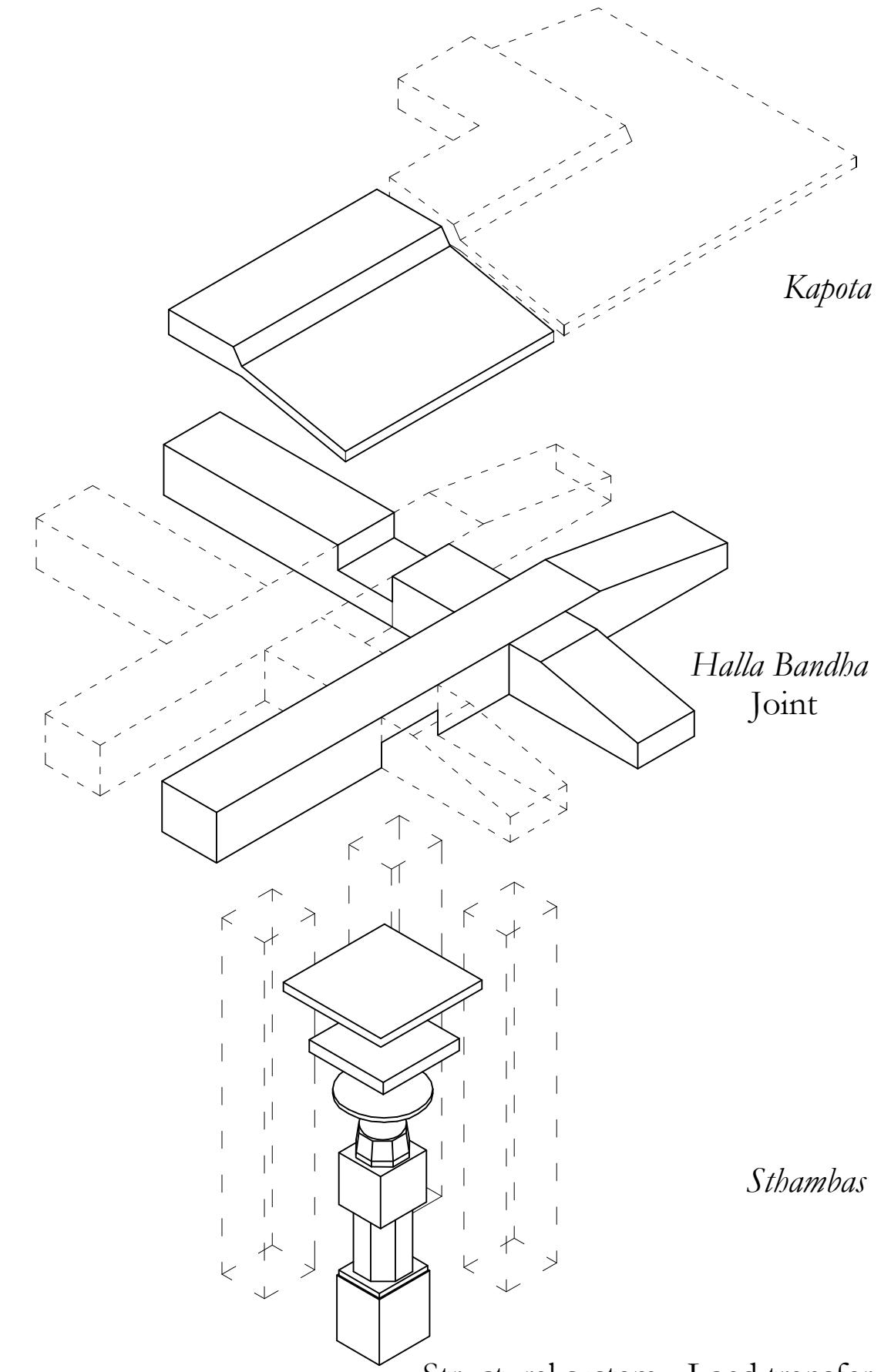
Kapota Reflected Plan (Detail-B)

Padavarga wall with Sectional- Profile and *Kapota* Detail

Plate

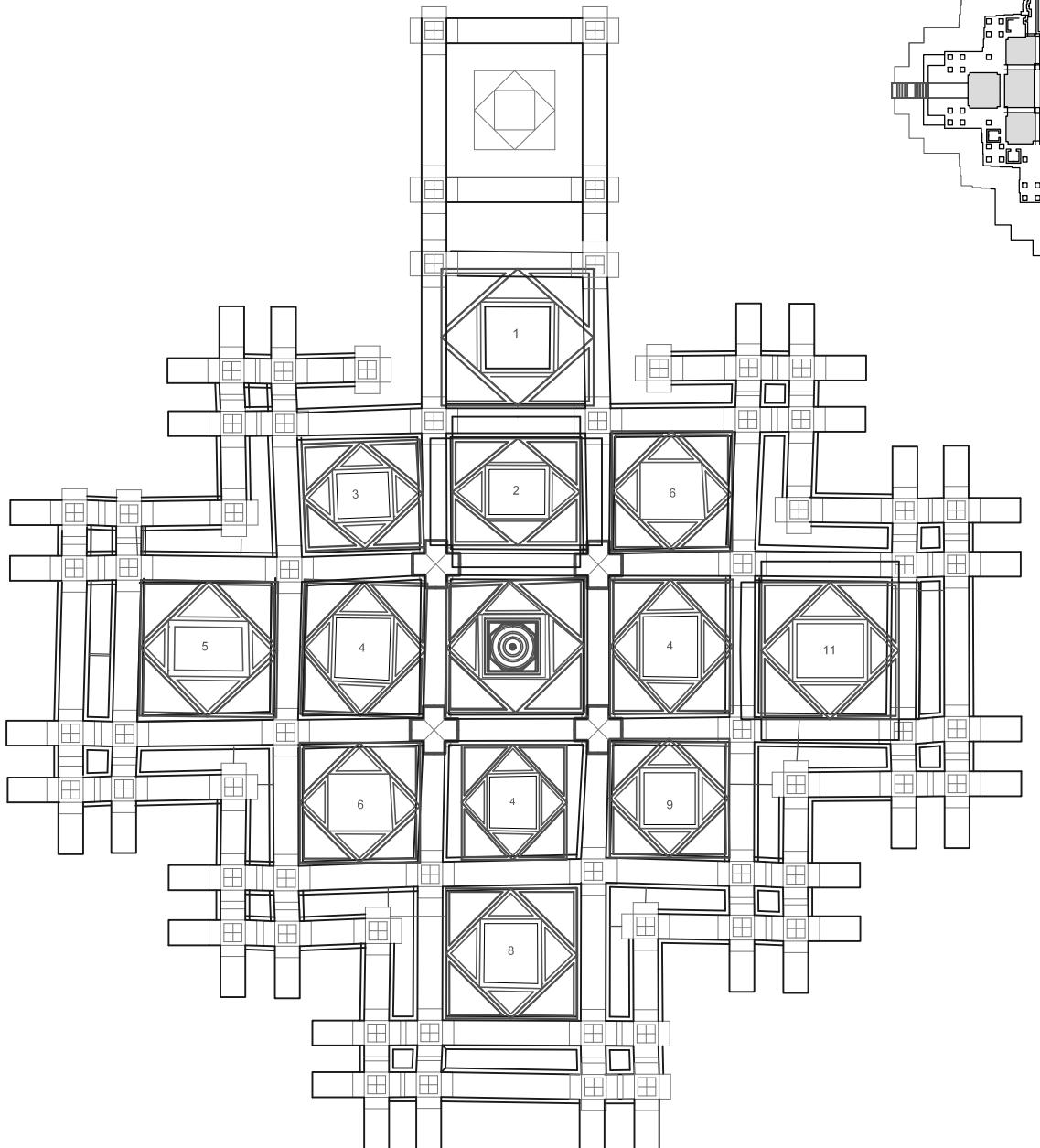


Kadalikakarana- Construction system



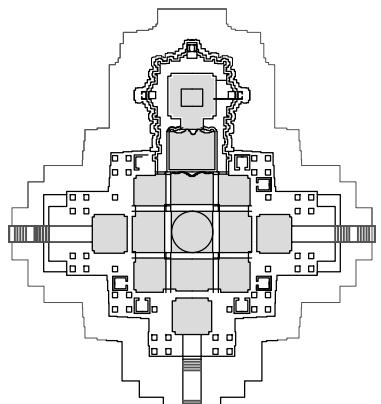
Structural system - Load transfer

Plate

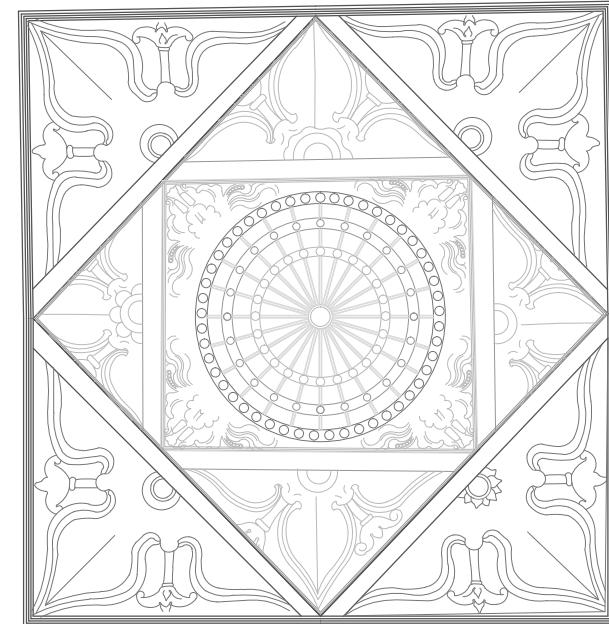


0 1 2 3 4 5 10m

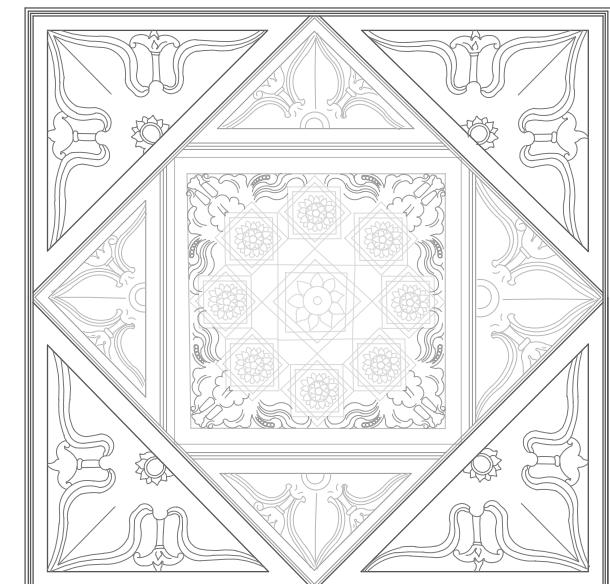
Reflected ceiling layout of
Ramappa Temple



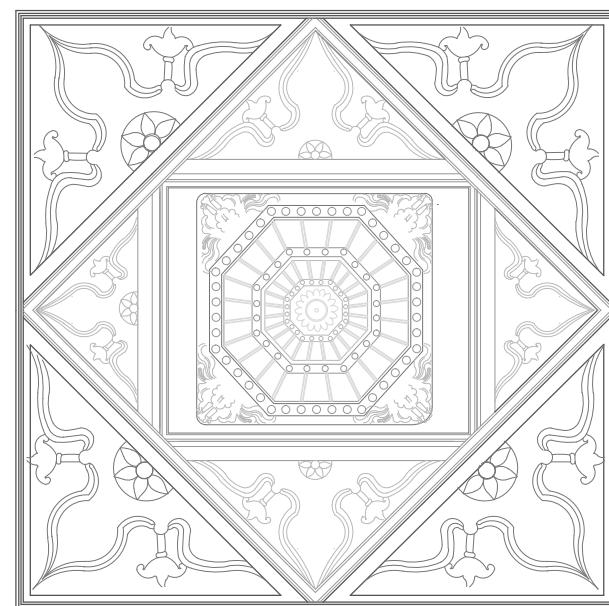
Key Plan



Type-1

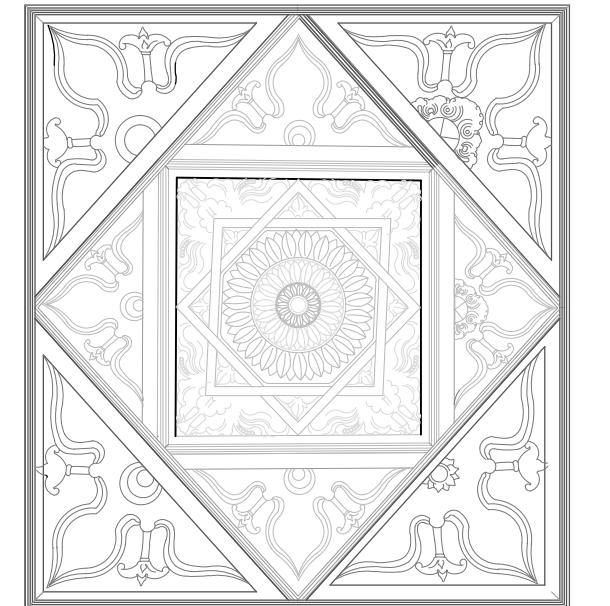


Type-2

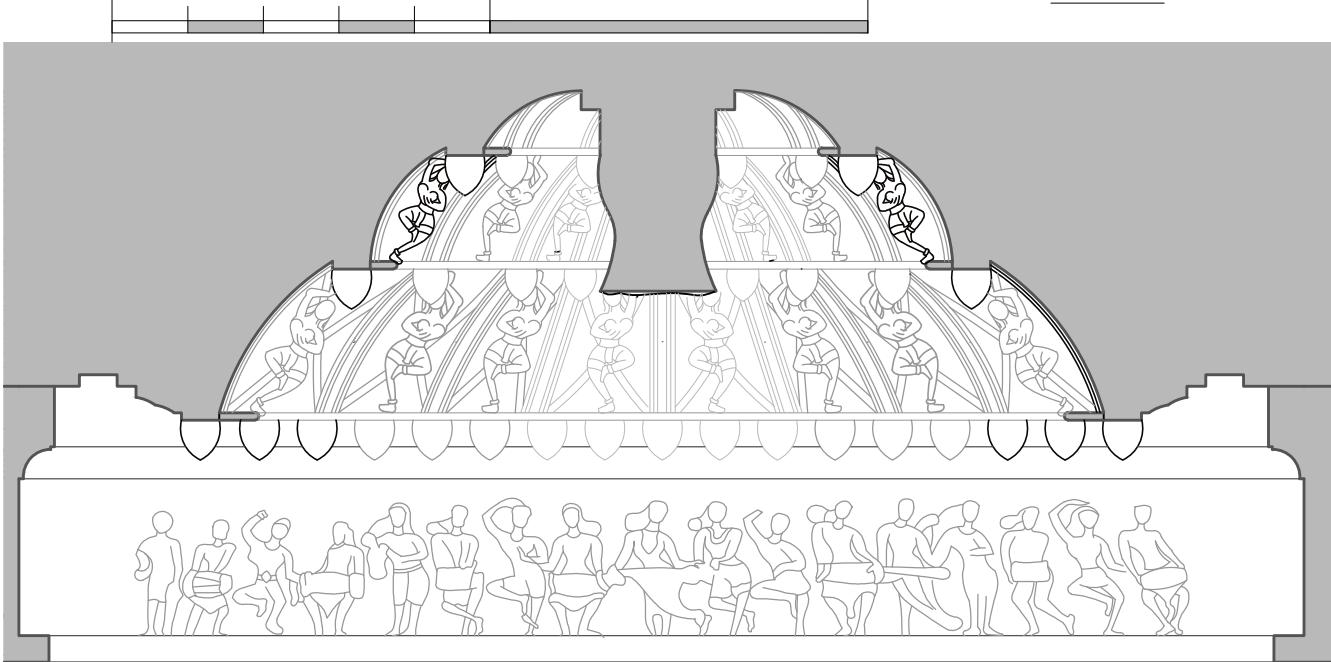
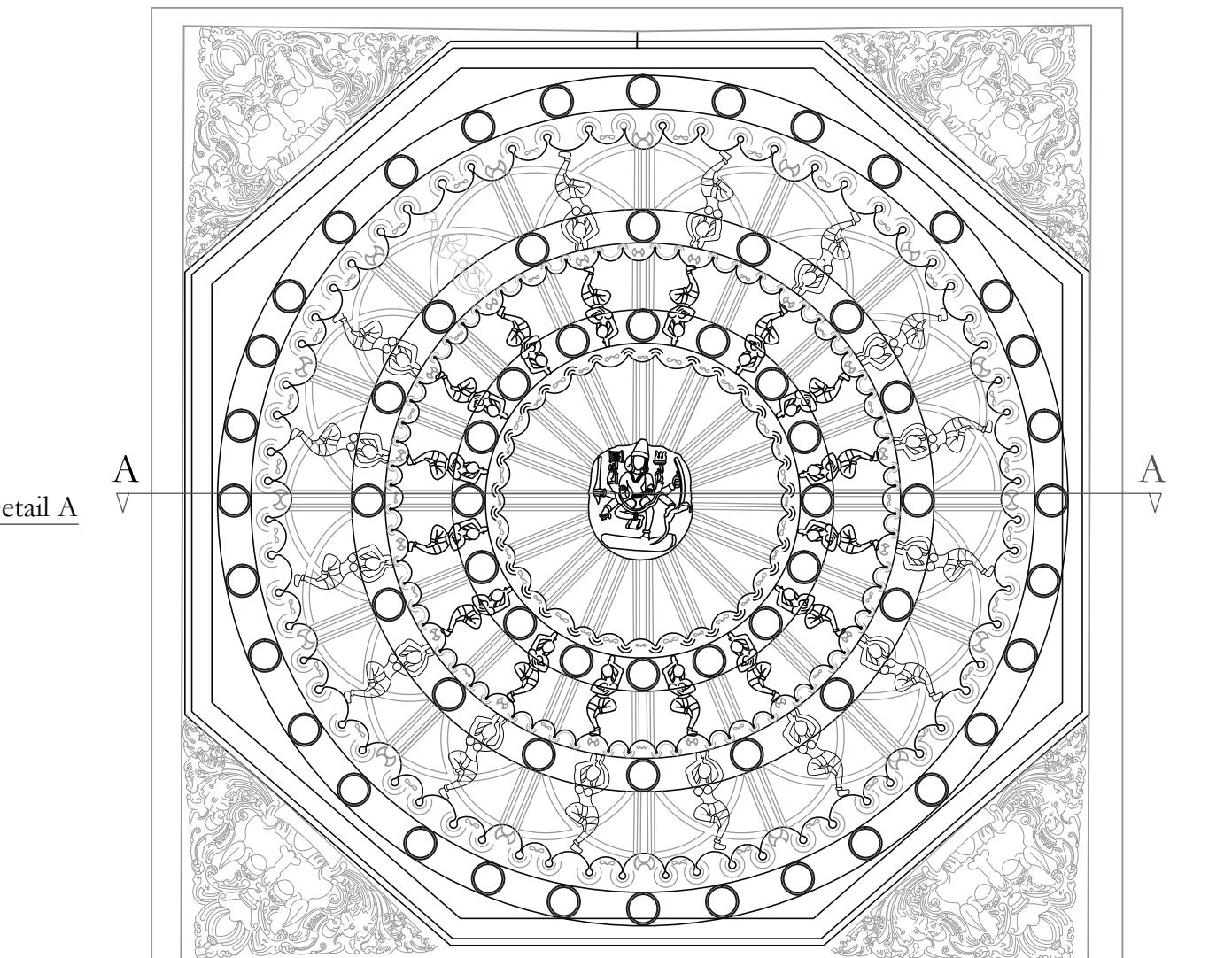
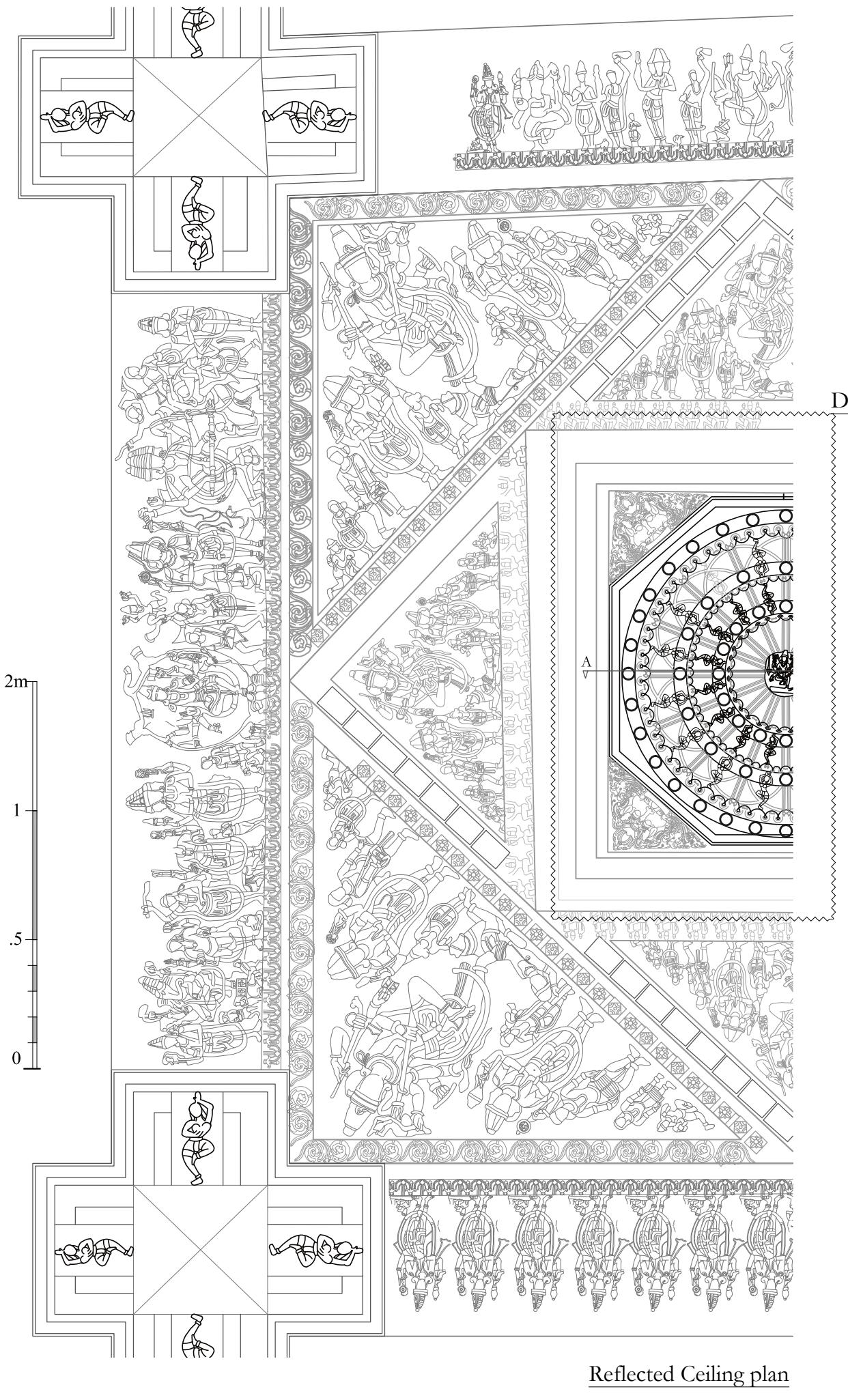


0 25 5 1 2m

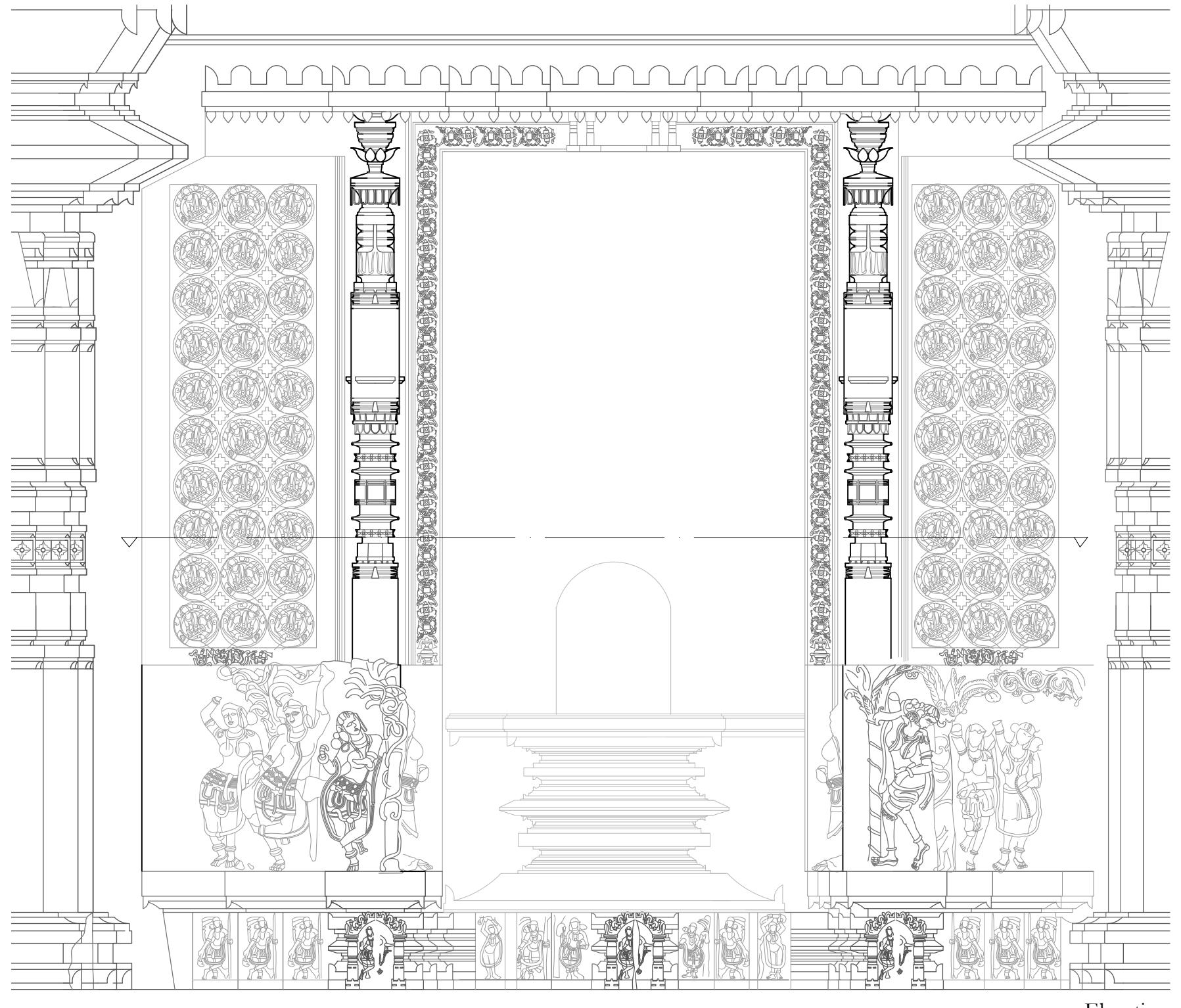
Type-3



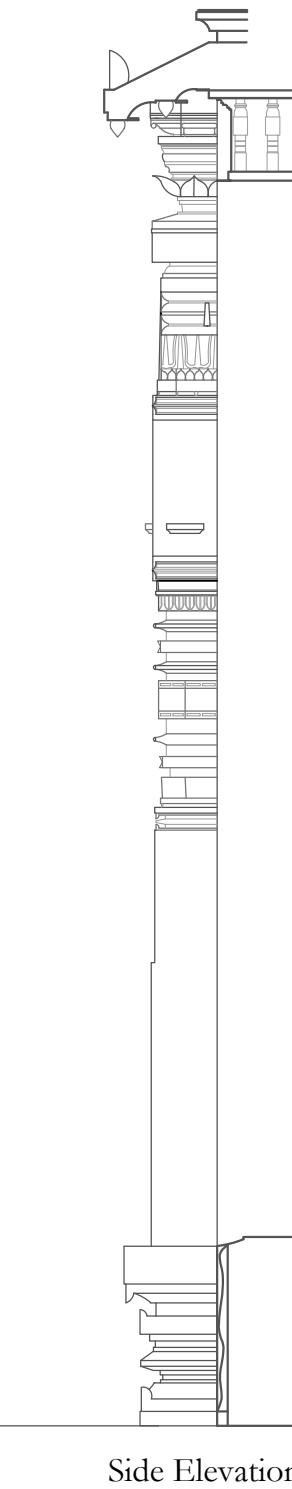
Type-4



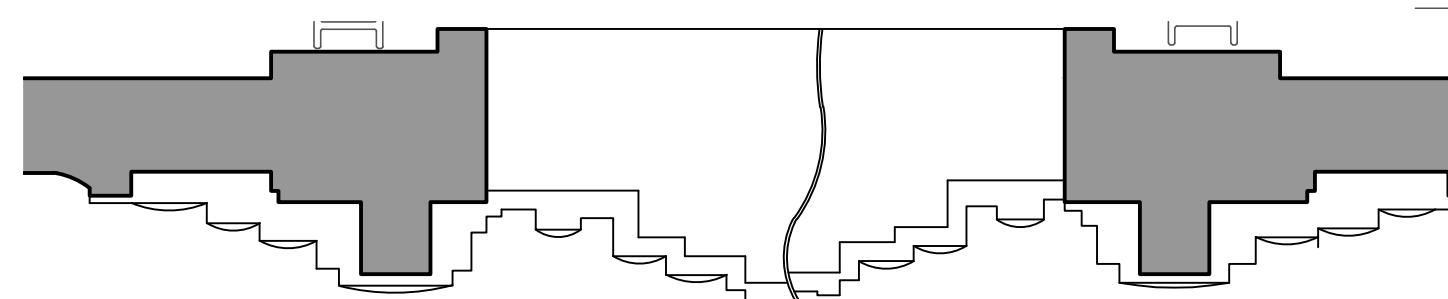
Reflected Ceiling of *Natya Mandapa*-Rudreshwara Temple



Elevation



Side Elevation

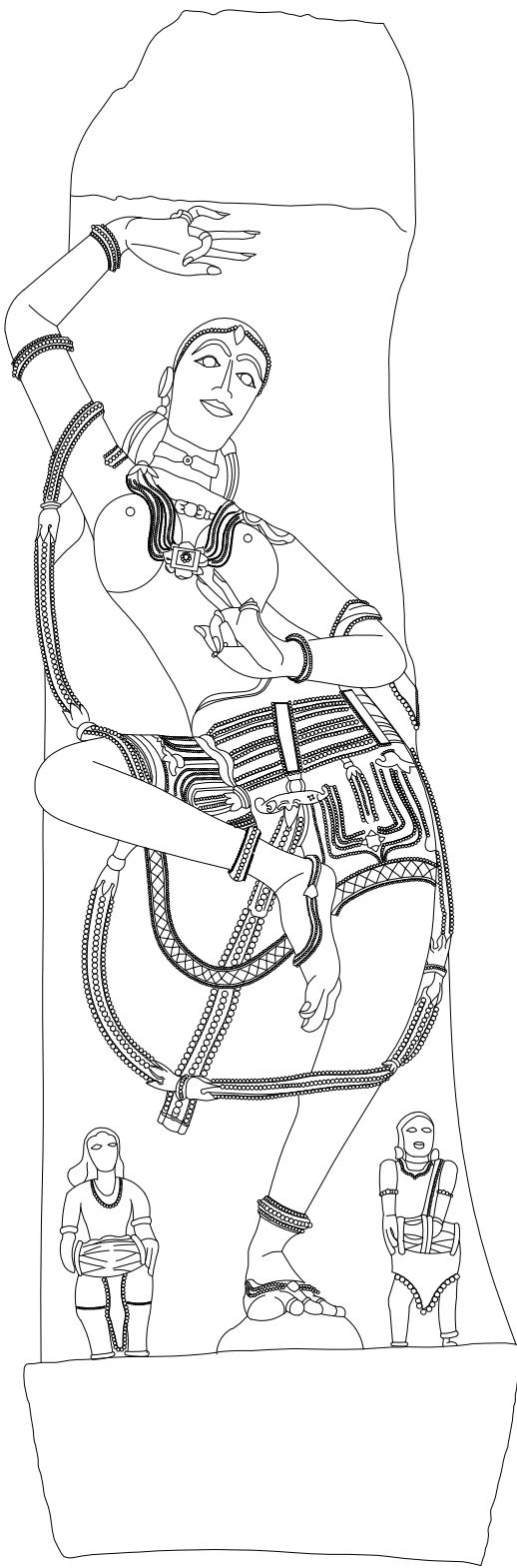


Plan

0 .5 1 2m

Plate

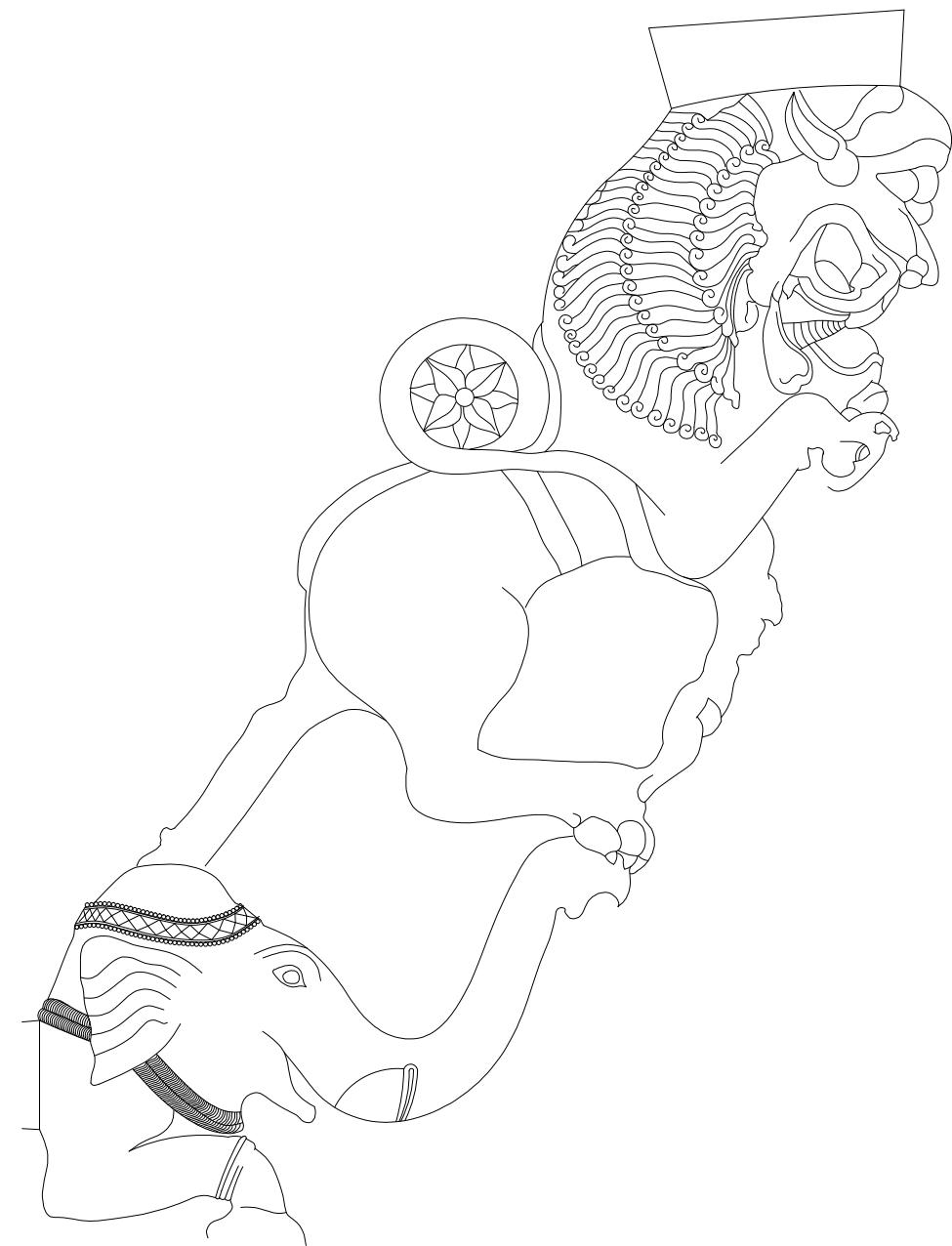
Architrave Of *Antarala Dwara*- Ramappa Temple 17



Abhinaya Nartaki



Dalamalika



Gaja Vyala

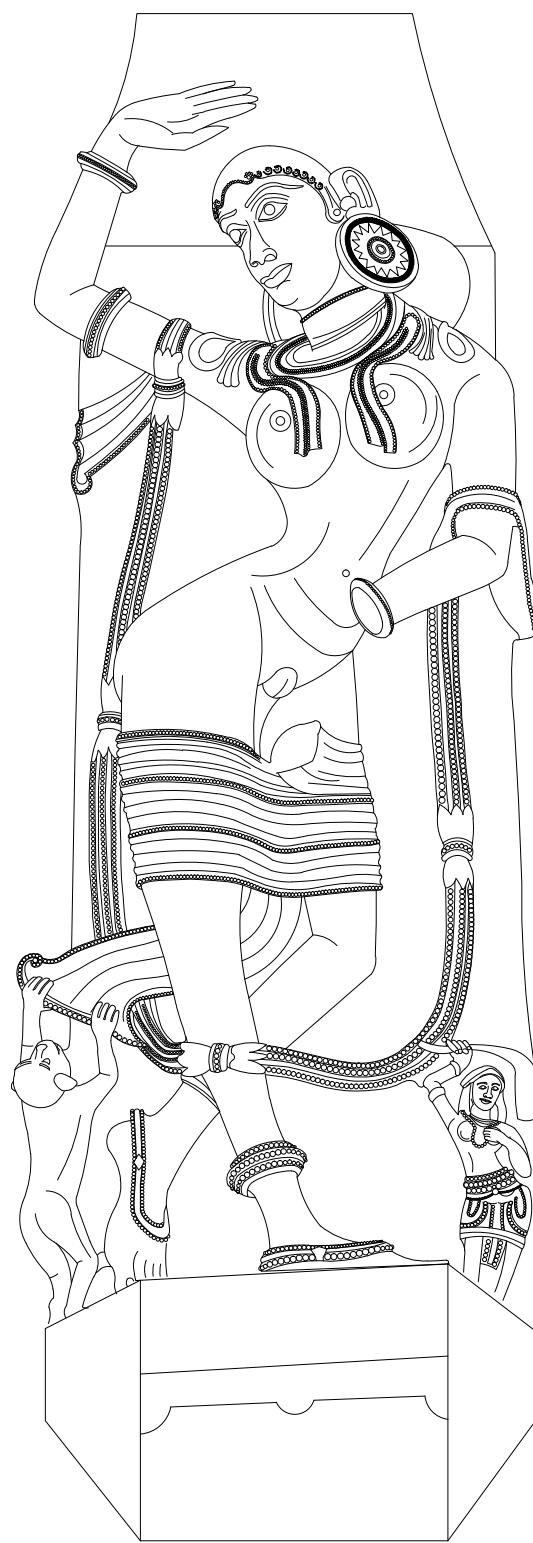
Madanikas & Gaja Vyals Lateral Supports

Plate

18



Nagini



Jayassi Nartaki

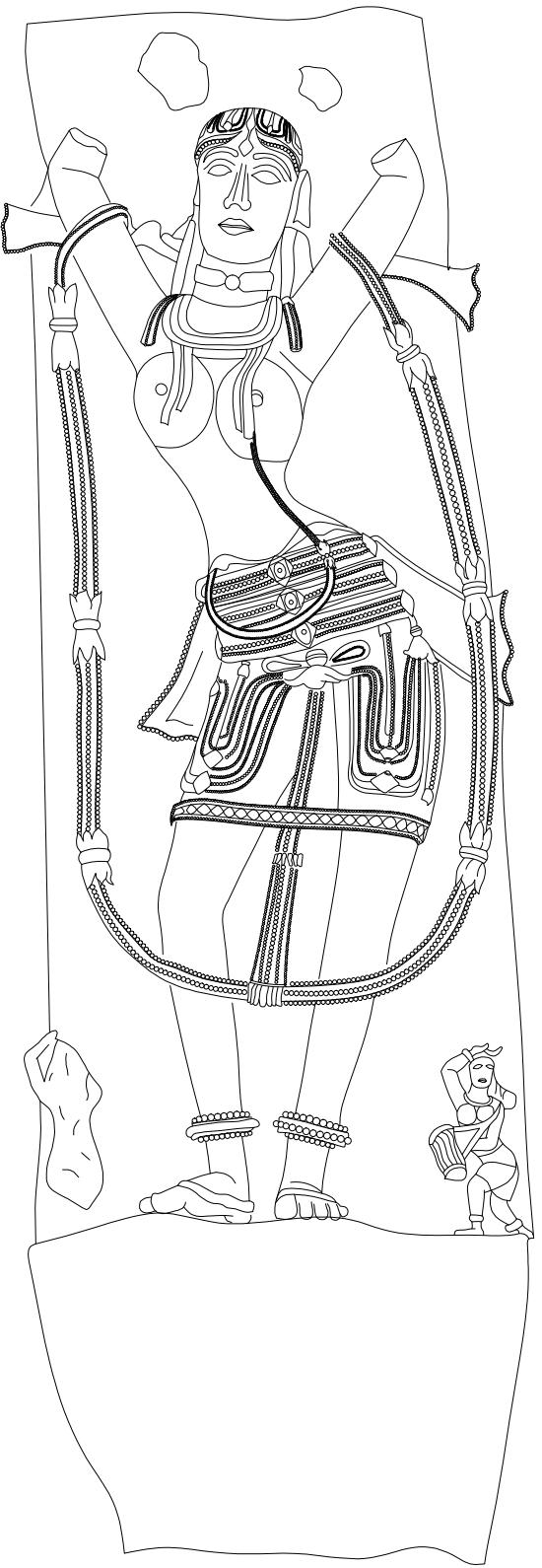


Huntress Nartaki

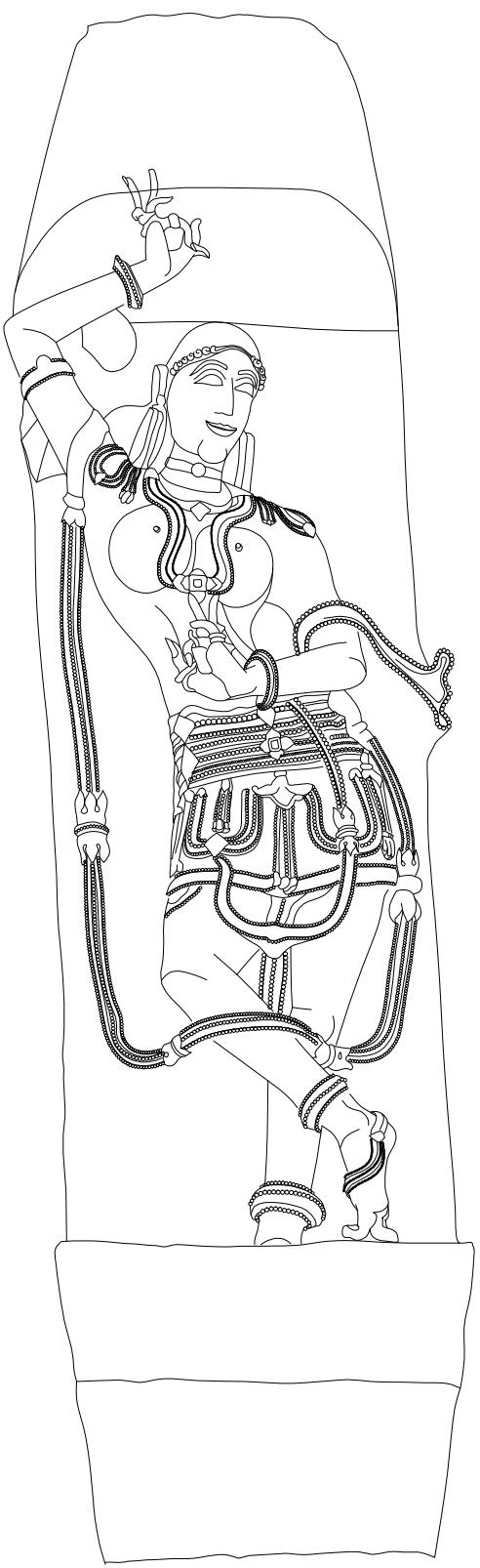
Madanikas Lateral Supports

Plate

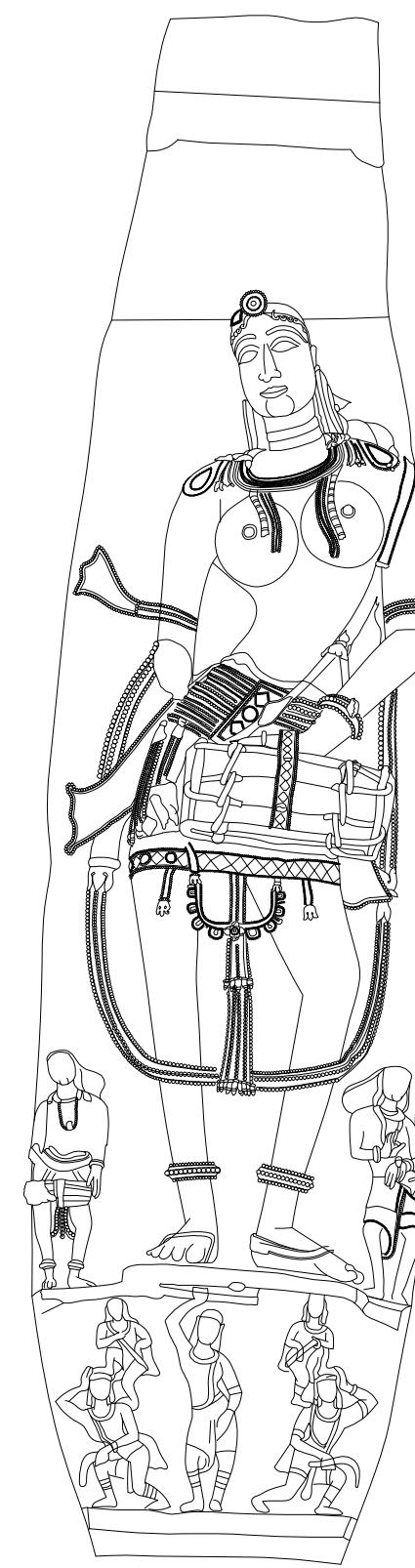
19



Abhinaya Nartaki



Gayani Nartaki



Maradala

Madanikas Lateral Supports

Plate

20

Illustrations for Criteria

Criteria (i): Represent a masterpiece of human creative genius

1. Rudreshwara Temple displays engineering innovation of materials by creating floating bricks to reduce the weight of the superstructure.

The *Vimana*(Spires) of Ramappa Temple and Kateshwara temple are hollow inside and are made up of highly porous bricks, with relatively low permeability than the regular bricks, float on water with a density ranging from 0.85gm/cc to 0.90gm/cc and can take higher strengths exceeding 30kg/cm².

1.a Floating brick tested at Ramappa Temple.

1.b Light weight porous bricks used in the *Vimana* of kateshwara temple.



1.a



1.b

2. The temple deployed indigenous geo-technical knowledge in chiseling one of the hardest rocks of the earth to give the fine finish to the sculptures that has its lustre intact even after 800 years of construction.

(Top to bottom)

2.a Yazdani's Photograph of Dolerite Column at *Natya Mandapa*(1914)

2.b Motifs on the the Dolerite column still intact.

2.c Monolith Nandi adorned with rich carving of Dolerite.

2.d Jaali work of *Varutula* at *Antarala* doorway, Close up of sculpture



2.a

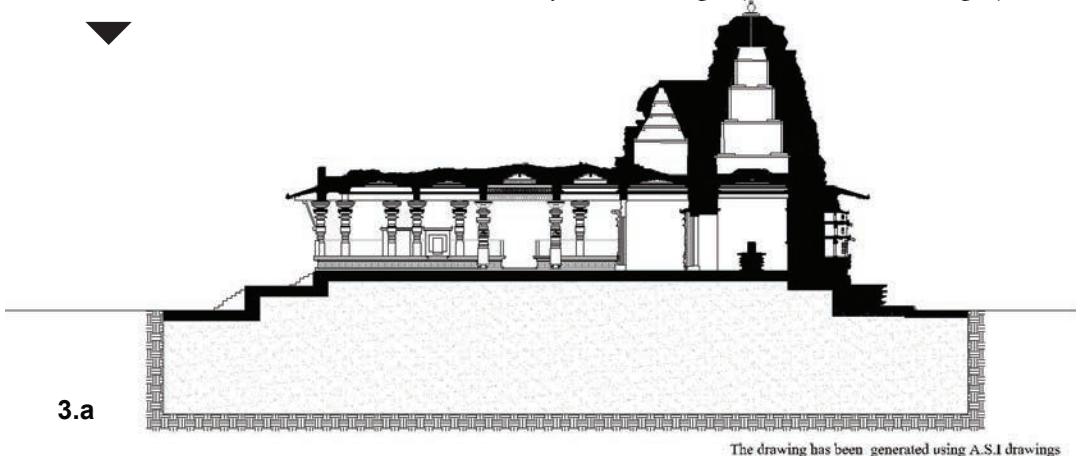


2.b

3. The use of simple and abundant material like sand in the foundation of a lofty temple exemplifies the creative effort of the Kakatiyas in the field of geo-technology and construction, building an earthquake resistant structure.

3.a Cross-section through *Sabha Mandapa* - sand box technology

3.b Sand-box at foundation of the Kayana Mandapa (Kameshwara temple)



3.a

The drawing has been generated using A.S.I drawings



2.c



3.b

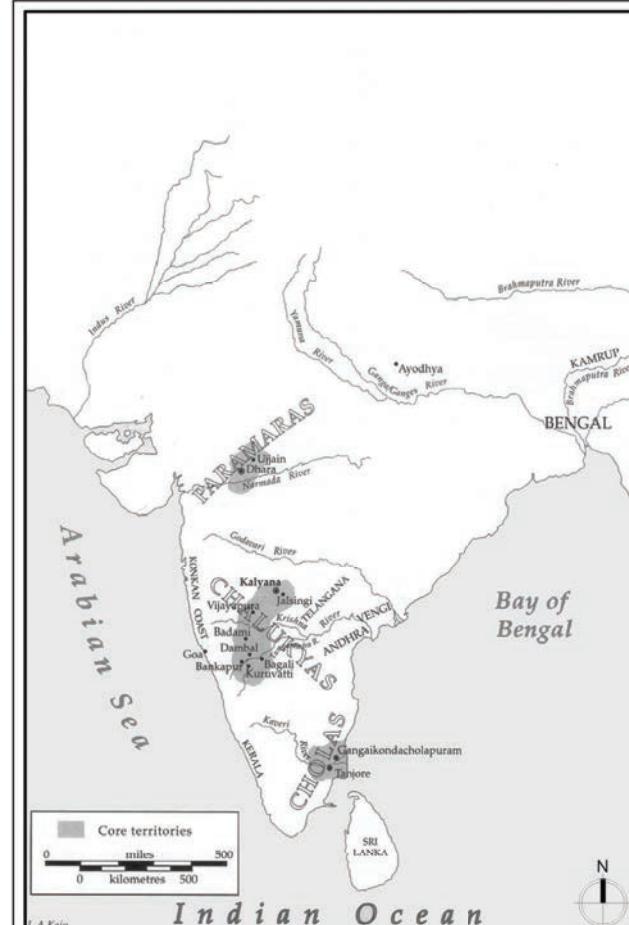


2.d



Illustrations for Criteria (i)

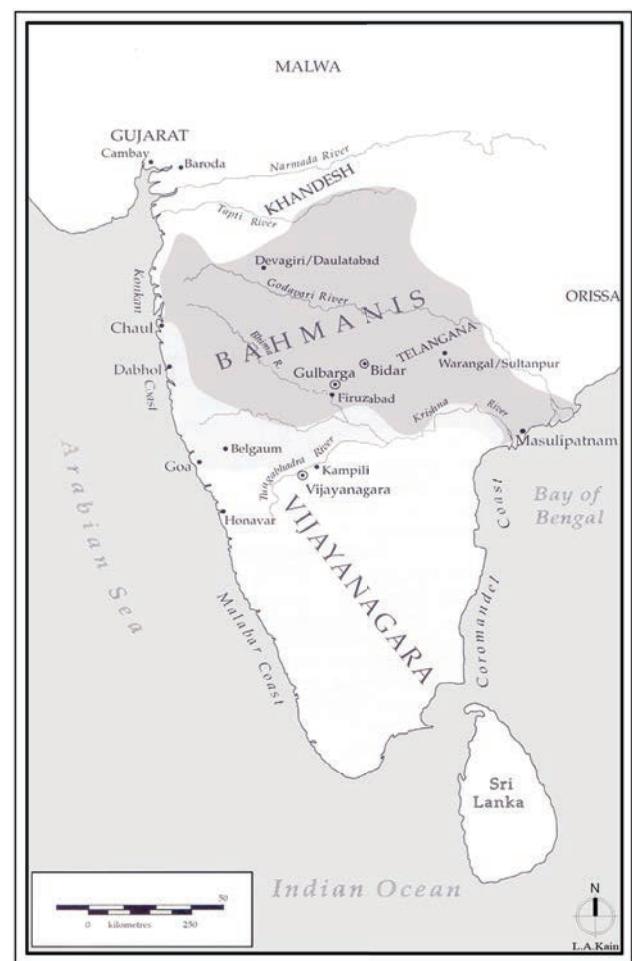
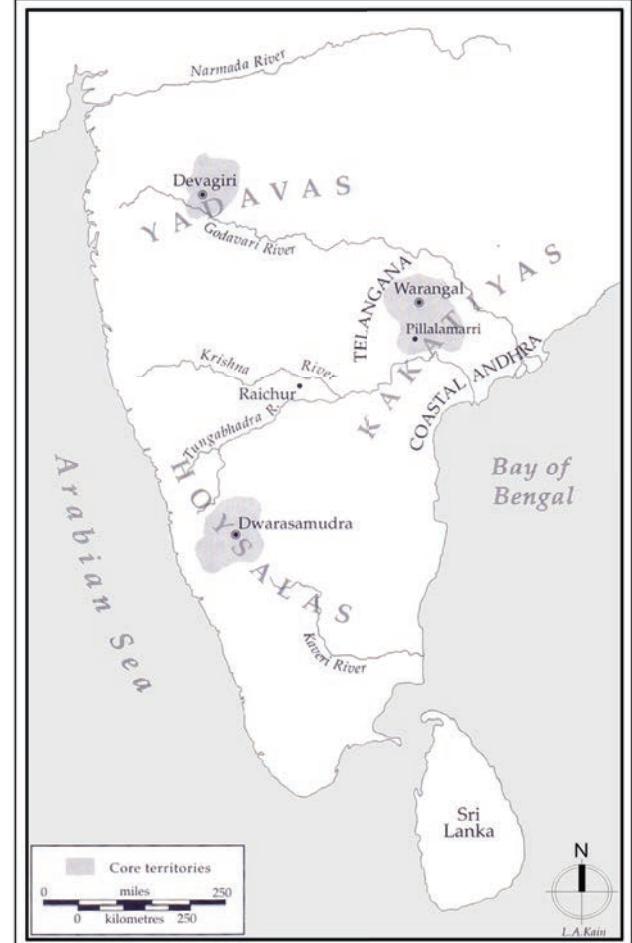
Criteria (ii): Exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, townplanning or landscape design.



(Clockwise from top)

- 1.a. The Spread of Chalukyas¹
- 1.b The Chalukyas split mainly in Hoysala, Kakatiyas and Yadavas¹
- 1.c Expansion of Bahamani and Vijayanagara Dynasties¹

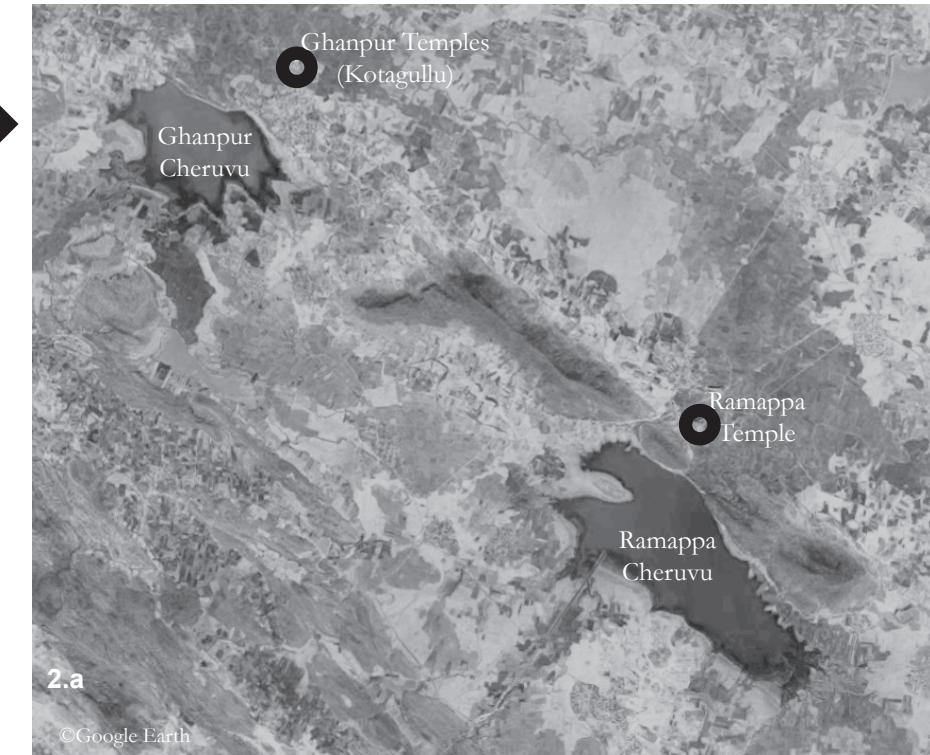
1. As a result of the break-up of the Chalukya empire and its succession by three major regional Kingdoms. Mapping themselves over the Marathi-, Kannada-, and Telugu-speaking regions of the Deccan Plateau respectively, the Yadava, Hoysala, and the Kakatiya represented political manifestations of an ethno-regional consciousness that had already taken root across the Deccan. The easternmost successors state of the Chalukyas was the Kakatiya kingdom, its power based located in Telangana, the dry, upland eastern portion of the Deccan Plateau.¹



2. The geography of Telangana has played a major role in shaping the history and architecture of Kakatiya dynasty. Irrigation system was realised as a major technical innovation to improve the efficiency of local agricultural systems. The site selection was made besides and between the hills and hillocks or the ridges across the slopes with an aim to reserve more water effectively.

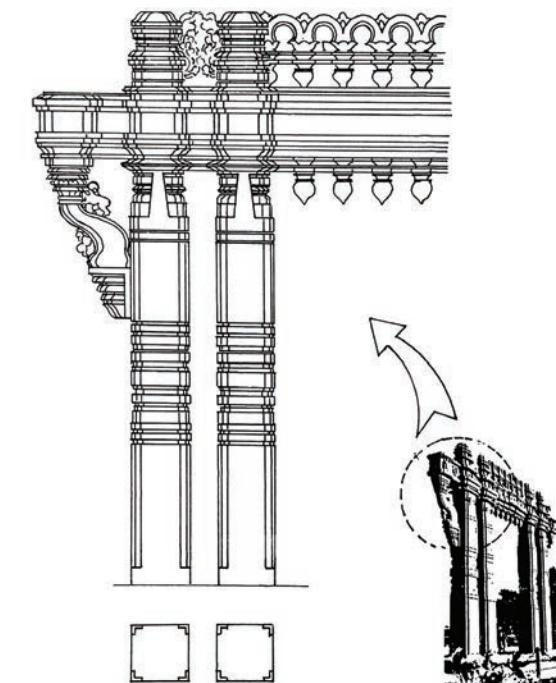
The construction of large scale reservoirs with a network of canals and distribution channels is evident with Ramappa *Cheruvu* (lake) and Ghanpur *Cheruvu* respectively, close to the Temple sites of Ramappa and Kotagullu (2.a). This technology developed by introduction of embankments to expand the water catchment areas, dams for improved storage and transport water through canals for agriculture.

3. Free standing *Toranas* form an important and distinctive feature of temple architecture of the Kakatiyas, derived from the kalyana chalukyas.²



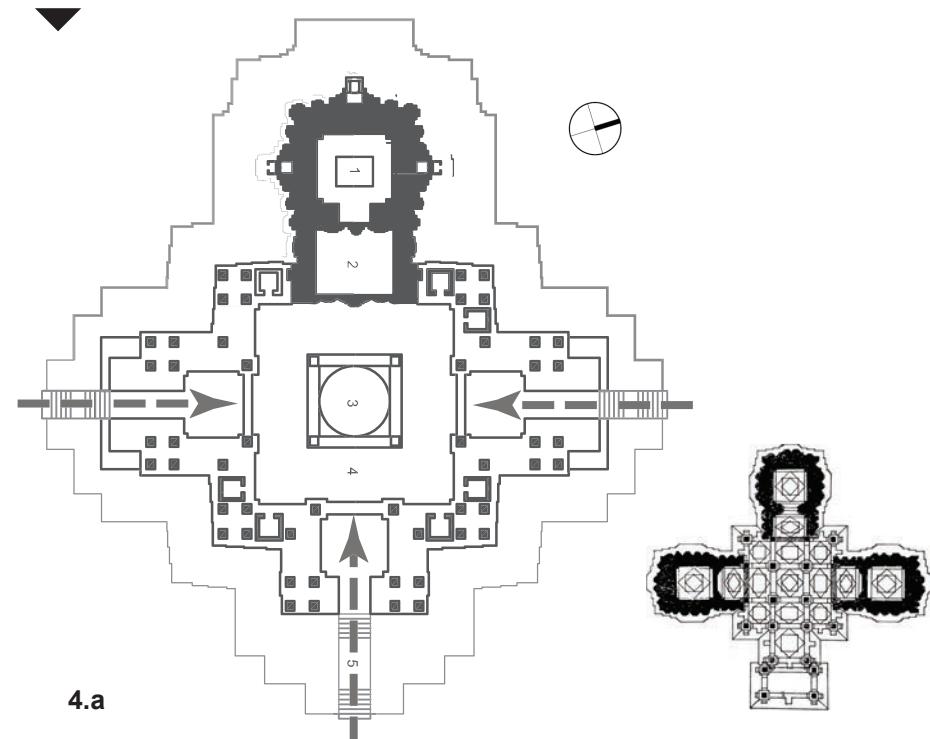
4. *Trikutalaya* of Kakathiyan temples adopted from Chalukyas composed of three shrines of similar dimensions formed cruciform plan later evolved into stellate forms.

- 3.a The double pillared *Keerthithorana* adorning the entry way to the temple at Warangal fort.



3.a

- 4.a The Ramappa Temple at Palampet, resembling a *Trikutalaya* plan, is one shrine and three entry ways.
inset: *Trikutalaya* at Hanamkonda (Thousand Pillar Temple)



Illustrations for Criteria (ii)

Criteria (ii): Exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, townplanning or landscape design.

5. The Kakatiyas has carried forward the temple architecture knowledge of the Chalukyas and have brought tremendous developments in its architecture with respect to its geographical conditions establishing the Kakatiya Temples as a fully developed temple of the medieval era. The Kakatiyan style of architecture evolved along with the Hoysalas and Vijayanagara between 12th to 14th century A.D. Though differentiated by regional language and geography, these temples exhibit continuity of similar geometry, visual composition and sculptural manifestations.

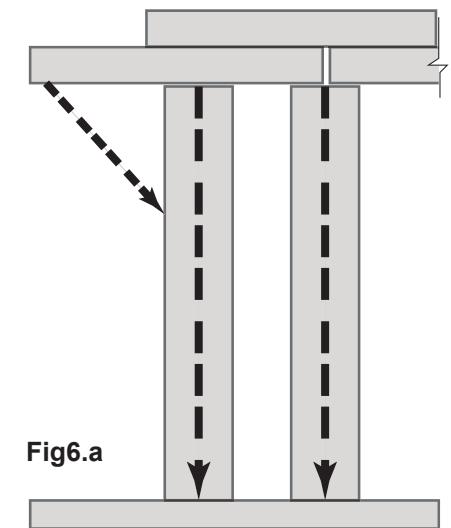
6. The emergence of *Madanikas* as bracket figures that transfer the load of cantilevered beams and *Kapota* onto the columns, delineates Kakatiyas' ingenuity in sculpturing and structural composition.

(clockwise from right)

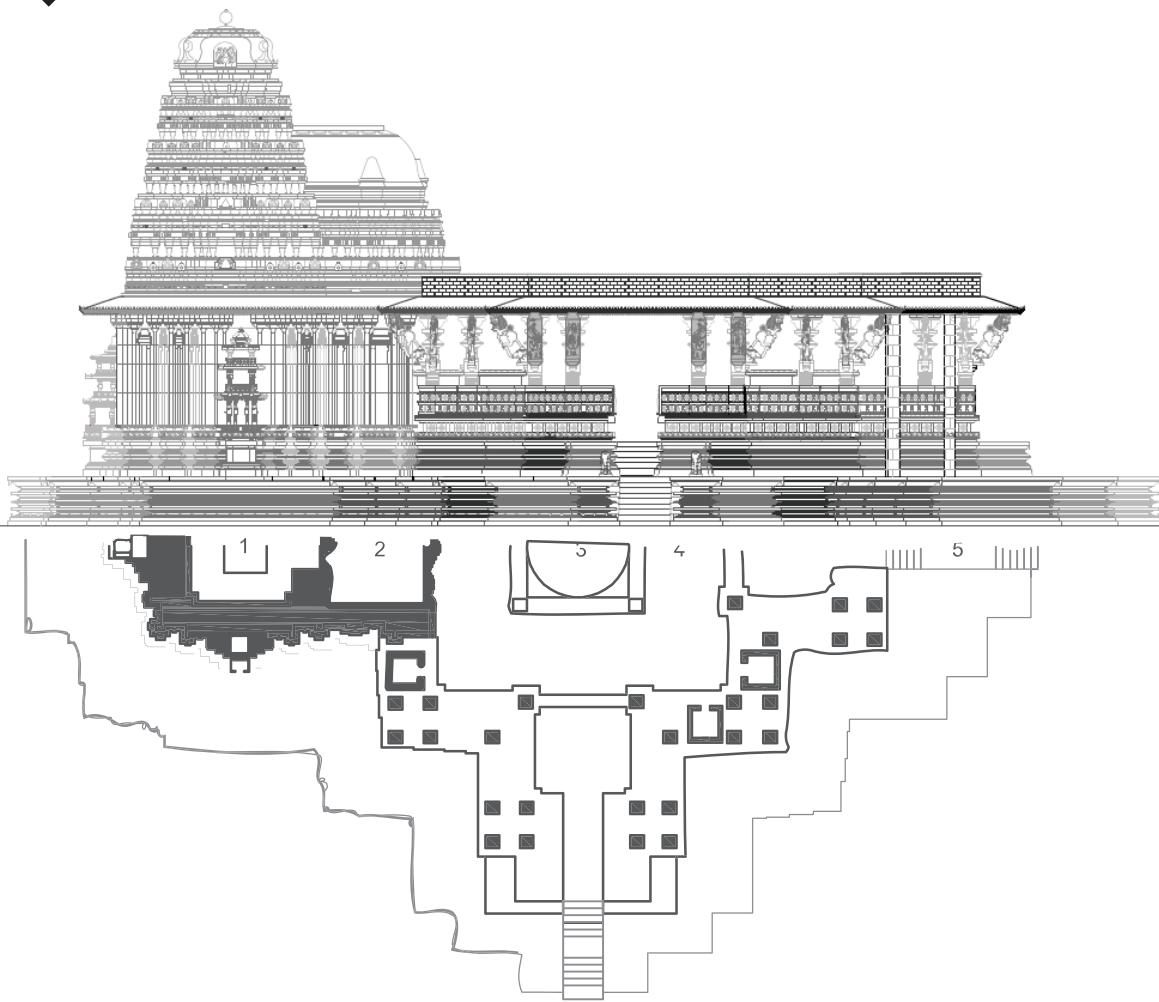
6.a Load transfer diagram ➔

6.b *Gayani Nartaki* at Ramappa temple, Palampet, Telangana

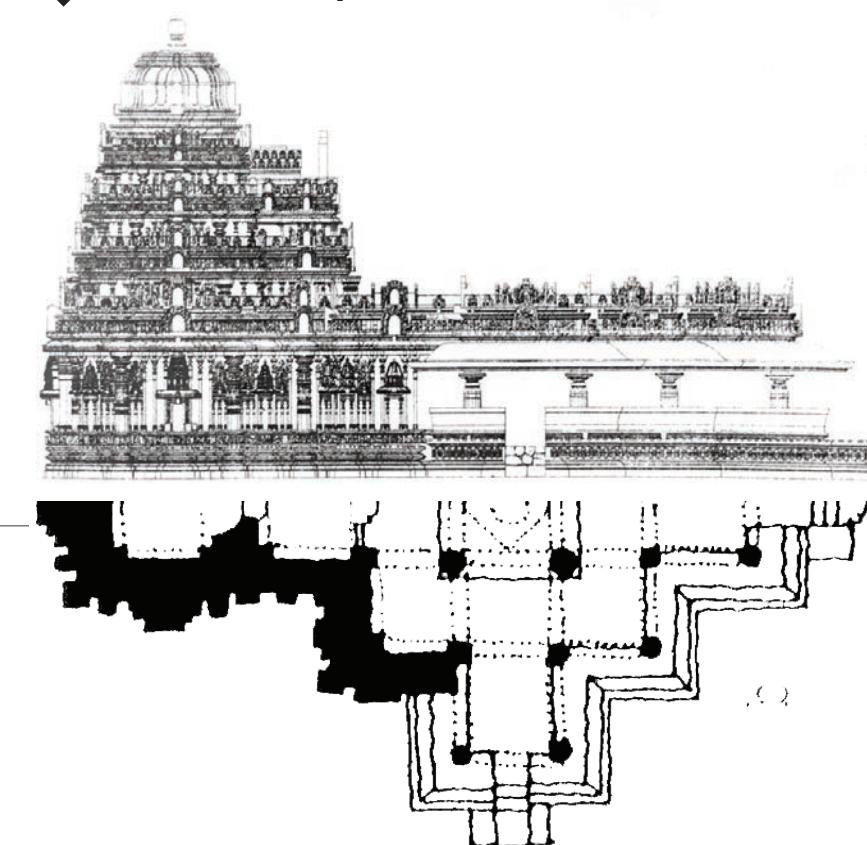
6.c Apsara at Hoysaleshwara Temple, Belur, Karnataka.



5.a Rudreshwara (Ramappa) Temple, Palampet, Telangana



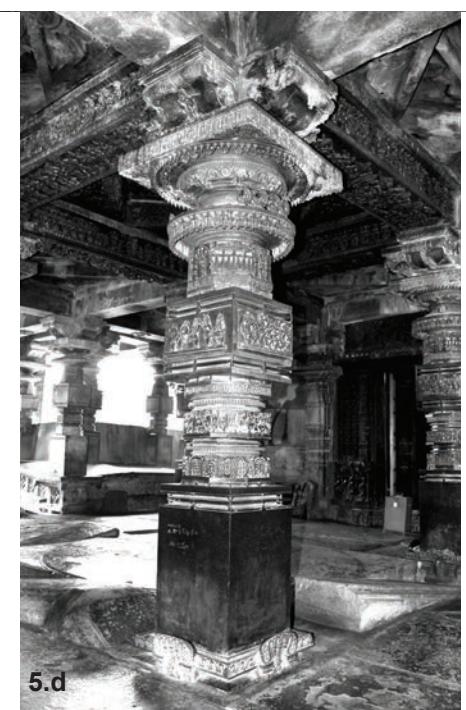
5.b A contemporary Hoysala temple (Siddheshwara temple, Haveri, Karnataka)³



5.c *Natya Mandapa* of richly carved dolerite columns

5.d Dolerite column at Ramappa Temple.

5.e Column at Hoysaleshwara Temple, Karnataka of similar composition of elements.



Illustrations for Criteria (ii) (contd.)

Criteria (iii): Bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared.

1. Rudreshwara Temple is a best surviving example of Kakatiyan tradition of art, architecture and technology even after the onslaught on various other temples of Kakatiyan era. The temple is an outstanding example of temple architecture evolution illustrating a phase of development in the technology, science and art of temple building and construction in South India.

The establishment and continuity of Kakatiyan power patronised the emergence of this architectural marvel, linking dance traditions as documented in the dance treatise *Nritta Ratnavali* by military general *Jayasenapati*. The effort of kakatiyan craftsmen to interpret this regional dance customs, lifestyle and to establish textual renderings as a physical representation stands as a testimony to the outstanding universal value in popularising cultural artforms.

1.a *Natya mandapa* made of monolith *Rangaboomika* for dance performances.



(from top to bottom)

Puranic themed sculptures on the dolerite beams

1.b *Gouri Kalyana* panel

1.c *Tripurasura-samharamurty* panel

1.d *Gajasura Samhara* panel

1.e Tiers of the *Bharasila* with scrolls of puranic stories.

1.f *Apsarapurusa* on the *Ardhamandapa dwara*.



1.g *Madanikas* and *Gaja-vyala* as bracket fugures.

1.h *Gayani nartaki*

1.i Dancer imitating *Gayani nartaki*

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Id. No.	Format (slide/ print/ video)	Caption	Date of Photo(m/y)	Photographer/ Director of the video	Copyright owner	Contact details of copyright owner	Nonexclusive cession of rights
Criteria (i)							
1.a	Print	Floating brick tested at Ramappa Temple.	25/11/2015	E. Shiva Kumar	Visual Quest India Pvt. Ltd.	Visual Quest India Pvt. Ltd. Address 71, Road Number 3, Banjara Hills, Hyderabad, Telangana 500034 Email: mail@vqindia.com	Granted
1.b	”	Light weight porous bricks used in the Vimana of kateshwara temple.	”	”	”	”	”
2.a	”	Yazdani's Photograph of Dolerite Column at natya Mandapa(1914)	1914	Gulam Yazdani	The Temples at Palampet (1922)	Archaeological Survey of India Hyderabad Circle Kendriya Sadan III Floor, II Block, Sultan Bazar Hyderabad (Code-040) Email Id: circlehyd.asi@gmail.com, circlehyderabad.asi@gov.in.	”
2.b	”	Motifs on the the Dolerite column still intact.	25/11/2015	Anil Agarwal	Visual Quest India Pvt. Ltd.	Visual Quest India Pvt. Ltd, Hyderabad	”
2.c	”	Monolith Nandi adorned with rich carving of Dolerite.	20/11/2015	”	”	”	”
2.d	”	Jaali work of varutula at Antarala doorway, Close up of sculpture	25/11/2015	”	”	”	”
3.a	”	Cross-section through Sabhamandapa - sand box technology	----	Kshetra	M/s. Kshetra	M/s. Kshetra 2, 2, 1074/5, 528, Alekya's Radha Sadan, Road No 6, Amberpet, Amberpet, Hyderabad, Telangana 500013	”
3.b	”	Sand at foundation of the Kalyana Mandapa (Kameshwara temple)	25/11/2015	Anil Agarwal	Visual Quest India Pvt. Ltd.	Visual Quest India Pvt. Ltd, Hyderabad	”

Criteria (ii)

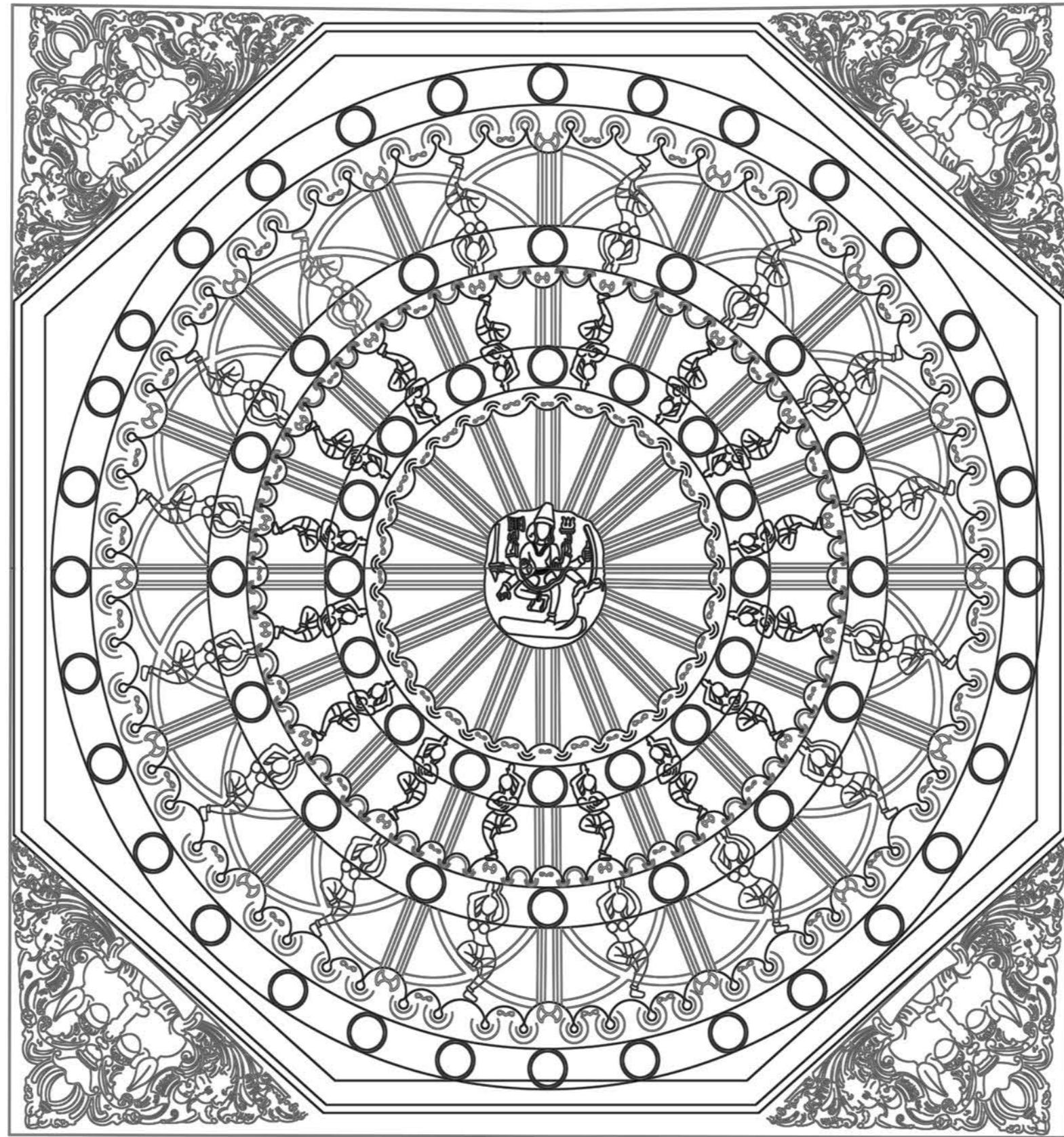
2.a	”	Google Imagery of Lakes close to the temples	----	---	Google Earth		”
3.a	”	The double pillared <i>Keerthi thoranas</i> adorning the entry Way to the temple at Warangal fort.	----	----	Geo Technical appraisal and evaluation of Kakatiya Monuments	Kakatiya Heritage Trust, Warangal	”
4.a	”	The Ramappa Temple at Palampet, resembling a Trikutalaya plan, is one shrine and three entry ways.	----	----	Archaeological Survey of India	Archaeological Survey of India Hyderabad Circle	”
5.a	”	Ramappa Temple at Palampet	----	----	M/s. Kshetra	M/s. Kshetra, Hyderabad	”
5.b	”	A contemporary Hoysala temple (Siddheshwara temple, Haveri, Karnataka)3	2002	----	The History of Architecture in India- Christopher Tadgell	----	”
5.c	”	Natya Mandapa of richly carved dolerite columns	20/11/2015	Anil Agarwal	Visual Quest India Pvt. Ltd	Visual Quest India Pvt. Ltd. Hyderabad	”
5.d	”	Dolerite column at Ramappa Temple	”	”	”	”	”
5.e	”	Column at Hoysaleshwara Temple, karnataka of simiar composition of elements	2007	Gerad Foekema	The Temple Architecture Of India Adam Hardy	----	”
6.a	”	Load transfer diagram	----	----	Geo Technical appraisal and evaluation of Kakatiya Monuments	Kakatiya Heritage Trust, Warangal	”
6.b	”	<i>Gayani Nartaki</i> at Ramappa temple, Palampet, Telangana	20/11/2015	E. Shiva Kumar	Visual Quest India Pvt. Ltd	Visual Quest India Pvt. Ltd. Hyderabad	”
6.c	”	Apsara at Hoysaleshwara Temple, Belur, Karnataka	----	Gerad Foekema	The Temple Architecture Of India Adam Hardy	----	”

Criteria iii							
1.a	„	Natya mandapa made of monolith <i>Rangaboomika</i> for dance performances.	5/11/2016	----	Dr. Choodamani Nandagopal	Email: choodamani.nandagopal@gmail.com	„
1.b	„	<i>Gouri Kalyana</i> panel	”	----	„	”	„
1.c	„	<i>Tripurasura-samharamurty</i> panel	”	----	”	”	”
1.d	„	Gajasura Samhara panel	”	----	”	”	”
1.e	„	Tiers of the <i>bharasila</i> with scrolls of puranic stories	”	----	”	”	”
1.f	„	<i>Apsarapurusa</i> on the <i>Ardhamandapa dwvara</i> .	20/11/2015	E. Shiva Kumar	Visual Quest India Pvt. Ltd	Visual Quest India Pvt. Ltd, Hyderabad	„
1.g	„	Dance Imitating <i>Madanika</i>	6/11/2016	----	Dr. Choodamani Nandagopal	Email: choodamani.nandagopal@gmail.com	„
1.h	„	<i>Gayani Nartaki</i>	20/11/2015	----	”	”	”
1.i		Dancer Imitating <i>Gayani Nartaki</i>	6/11/2016	----	”	”	

¹Philip B. Wagoner & Richard M.Eaton (2014) .Power, Memory, Architecture - contested sites on India's Deccan Plateau; Pg. 5,16&29.

²B. Satyanarayana Singh (1999) The Art and Architecture of Kakatiyas; Pg-110&112.

³Christopher Tadgell (2002) The History of Architecture in India; Pg. 130.



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Map 2. Location of Temples in the Wider Context of Rudreshwara (Ramappa) Temple



Map 3 Proposed Special Development Area

Meters
0 100 200 500
Levels from MSL

Map 4: Warangal-Mulugu Tourism Development Region

