



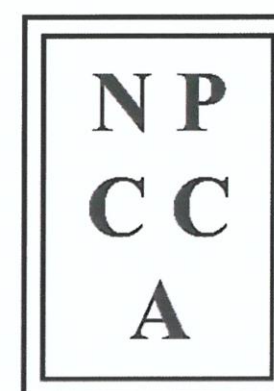
ACCESSIBILITY AUDIT REPORT

MARINE DRIVE PROMENADE

NCPA TO MARINE DRIVE FLYOVER



Advocacy - Governance - Renewal



ACCESSIBILITY AUDIT REPORT: MARINE DRIVE PROMENADE NCPA TO MARINE DRIVE FLYOVER



BUILDING TYPE: Pedestrian Promenade and Public realm

ADDRESS: Marine Drive Promenade, NCPA to Marine Drive Flyover

DATE OF AUDIT: 22nd March 2021

PREPARED AND CONDUCTED BY: Nature Nurture Architects and Planners

FOR: NGOs NAGAR and Nariman Point and Churchgate Citizens Association (NPCCA)

AUDIT TEAM : Nature Nurture Architects & Planners

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EXECUTIVE SUMMARY

Buildings and public spaces in India are not always designed to be accessible to all. Needs of persons with disability (PwDs), elderly persons and persons with temporary mobility issues due to fractures, pregnancy, etc. are not considered while designing resulting in a number of barriers. The accessibility audit is aimed at identifying such barriers and giving recommendations thereon, in order that all persons can move around with dignity, without need for assistance in any public space and building premise.

The intent of the audit is to identify the barriers in the everyday use of the space, as encountered by the visually impaired, hearing impaired, and persons with lower and upper limb locomotive disability which includes wheelchair users, as also elderly persons and persons with temporary mobility issues due to fractures, pregnancy.

The report includes high priority and other recommendations based on ease of implementation and has to be read along with the Harmonised Guidelines and Space standards for barrier free built environment for persons with disability and elderly persons,

February 2016.

<http://cpwd.gov.in/Publication/armonisedguidelinesreleasedon23rdMarch2016.pdf>

In accordance with the Accessible India Campaign (AIC) (Sugamya Bharat Abhiyan) which is launched as a nationwide campaign, for achieving Universal accessibility for Persons with Disability (PwDs) and maximum accessibility for all persons, this access audit aims to assess these factors on '**Marine Drive Promenade**'.

Standards of accessibility in the audit conform to the 'Harmonised Guidelines and Space standards for barrier free built environment for persons with disability and elderly persons, February 2016.

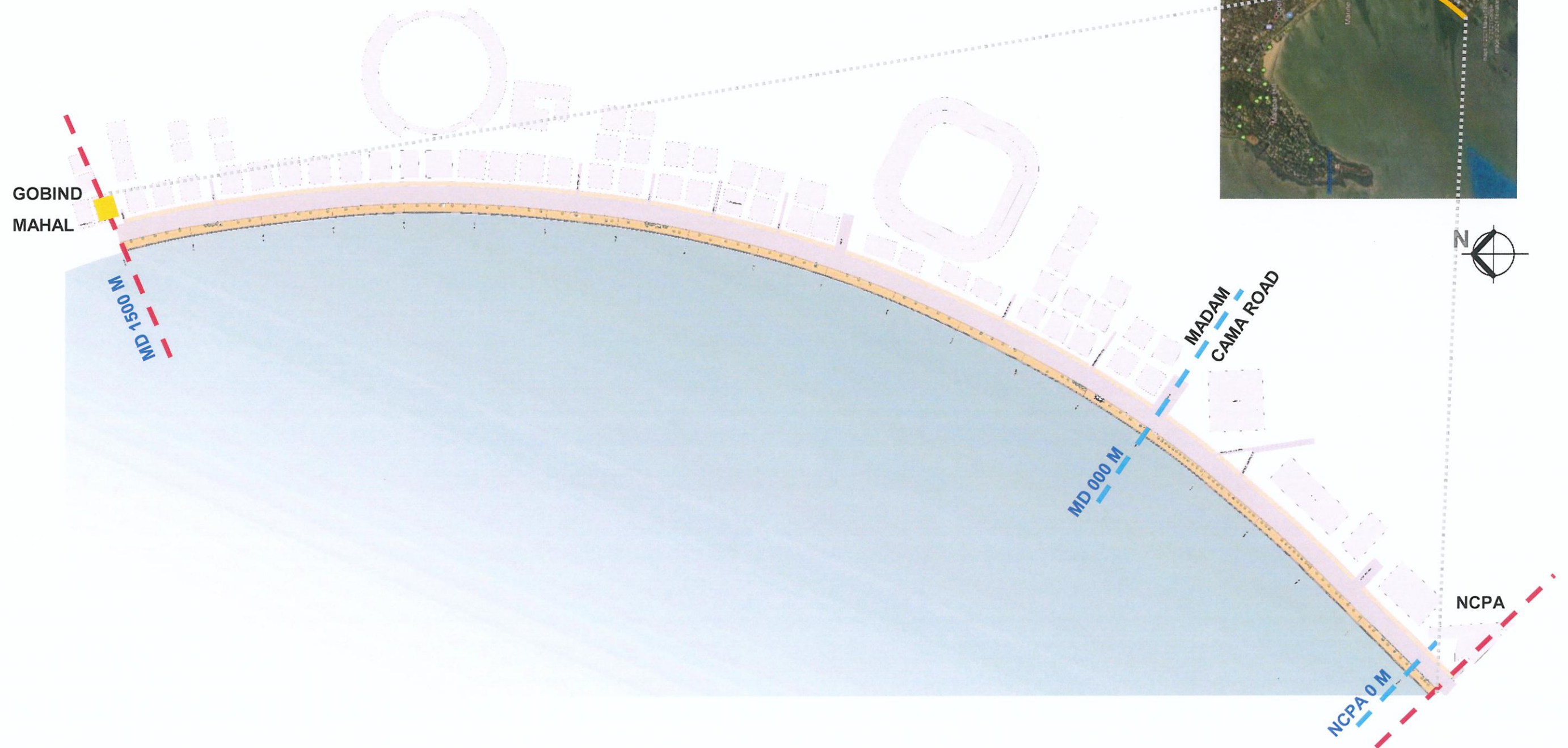
An accessible space is one in which all members of society have an equal access to every part and all amenities. It is working towards an equitable society whereby Persons with disabilities (PwDs), of both permanent and temporary nature, are empowered to move around independently in the accessible environment.

The audit was carried out considering the above mentioned categories who use this public space. The audit was conducted as per the everyday circulation and use of the space by a user, ensuring that no barriers are overlooked. The report is structured in a manner such that the spaces are categorized as Promenade, Access to and from the promenade and details on these accesses, Intersections / Crossings, along with all the public street furniture and utilities.

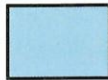
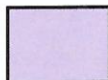



The audit of sideways/ promenade and entrances are carried out as a separate entity using the parameters of the Road Planning and Transport section of the Harmonised Guidelines and Space Standards for Barrier free Built Environment for Persons with Disability and Elderly Persons. Issues have been identified, and corresponding recommendations have been proposed.

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








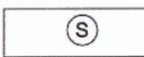
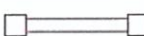
EXTENT OF THE AUDIT



CHECKLISTS LEGEND:

LOCOMOTOR IMPAIRED	L
VISUALLY IMPAIRED	VI
HEARING IMPAIRED	HI
MAJOR MODIFICATIONS	
MINOR MODIFICATIONS	
YES	
NO	
NOT APPLICABLE	

LAYOUT PLAN LEGEND:

	TREES
	GRASS
	TREE GRATINGS
	TREE GUARD
	DUSTBIN
	INSPECTION CHAMBER
	SEWAGE CHAMBER
	ELECTRICAL BOX
	STRUCTURE
	DRAIN
	SIGNAGE 1
	SIGNAGE 2

ABBREVIATIONS AND VOCABULARY:

NCPA- National Centre of the Performing Arts

MD- Marine Drive

IC- Inspection Chambers

PwDs- Persons with Disabilities

Protruding objects- Any object present on site which is of a permanent nature and cannot be moved is referred to as a protruding object. This includes, street utilities and furniture like electrical boxes, street lights, traffic lights, inspection chambers, post-boxes, and signages installed incorrectly on an access path.

Unwanted barriers- Any object on site which is of a temporary nature and can be moved is referred to as a unwanted barrier. This includes, movable furniture, pots and planters, etc.

NOTE:

The scope of the report is limited to the accessibility of the Marine Drive Promenade to the persons with disabilities.

Considering the heritage status of the Marine Drive promenade, the guidelines of universal design which would result in any kind of new construction are not applicable for the purpose of this study.

KEY PLAN

NCPA TO MADAM CAMA ROAD

NCPA (-50) to 300 M	10
• Promenade	11
• Resting Spaces	27
• Intersection	30

NCPA 300 to 500 M (MD 000)	31
• Promenade	32
• Resting Spaces	41
• Intersection	43

**MADAM CAMA ROAD TO GOBIND MAHAL
(near Marine Drive flyover)**

MD 000 to 400 M	45
• Promenade	46
• Resting Spaces	61
• Intersection	63

MD 400 to 800 M	65
• Promenade	66
• Resting Spaces	81
• Intersection	83

**MADAM CAMA ROAD TO GOBIND MAHAL
(near Marine Drive flyover)**

MD 800 to 1200 M	85
• Promenade	86
• Resting Spaces	101
• Intersection	103

MD 1200 to 1500 M	105
• Promenade	106
• Resting Spaces	118
• Intersection	120

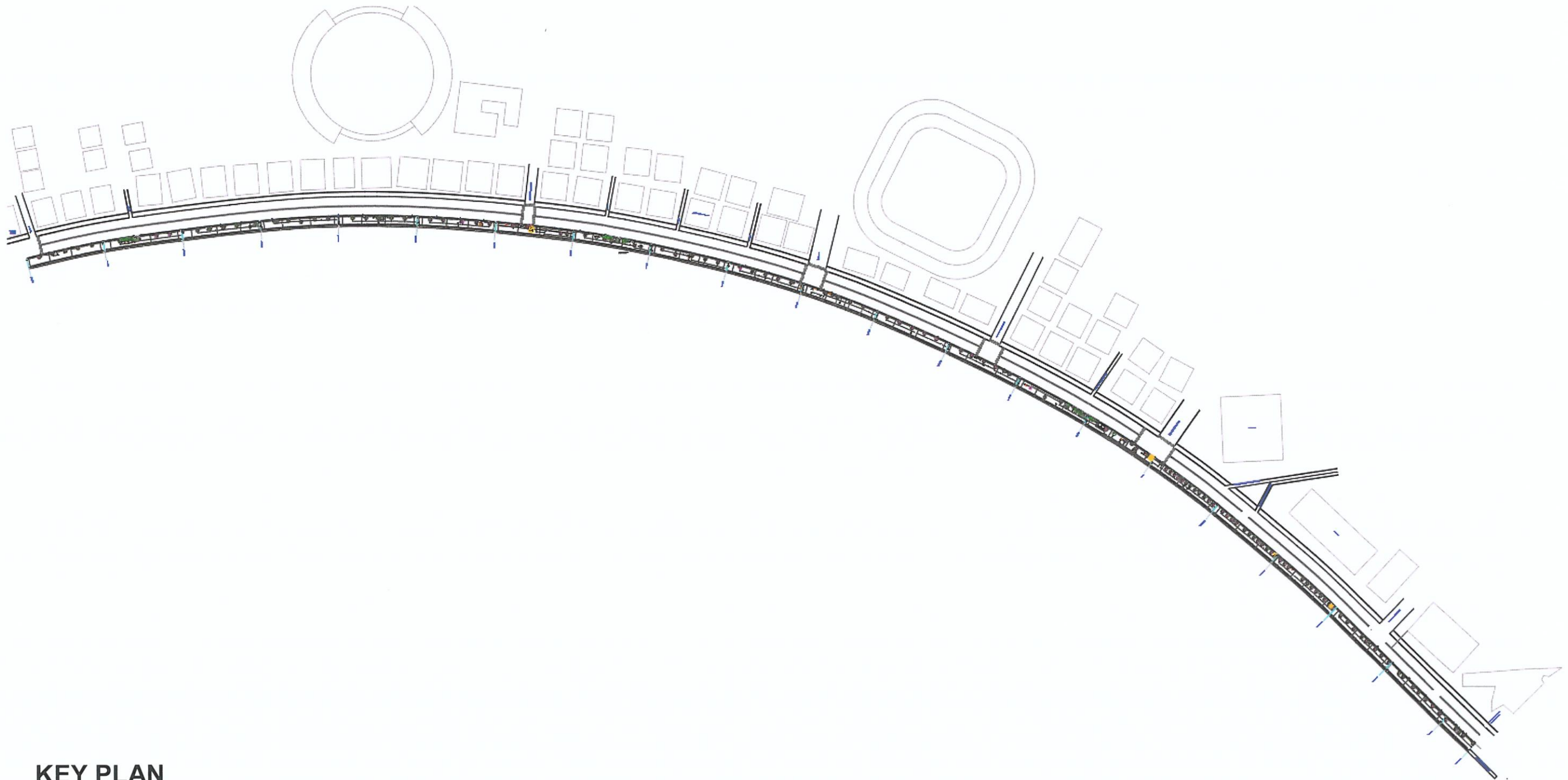
GENERAL OBSERVATIONS **122**

PUBLIC TOILET **128**

SIGNAGES **136**

CONCLUSIONS AND REFERENCES **143**

CONTENTS



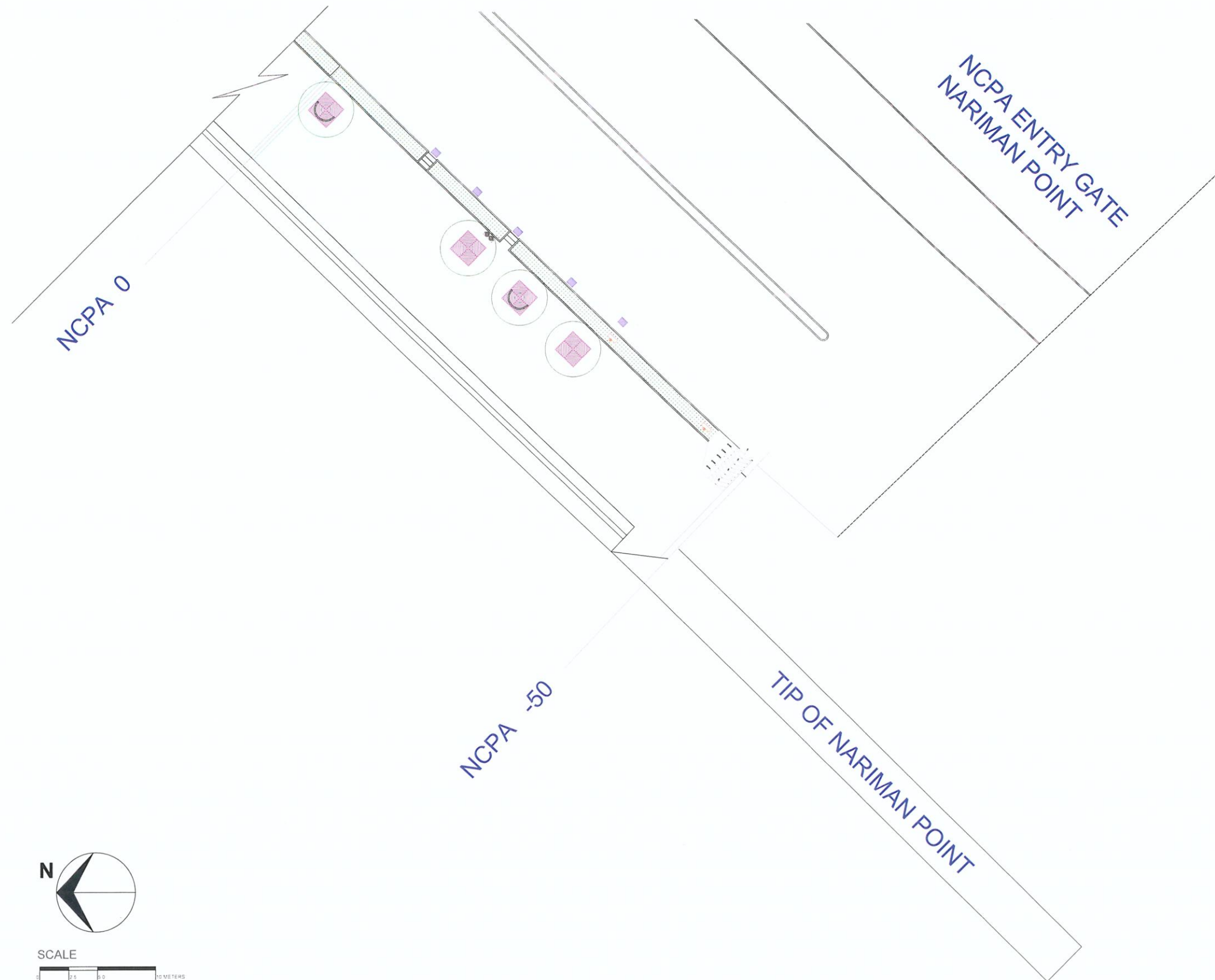
KEY PLAN

ACCESSIBILITY AUDIT

NCPA TO MADAME CAMA ROAD STRETCH

NCPA (-50) to 300 M

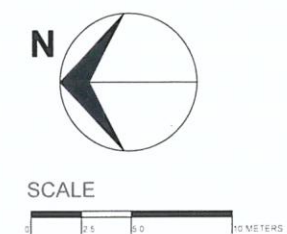
Interval: (-50)M at NCPA to 300M at Barrister R.P. Marg



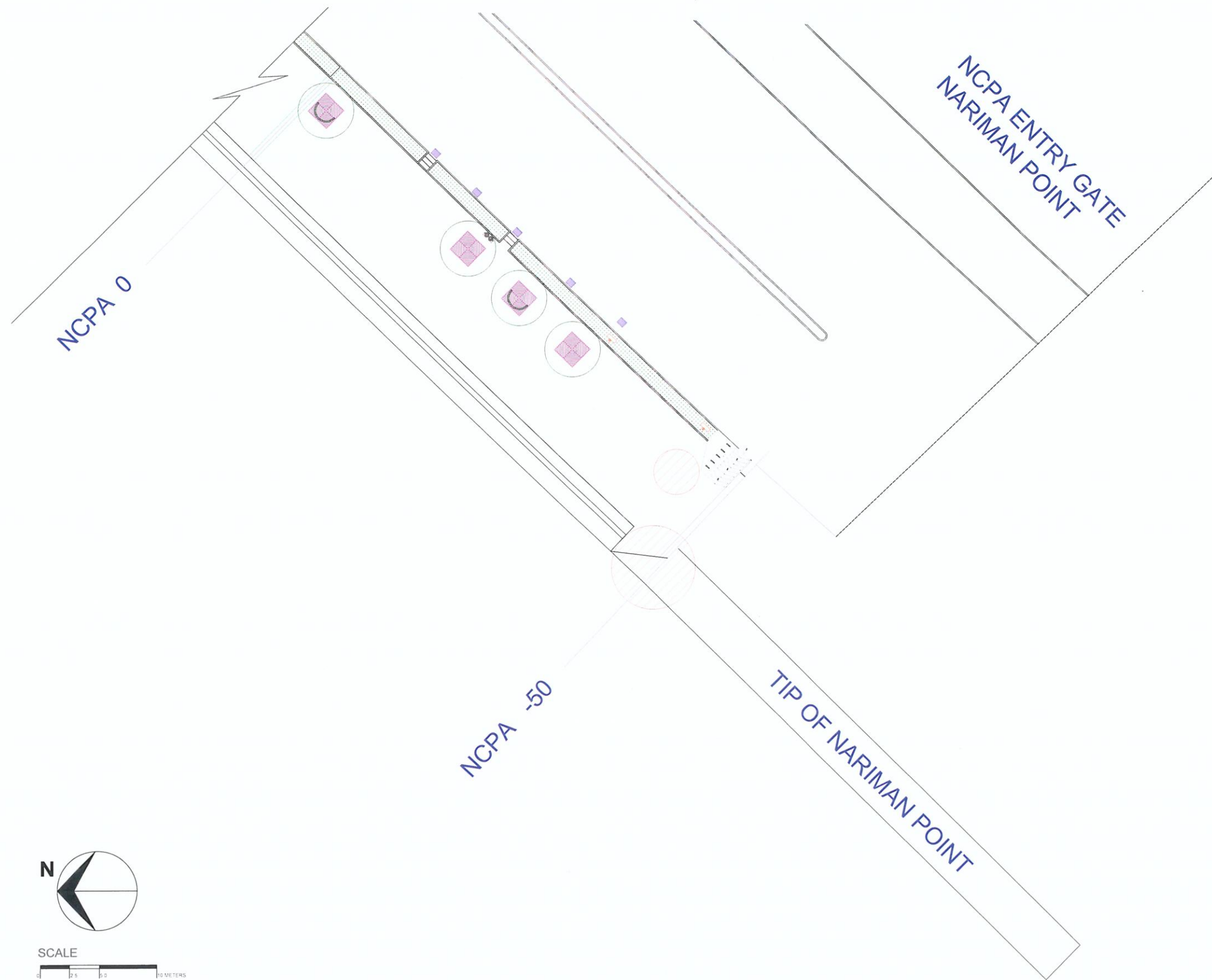
LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2













NCPA (-50) to 0 M
NCPA to NCPA Pay & Park



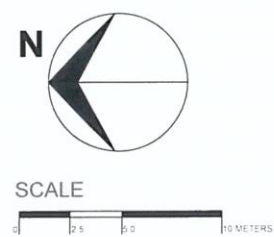
LAYOUT PLAN



LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
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-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
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-  DRAIN
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-  SIGNAGE 2

NCPA (-50) to 0 M
NCPA to NCPA Pay & Park

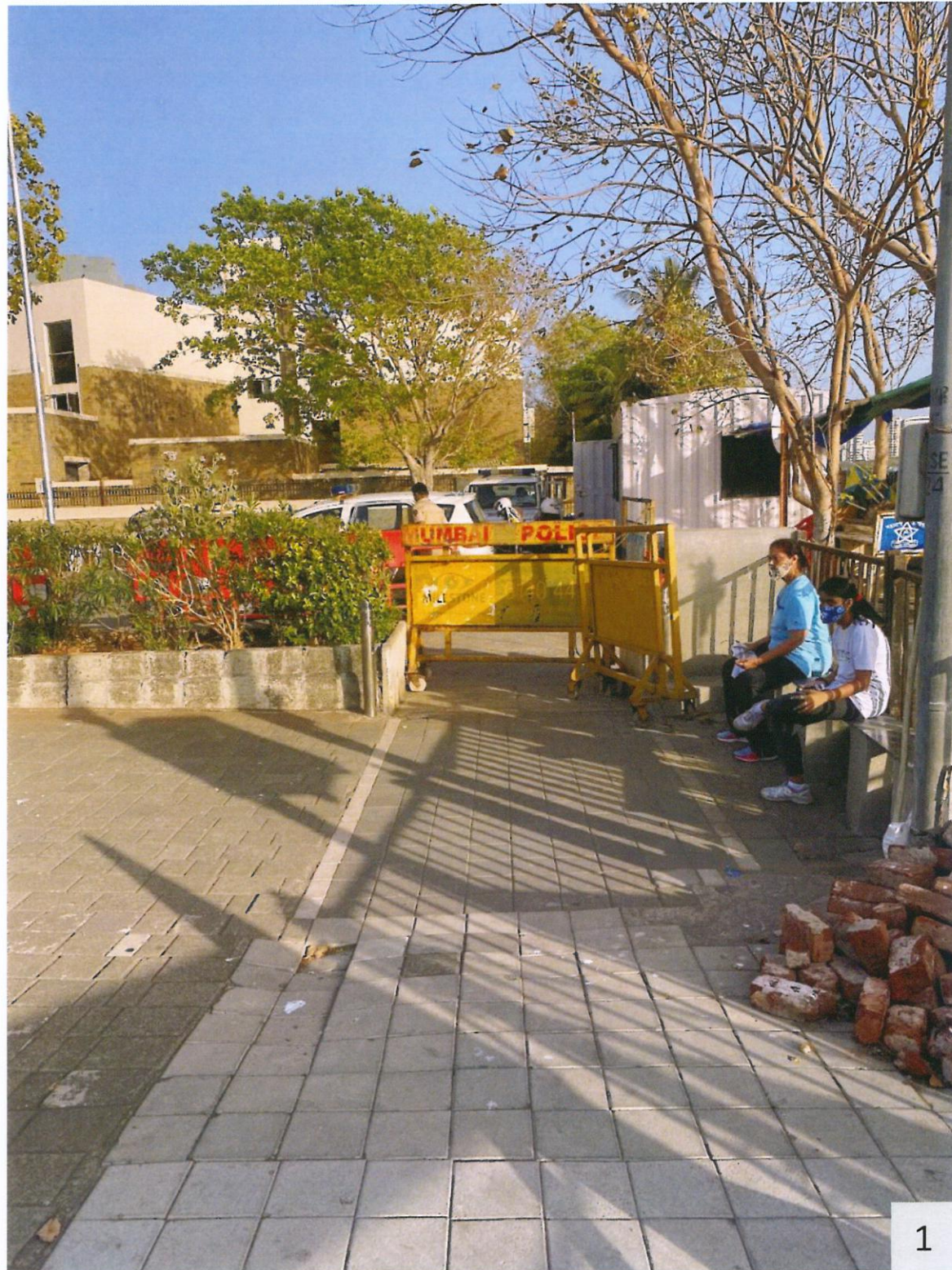


LAYOUT PLAN INDICATING BARRIERS













NCPA (-50) to 0 M



NCPA (-50) to 0 M

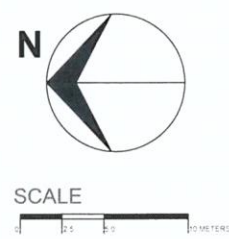


LEGEND

-  TREES
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

NCPA 0 M to 100 M

NCPA Pay & Park to V. K. Shah Marg



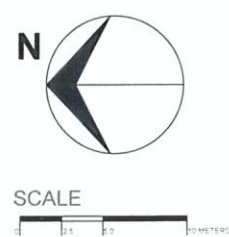
LAYOUT PLAN

LEGEND

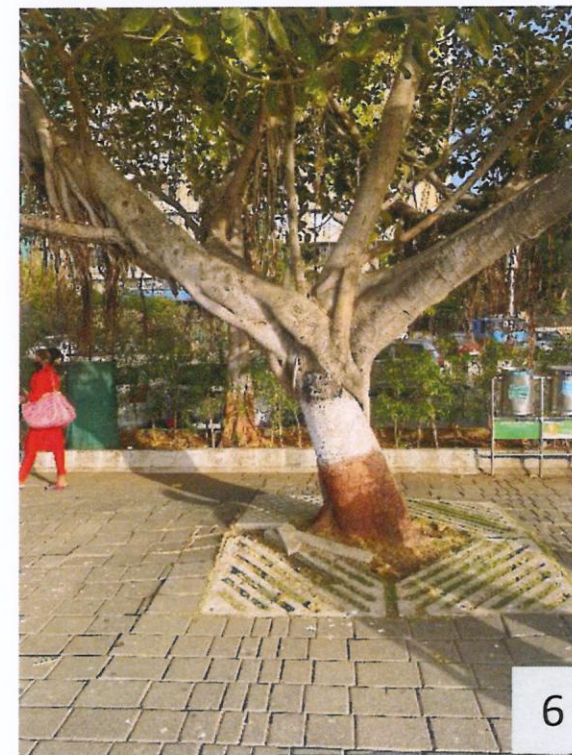
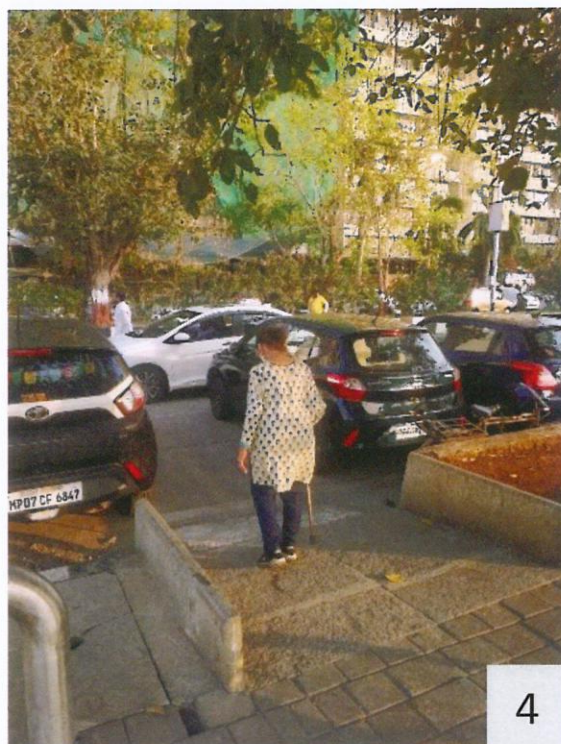
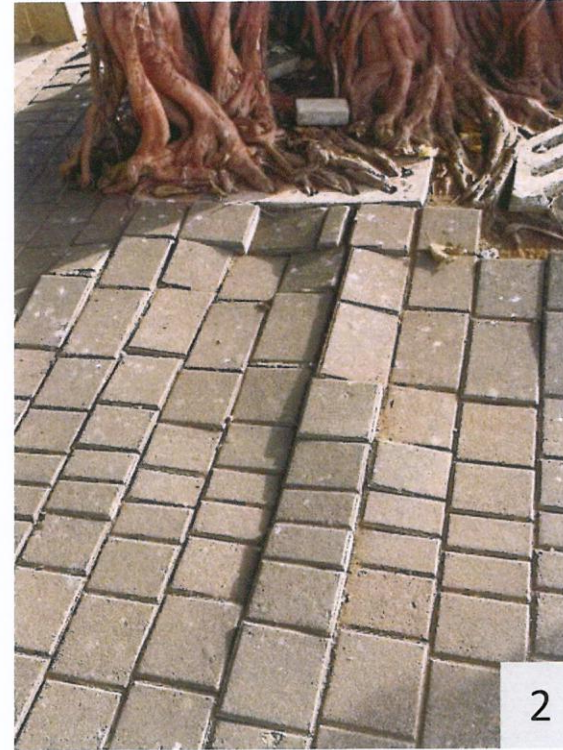
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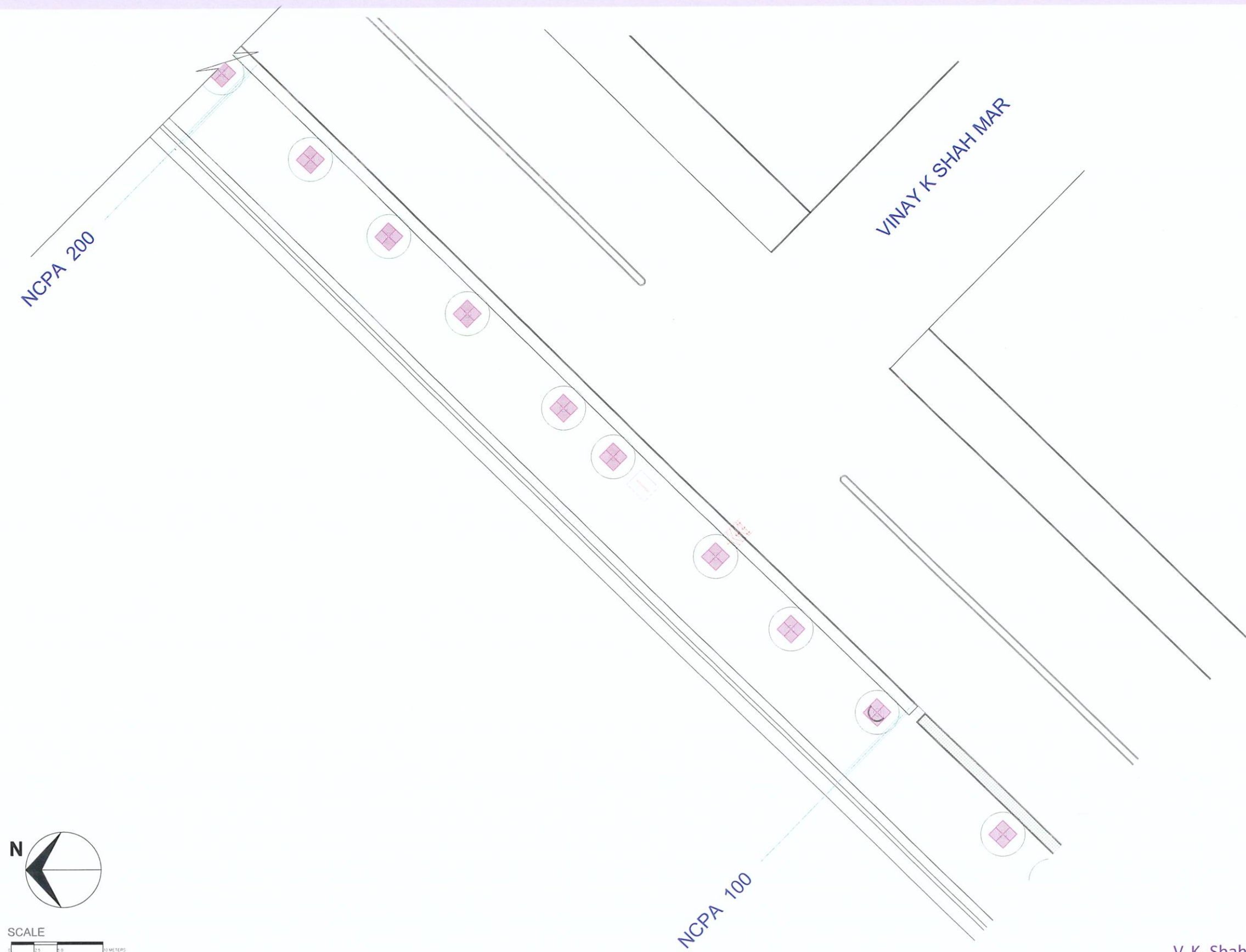
NCPA 0 M to 100 M

NCPA Pay & Park to V. K. Shah Marg















LAYOUT PLAN INDICATING BARRIERS



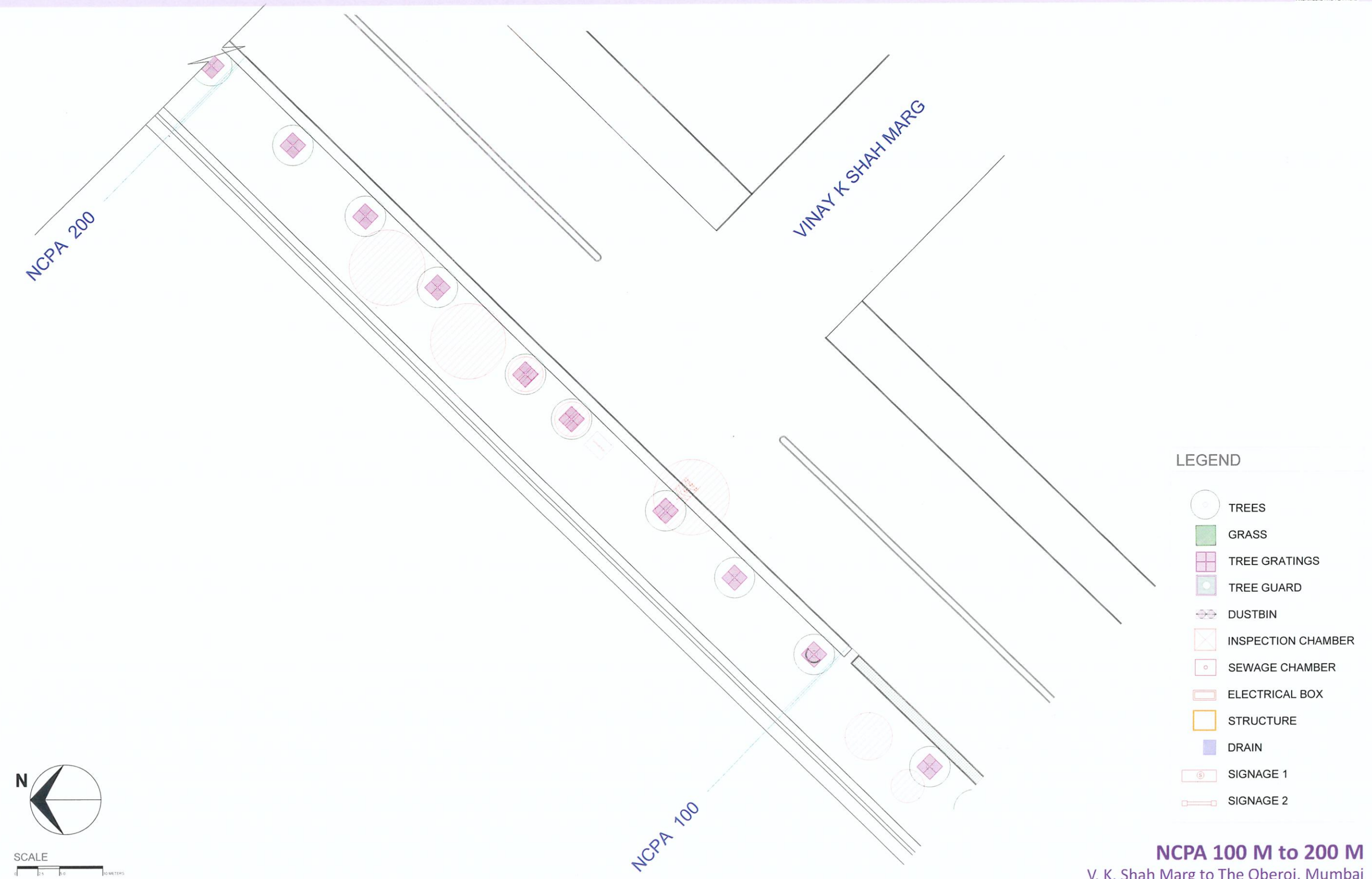


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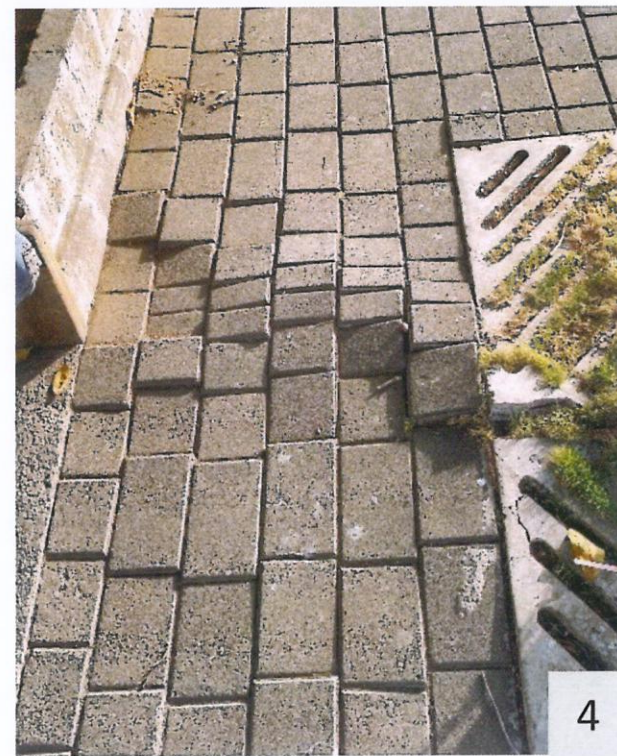
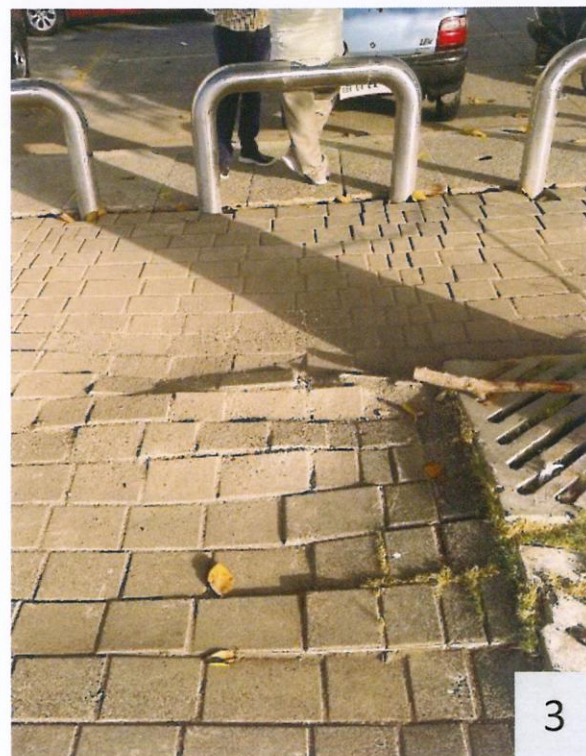
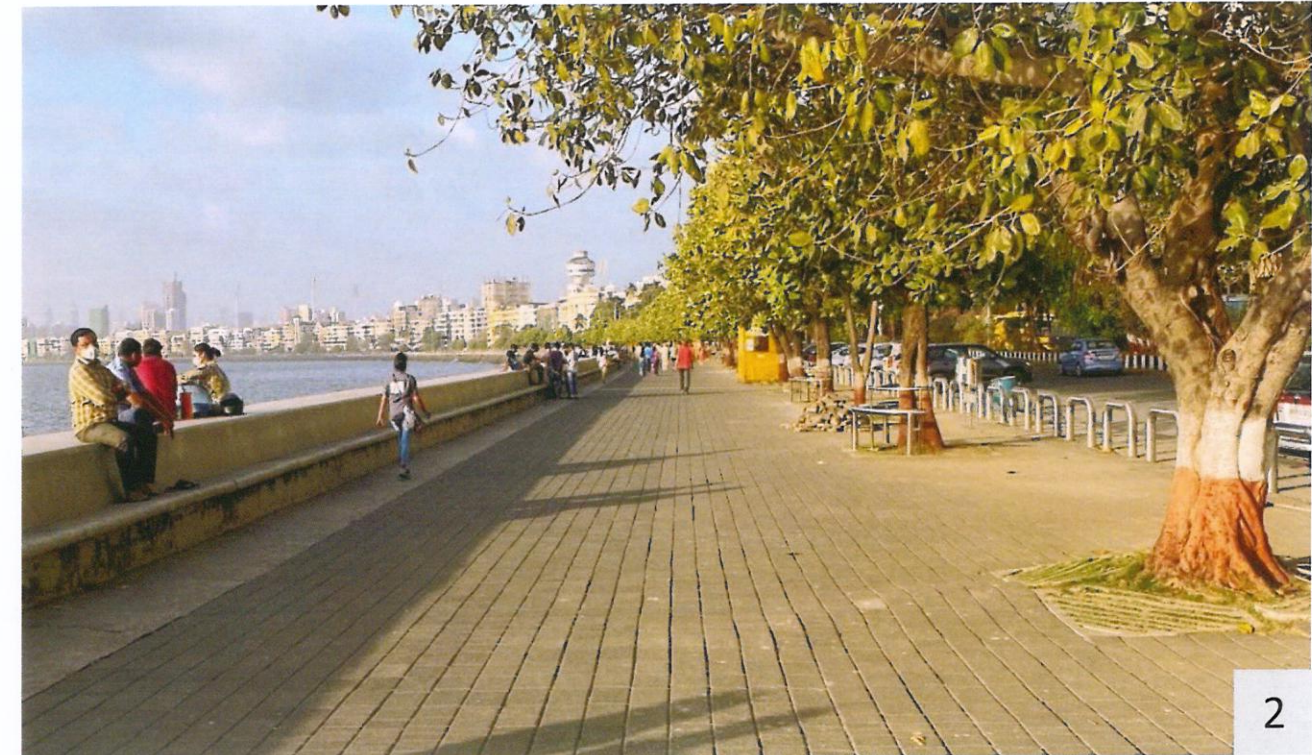
-  TREES
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-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

NCPA 100 M to 200 M
V. K. Shah Marg to The Oberoi, Mumbai

LAYOUT PLAN

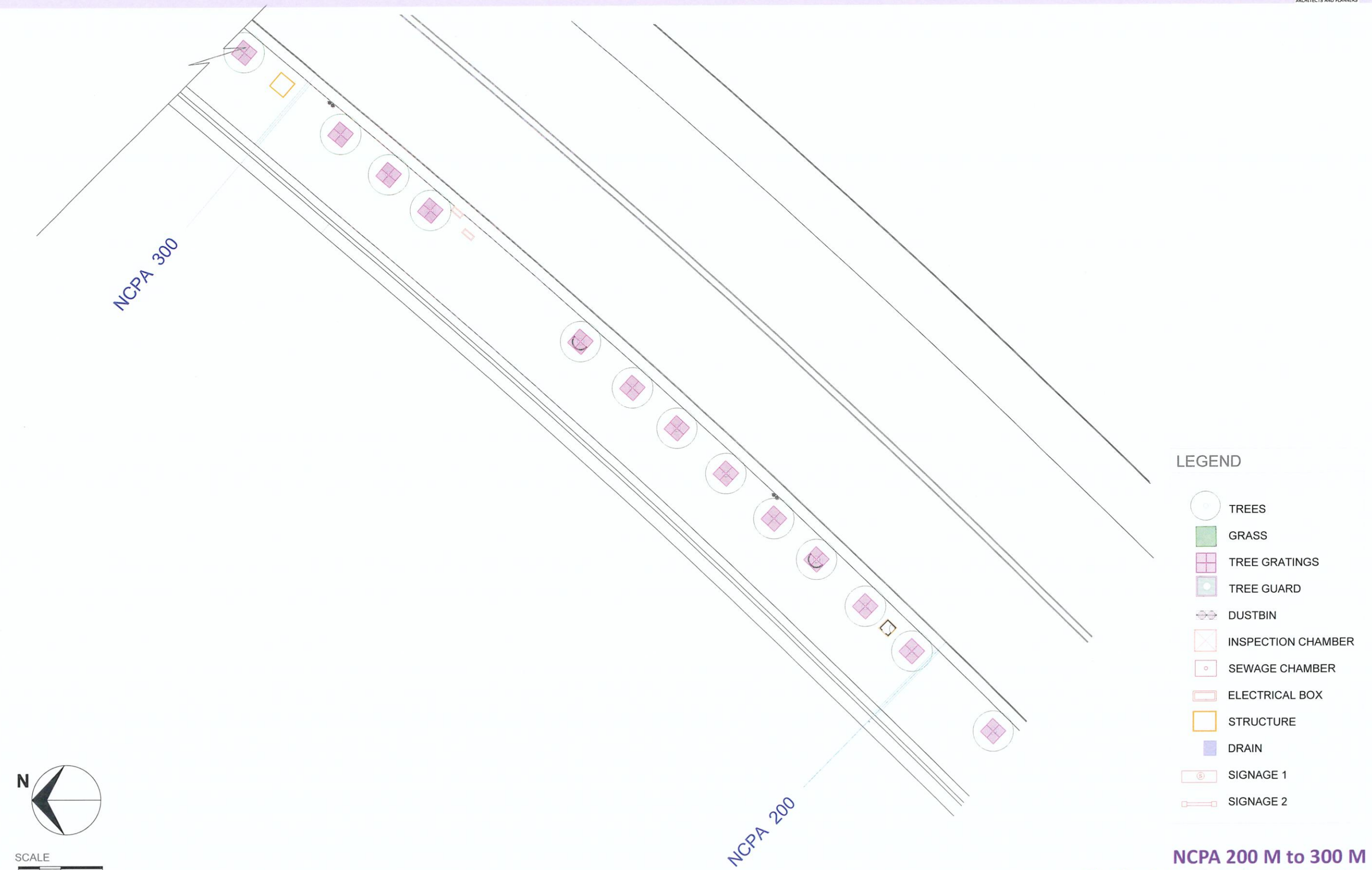


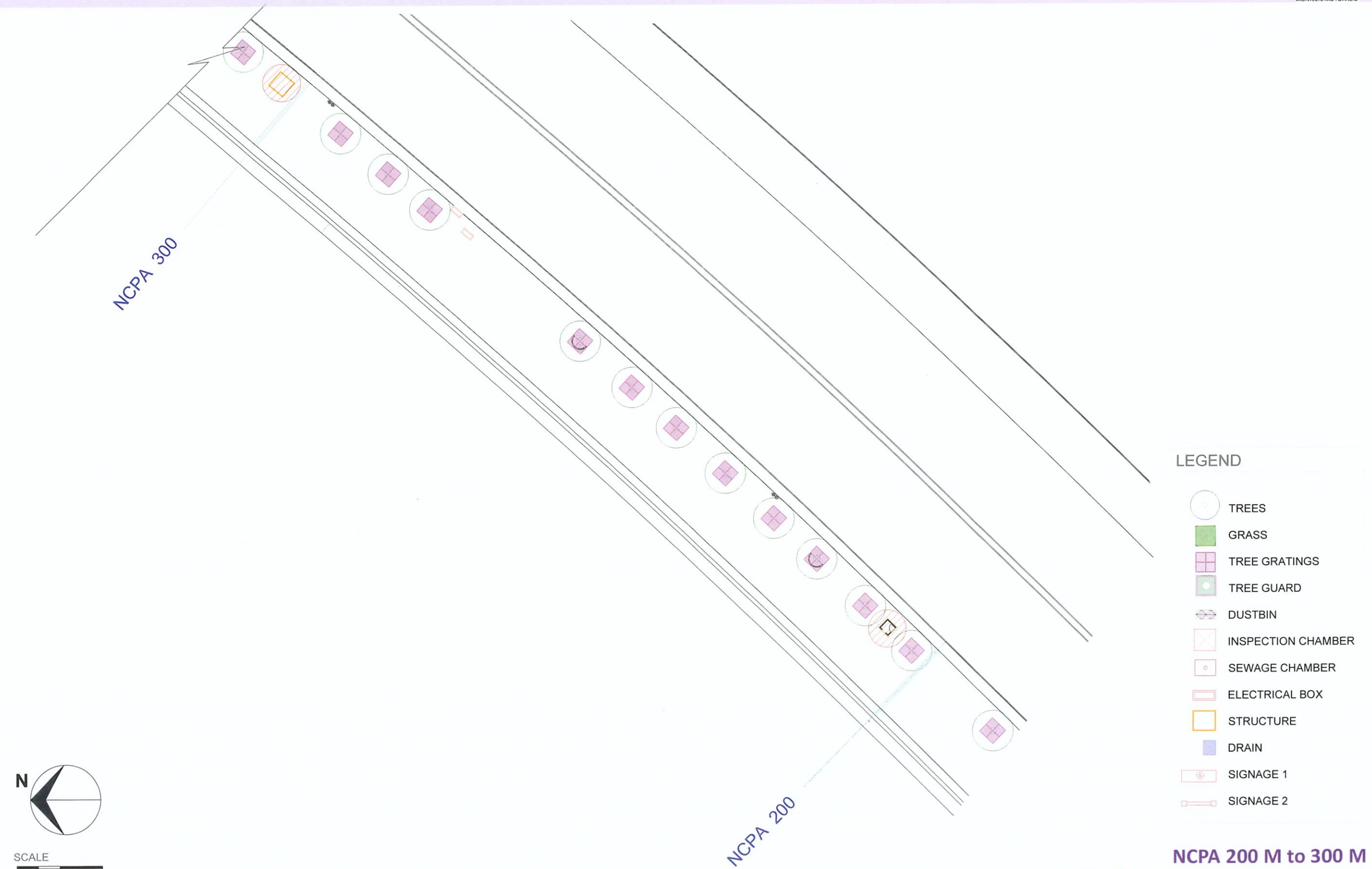
LAYOUT PLAN INDICATING BARRIERS



PARAMETER: **PROMENADE**

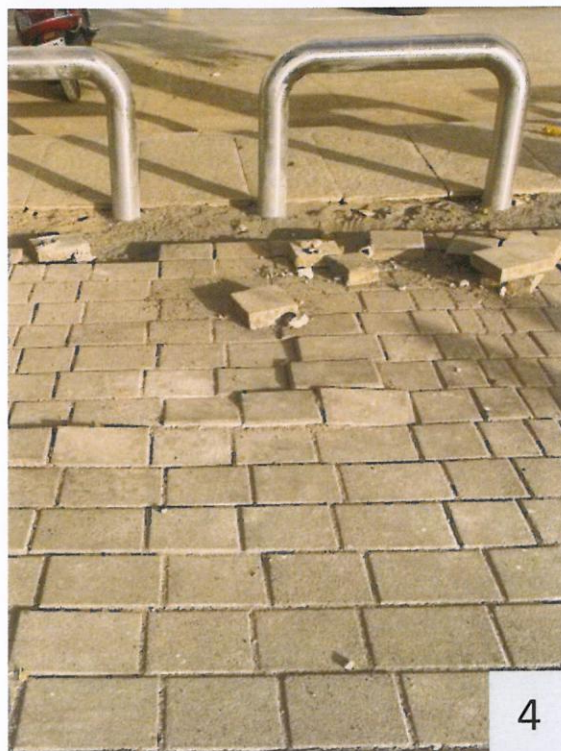
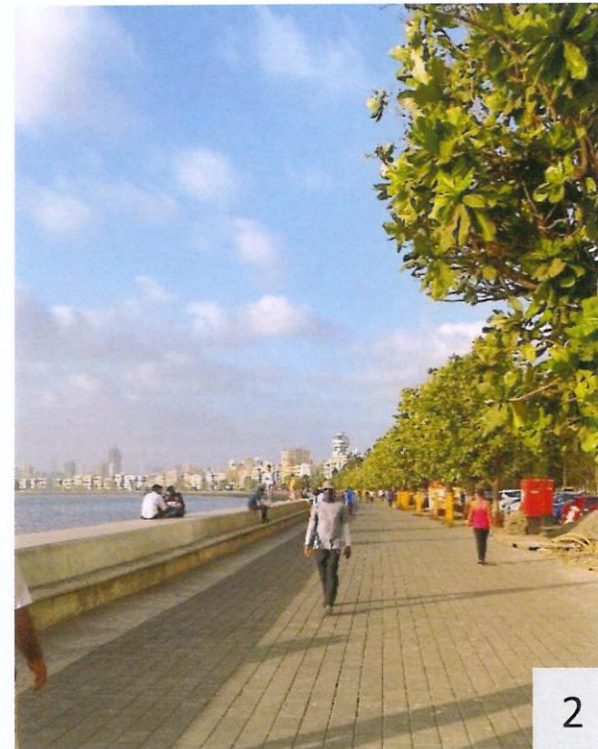
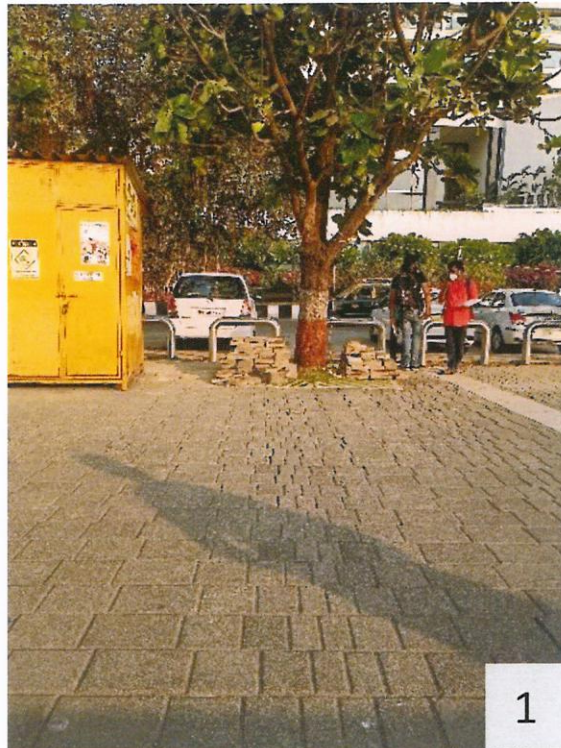
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LAYOUT PLAN INDICATING BARRIERS

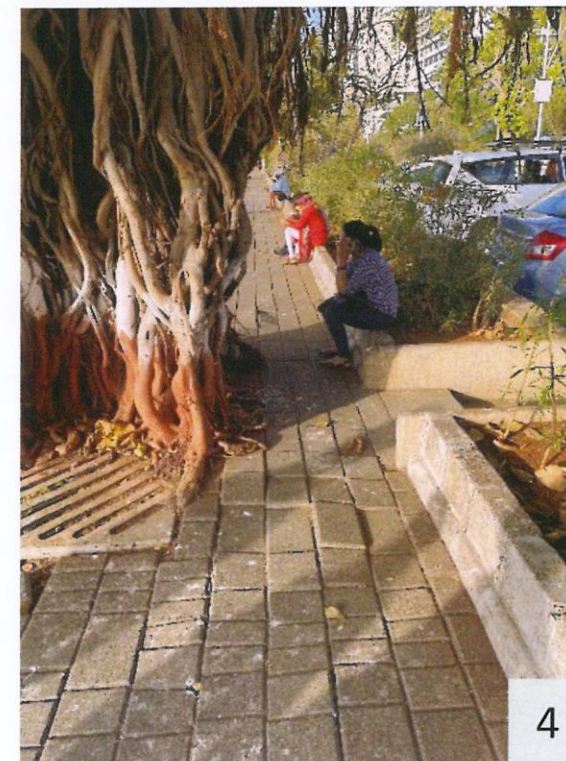
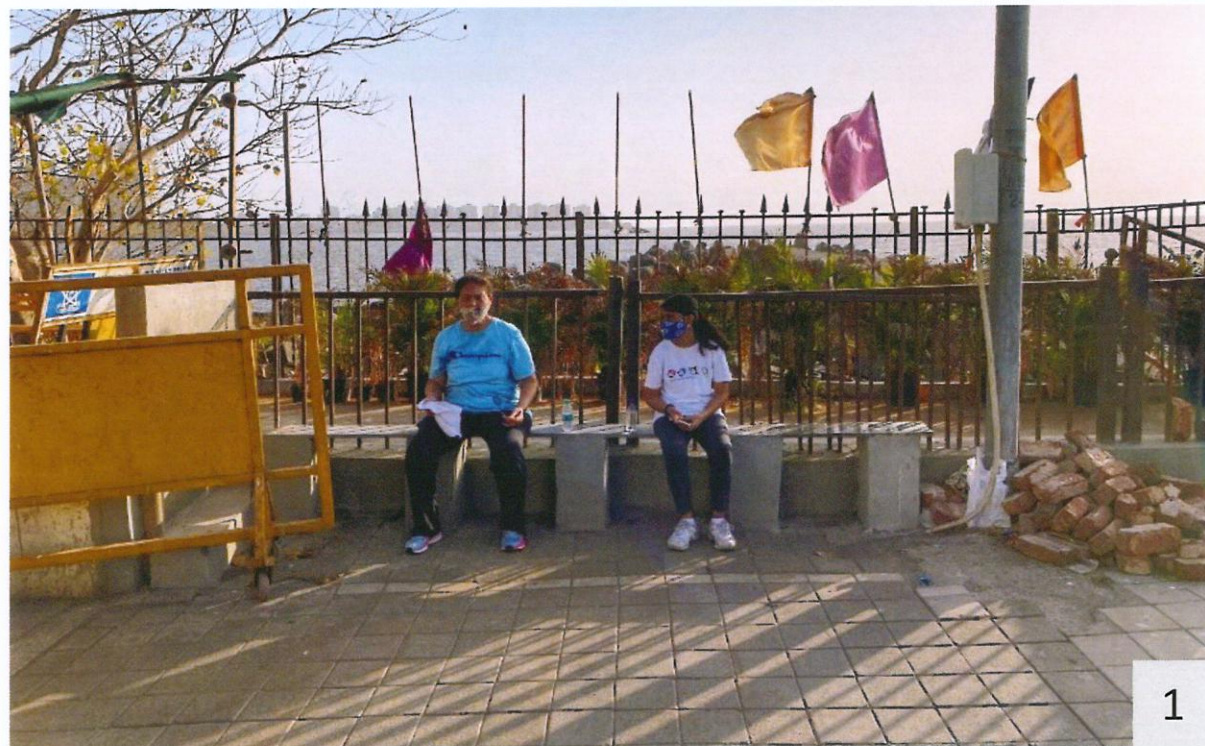
NCPA 200 to 300 M



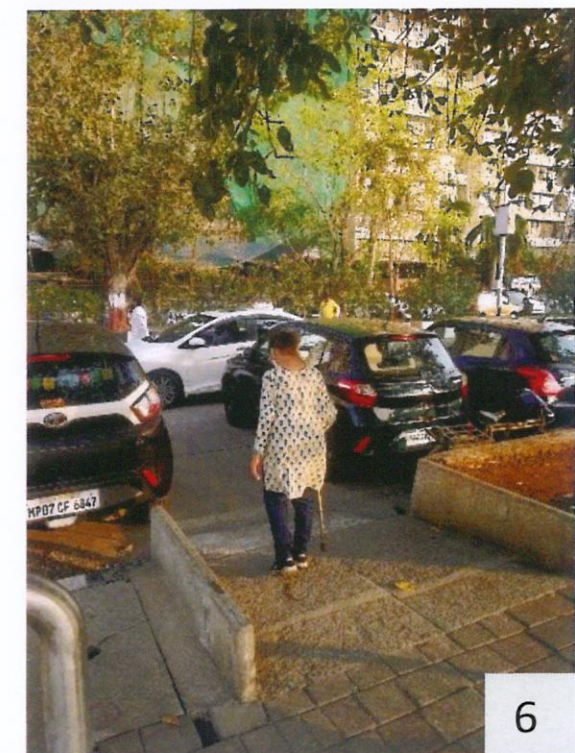
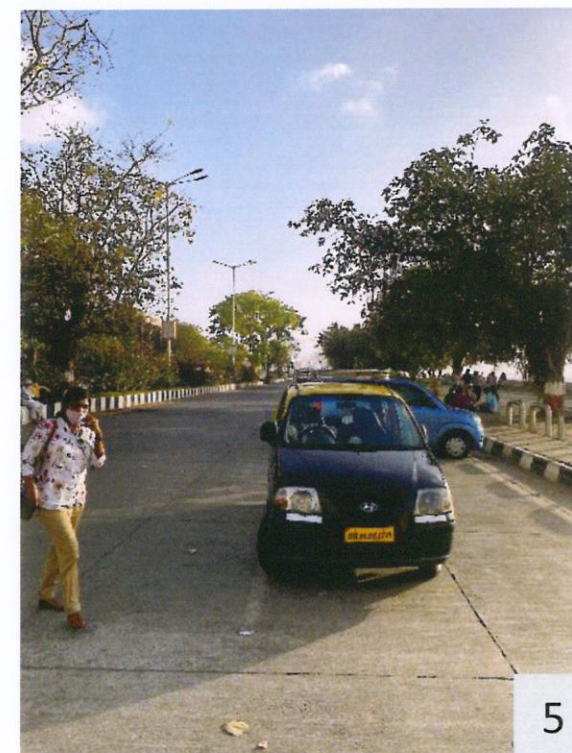
Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval/Serial No.	-50 to 0			0 to 100			100 - 200			200 - 300					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
PROMENADE																	
L/VI	11.1	Is the pedestrian pathway /promenade is minimally 1800mm wide?														A1.1 , A3.3, A4.1,A5.2	
		Is the promenade is along the entire length of the road?														A1.2,A5.1	
L/VI		Is it less than 150mm high?													It's at a level of 200 mm to 300mm.	A1.5, C1.3, A3.6, A4.6	11.1- Sidewalks/ footpaths
L/VI		Are there no protruding objects or barriers on the promenade?													Intervals 0 to 100 and 200 to 300 do not have protuding objects.	A1.3, A1.4, A3.1, A3.2, A4.3, A4.5, A5.3, A5.4, A5.5	11.1- Sidewalks/ footpaths
L/VI		Are the protruding objects guarded?													No guards provided.	B1.3	11.1- Sidewalks/ footpaths 5.1.4- Barriers and Hazards
		Is the pathway levelled?													Undulating at some points because of broken paving and unusual slopes.	A1.4, A3.1, A3.2, A4.3, A4.4, A1.6	11.1- Sidewalks/ footpaths
L		Is there 1500 mm x 1500mm space to allow a wheelchair user to turn around at some point on the pathway?														A1.2, A3.3, A4.2	
L/VI		Is the finish non-slip and non-reflective?															
VI		Is the pathway well illuminated at night?													Since there are no lights on the promenade itself, the illumination is by the street lights on the median. Most of this light is obstructed by the tree foliage.	A5.5	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval/Serial No.	-50 to 0			0 to 100			100 - 200			200 - 300					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
VI		Is there a colour contrast between the pathway and seating?													There is a contrast between the pathway and the seating depending on daylight factors and for persons without disabilities. However, for persons with partial visual impairment or color blindness, this contrast might not be visible. But considering that the promenade width is 12000 mm which is more than required and that the promenade is heritage listed, this contrast can be considered to be sufficient.	A1.2, A4.1	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways
L		Does the footpath have kerb cuts for persons to get on and get off the pathway at intersections?													Interval -50 to 200m does not have an intersection. The intersection in the interval 200-300m does not have a kerb cut ramped entrance to get off and on the promenade.		11.2- Kerb Ramps at walkways and pedestrian crossing
L/VI		Does the footpath have kerb cuts for persons to get on and get off the pathway?															11.2- Kerb Ramps at walkways and pedestrian crossing
VI		Have tactile warning blocks been installed next to all entry and exit points from the pathway													No tactile markings are provided.	A1.5, A2.1, A3.4, A5.4	11.1- Sidewalks/ footpaths

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval/Serial No.	-50 to 0			0 to 100			100 - 200			200 - 300					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
		Are the trees on the promenade guarded?		No			No			No			No			A1.4	11.1- Sidewalks/ footpaths
		Are there dustbins on the promenade?	Yes			Yes			Yes			Yes					
		Are the dustbins accessible- at a height between 900-1000mm?		No			No			No			No		They are at the height of 1200mm.	D1.2	3.2- Reach Range
		Are the Inspection chambers well flushed with the footpath?			NA			NA			NA			NA			
L/VI		Are the pathways maintained and kept free of unwanted barriers such as furniture, planters, etc?		No			No			No		Yes			At the time of the audit, bricks, pipes and debris were stacked at certain spots on the promenade. Although this stacking of construction materials is temporary, care must be taken that they are placed such that all the access points and utilities are free of such barriers.	A1.3, A3.5, A4.5, A5.3	



Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval /Serial No.	-50 to 0			0 to 100			100 - 200			200 - 300					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
RESTING SPACES																	
L/VI		Where there are large spaces, are resting facilities provided at 30 meters of intervals?														B1.2	
		Is there an adjoining space for a wheelchair next to benches and public seats?													The seating is continuous-most of the seating runs continuously abutting the shoreline.	B1.3	
L/VI		Are public seats with height of 450-480mm?													The lower seating complies with the regulation. However, the embankment which serves as a popular seating and from where the sea and horizon are visible, is higher and not accessible.	B1.2	
L/VI		Are there knee spaces at accessible tables with a height of 750mm and knee space of 750mm wide and 480mm deep?													There are no tables on the promenade.		















Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval /Serial No.	-50 to 0			0 to 100			100 - 200			200 - 300					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
INTERSECTIONS																	
L/VI		Is the footpath at the intersection 1800mm wide?													Intervals -50 to 100m and 200 to 300 does not have an intersection. Intersection present on the interval 100-200m.		
		Is a median is present?														C1.1, C1.2	11.4- Medians and Refuge Islands
L/VI		Is the median an area at ground level? Can it be used as refuge area during crossing?													Intersection is present but No zebra crossing is provided.		
L/VI		Are the signals easily readable and are they placed such that they can be seen while crossing?													The traffic lights are placed such that they are not easily identifiable. The orientation of these traffic lights meant for pedestrians are inefficient.		
VI		Is there an audible alert when the signal goes on and off?													No audible alert.		11.5- Traffic Signals
		Is there an interval indicating device on the traffic signal?													No time interval indicating device present.		11.5- Traffic Signals
		Is the time interval allowed for crossing programmed according to the slowest crossing persons?													It was observed that at most of the crossings had a very short interval which will not allow a person to cross at a comfortable pace.		11.5- Traffic Signals

NCPA TO MADAME CAMA ROAD STRETCH

NCPA 300 M to 500 M

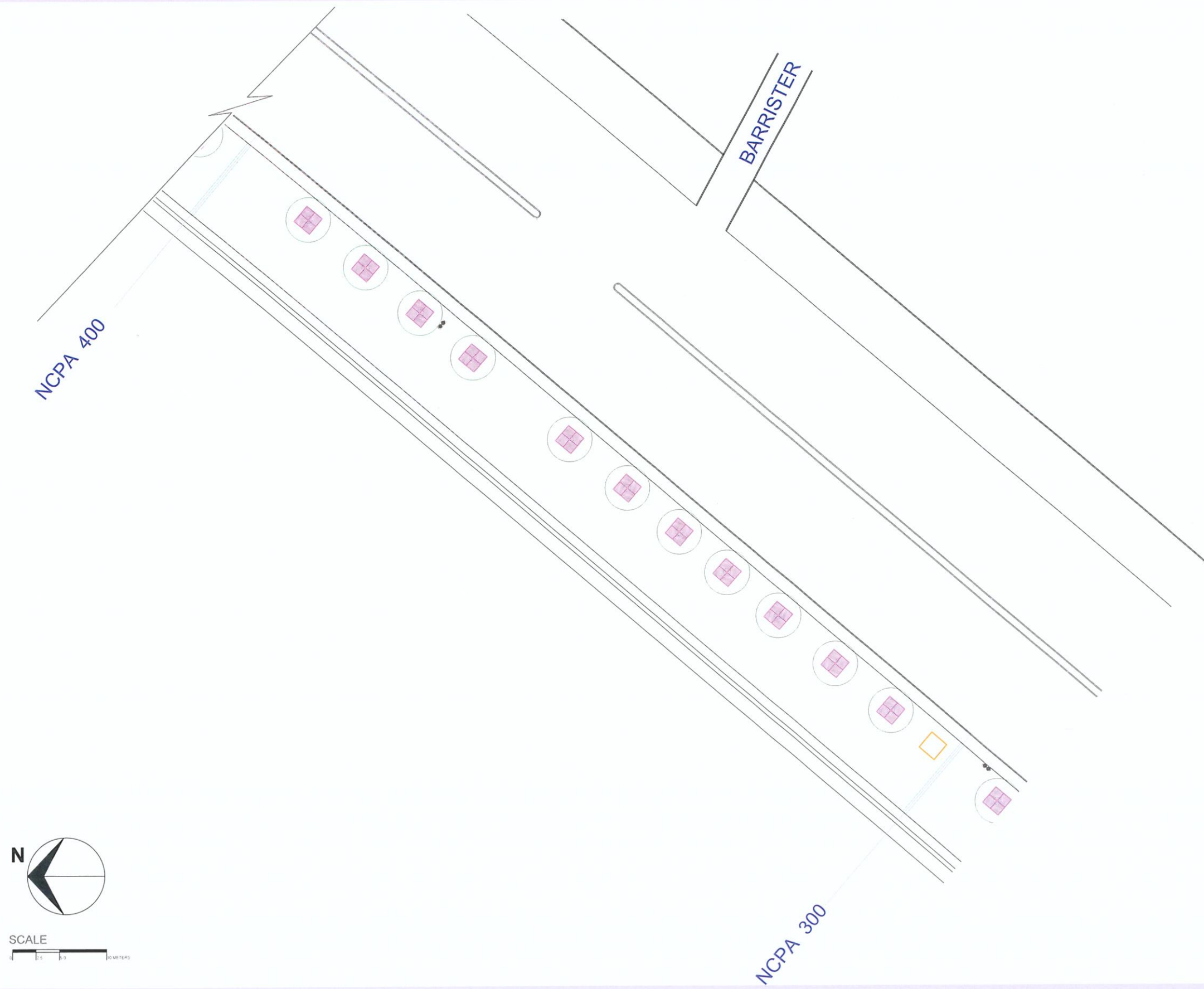
Interval: 300 M at Barrister R.P. Marg to
500 M at Madame Cama Road

LEGEND







-  TREES
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NCPA 300 M to 400 M
Barrister R. P. Marg to Air India

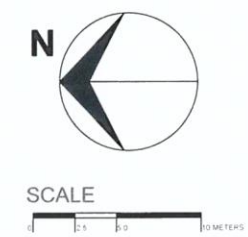
LAYOUT PLAN



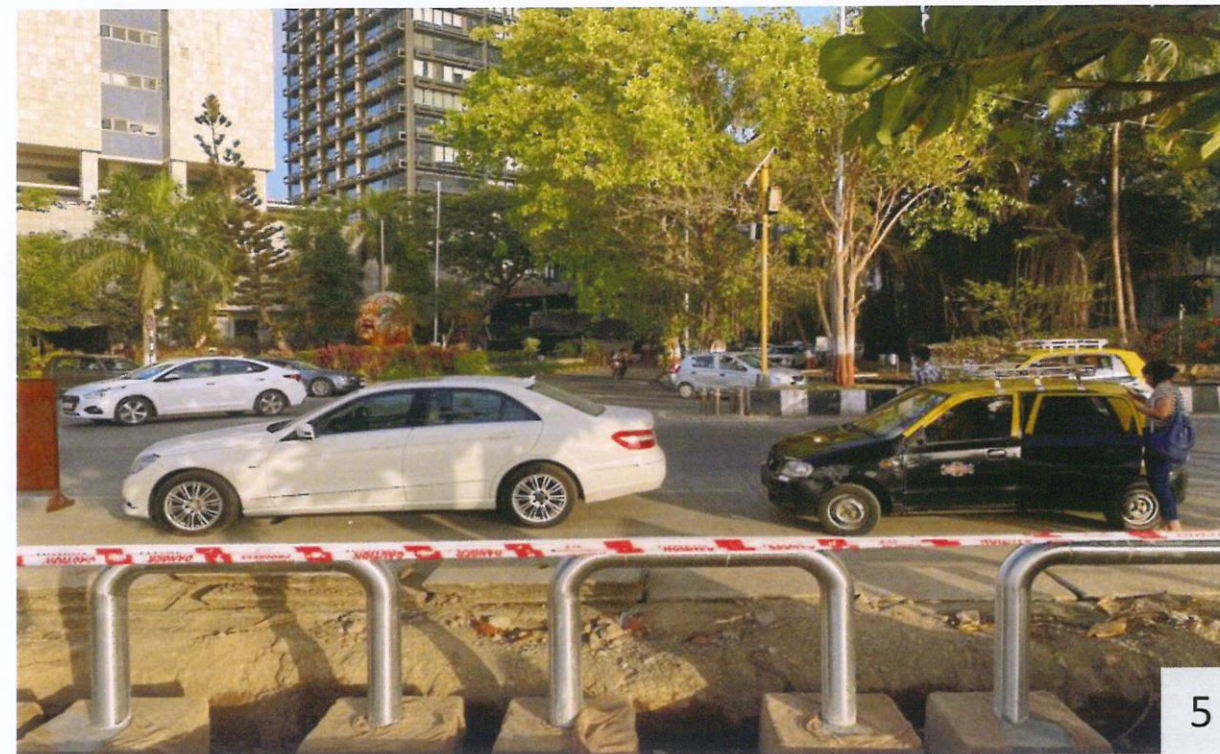
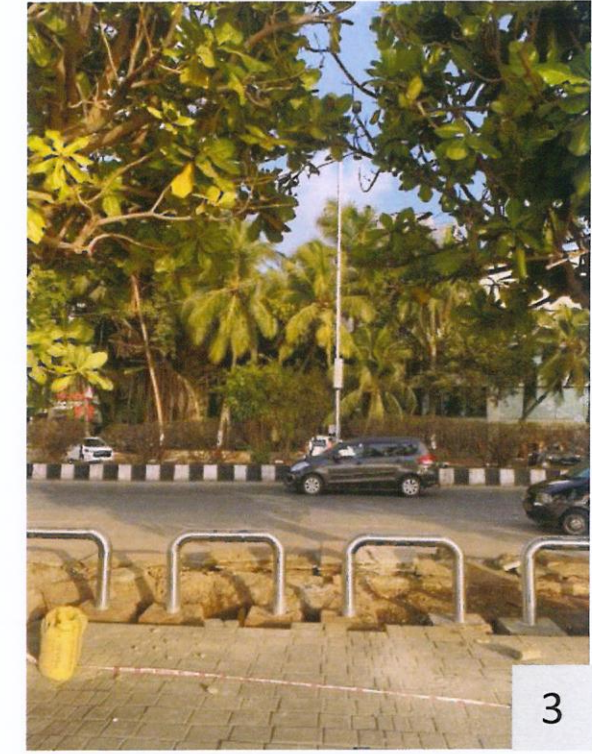
LEGEND

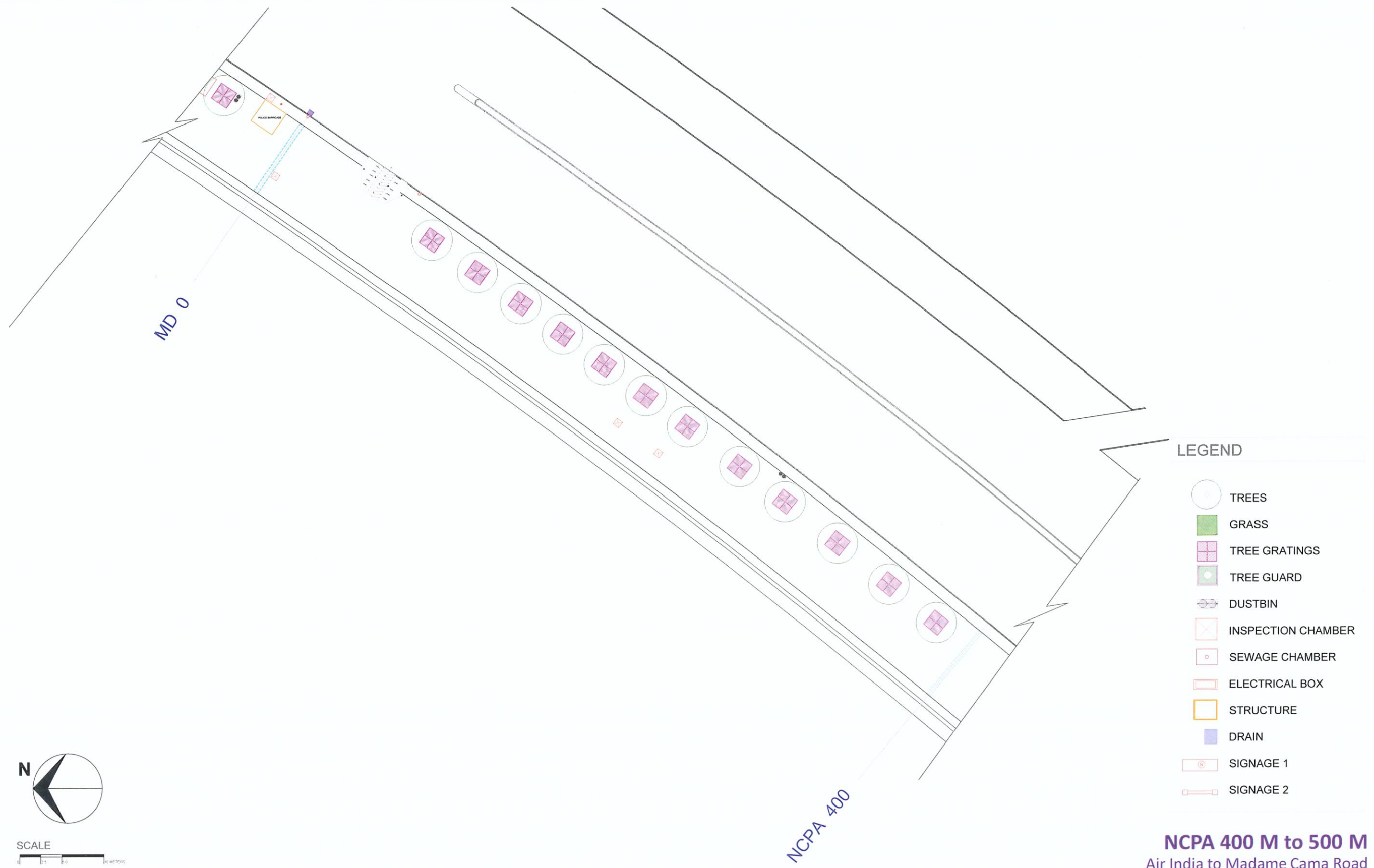
-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

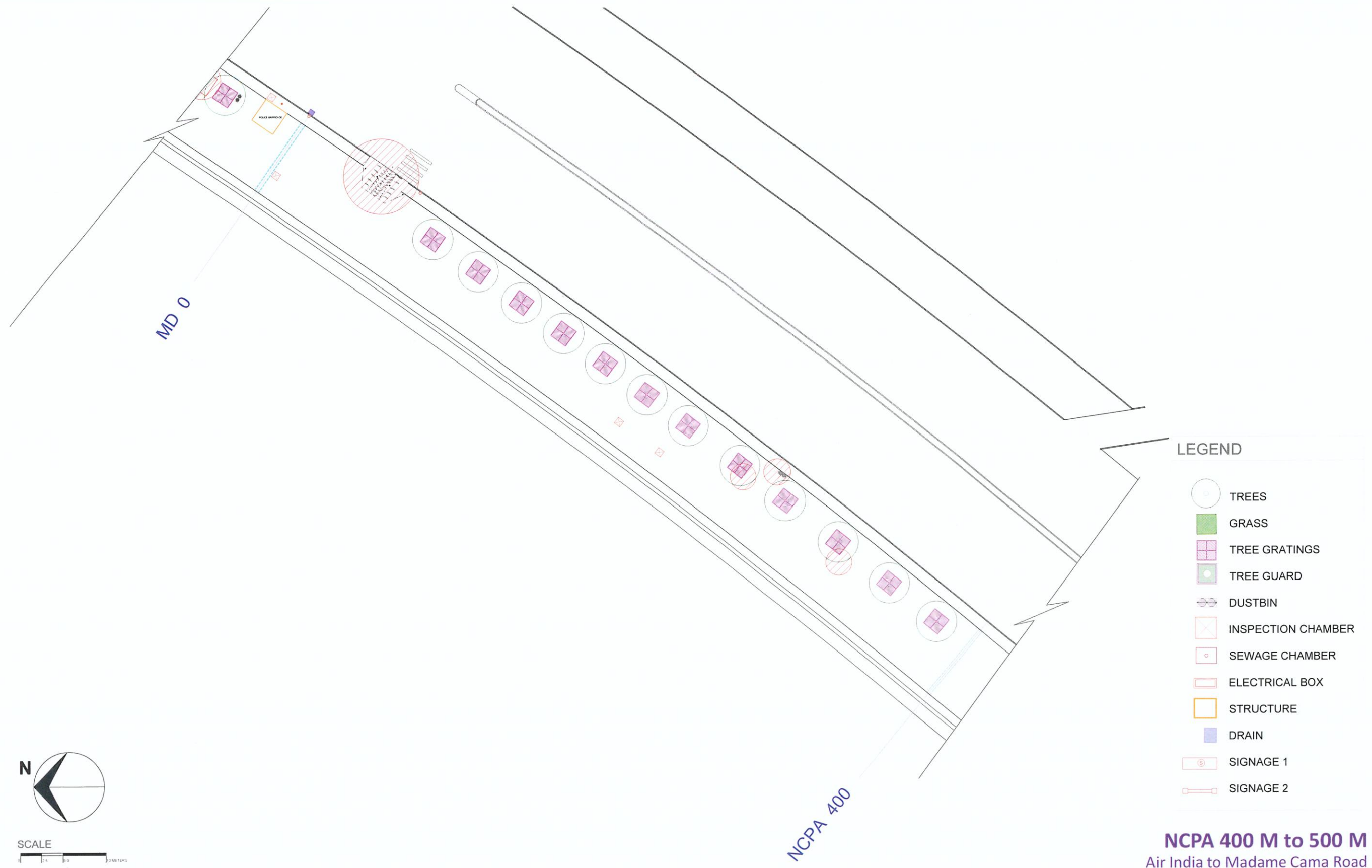
NCPA 300 M to 400 M
Barrister R. P. Marg to Air India



LAYOUT PLAN INDICATING BARRIERS

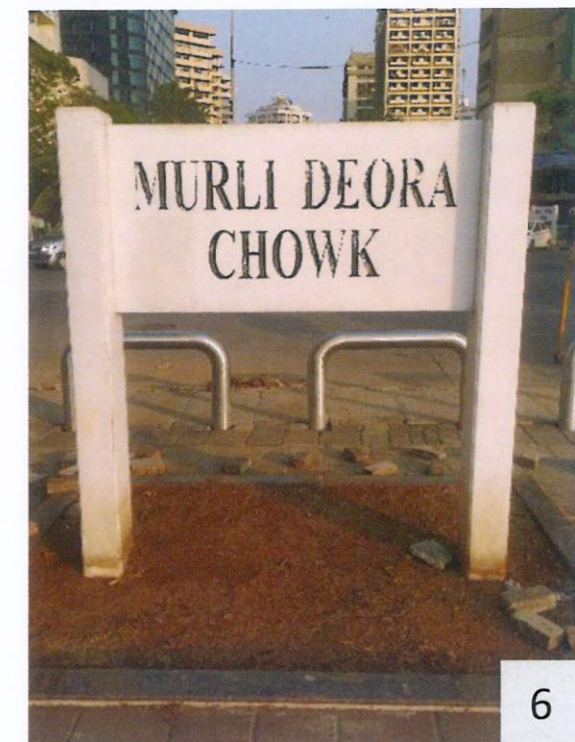






LAYOUT PLAN INDICATING BARRIERS

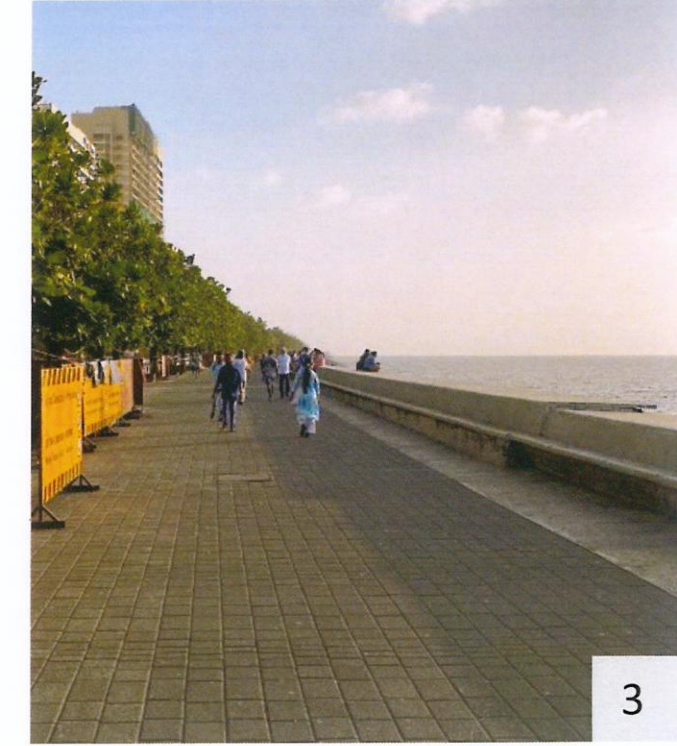
NCPA 400 to 500 M



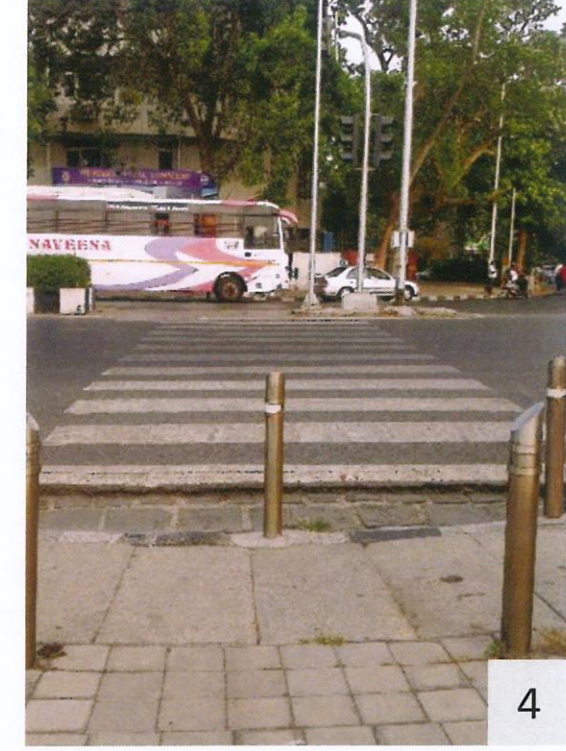
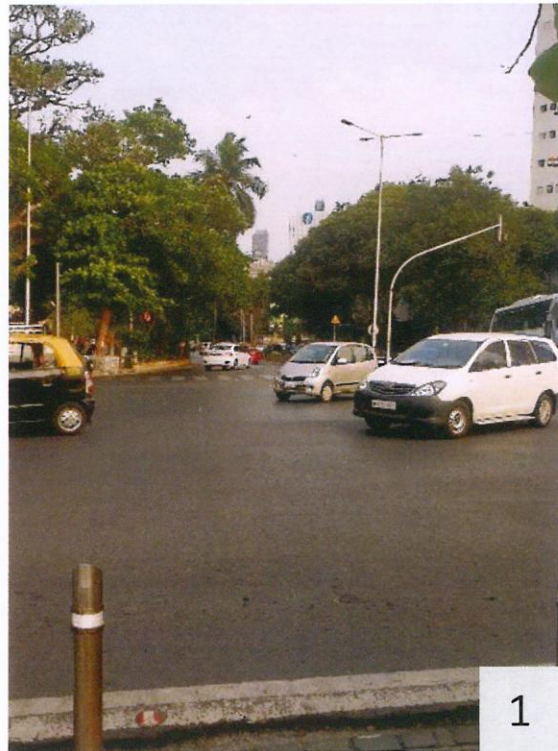
Disability	No.	Question	Answers						Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval/Serial No.	300-400			400- MD 000					
			Yes	No	NA	Yes	No	NA			
PROMENADE											
L/VI	11.1	Is the pedestrian pathway /promenade is minimally 1800mm wide?								E1.1, E1.2, E2.2	
		Is the promenade is along the entire length of the road?									
L/VI		Is it less than 150mm high?							Its at a level of 200 mm to 300mm.		11.1- Sidewalks/ footpaths
L/VI		Are there protruding objects or barriers on the pathway?							Intervals 400 to 0 (MD) do not have protuding objects. There is a temporary structure on the stretch 300-400M which acts as a barrier.	E1.4	11.1- Sidewalks/ footpaths
L/VI		Are the protruding objects guarded?							No guards provided.		11.1- Sidewalks/ footpaths 5.1.4- Barriers and Hazards
		Is the pathway levelled?							Undulating at some points because of broken paving.	E1.1, E1.2, E2.3	11.1- Sidewalks/ footpaths
L		Is there 1500 mm x 1500mm space to allow a wheelchair user to turn around at some point on the pathway?									
L/VI		Is the finish non-slip and non-reflective?									
VI		Is the pathway well illuminated at night?							Since there are no lights on the promenade itself, the illumination is by the street lights on the median. Most of this light is obstructed by the tree foliage.		11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways

Disability	No.	Question	Answers						Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval/Serial No.	300-400			400- MD 000					
			Yes	No	NA	Yes	No	NA			
VI		Is there a colour contrast between the pathway and seating?							There is a constrast between the pathway and the seating depending on daylight factors and for persons without disabilities. However, for persons with partial visual impairment or color blindness, this contrast might not be visible. But considering that the promenade width is 12000 mm which is more than required and that the promenade is heritage listed, this constrast can be considered to be sufficient.	F1.2, E2.2	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways
L		Does the footpath have kerb cuts for persons to get on and get off the pathway at intersections?							Interval 300 to 400m does not have an intersection. The intersection in the interval 400 to MD 000M has a kerb cut ramped entrance to get off and on the promenade but the construction of this ramp does not complies with the guidelines.	E2.5	11.2- Kerb Ramps at walkways and pedestrian crossing
L/VI		Does the footpath have kerb cuts for persons to get on and get off the pathway?								E2.5	11.2- Kerb Ramps at walkways and pedestrian crossing
VI		Have tactile warning blocks been installed next to all entry and exit points from the pathway							No tactile markings are provided.		11.1- Sidewalks/ footpaths

Disability	No.	Question	Answers						Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval/Serial No.	300-400			400- MD 000					
			Yes	No	NA	Yes	No	NA			
		Are the trees on the promenade guarded?									11.1- Sidewalks/ footpaths
		Are there dustbins on the promenade?								H1.3	
		Are the dustbins accessible- at a height between 900-1000mm?							They are at the height of 1200mm.	H1.3	3.2- Reach Range
		Are the Inspection chambers well flushed with the footpath?							No inspection chambers present in 300 to 400m interval of the promenade.	E2.4	
L/VI		Are the pathways maintained and kept free of unwanted barriers such as furniture, planters, etc?								E1.5, E1.4	11.1- Sidewalks/ footpaths



Disability	No.	Question	Answers						Notes	Photograph no	Recommendation as per MoUD guidelines	
NCPA		Interval /Serial No.	300-400			400- MD 000						
			Yes	No	NA	Yes	No	NA				
RESTING SPACES												
L/VI		Where there are large spaces, are resting facilities provided at 30 meters of intervals?								F1.1, F1.2		
		Is there an adjoining space for a wheelchair next to benches and public seats?							The seating is continuous- most of the seating runs continuously abutting the shoreline.	F1.3		
L/VI		Are public seats with height of 450-480mm?							The lower seating complies with the regulation. However, the embankment which serves as a popular seating and from where the sea and horizon are visible, is higher and not accessible.	F1.1		
L/VI		Are there knee spaces at accessible tables with a height of 750mm and knee space of 750mm wide and 480mm deep?							There are no tables on the promenade.			

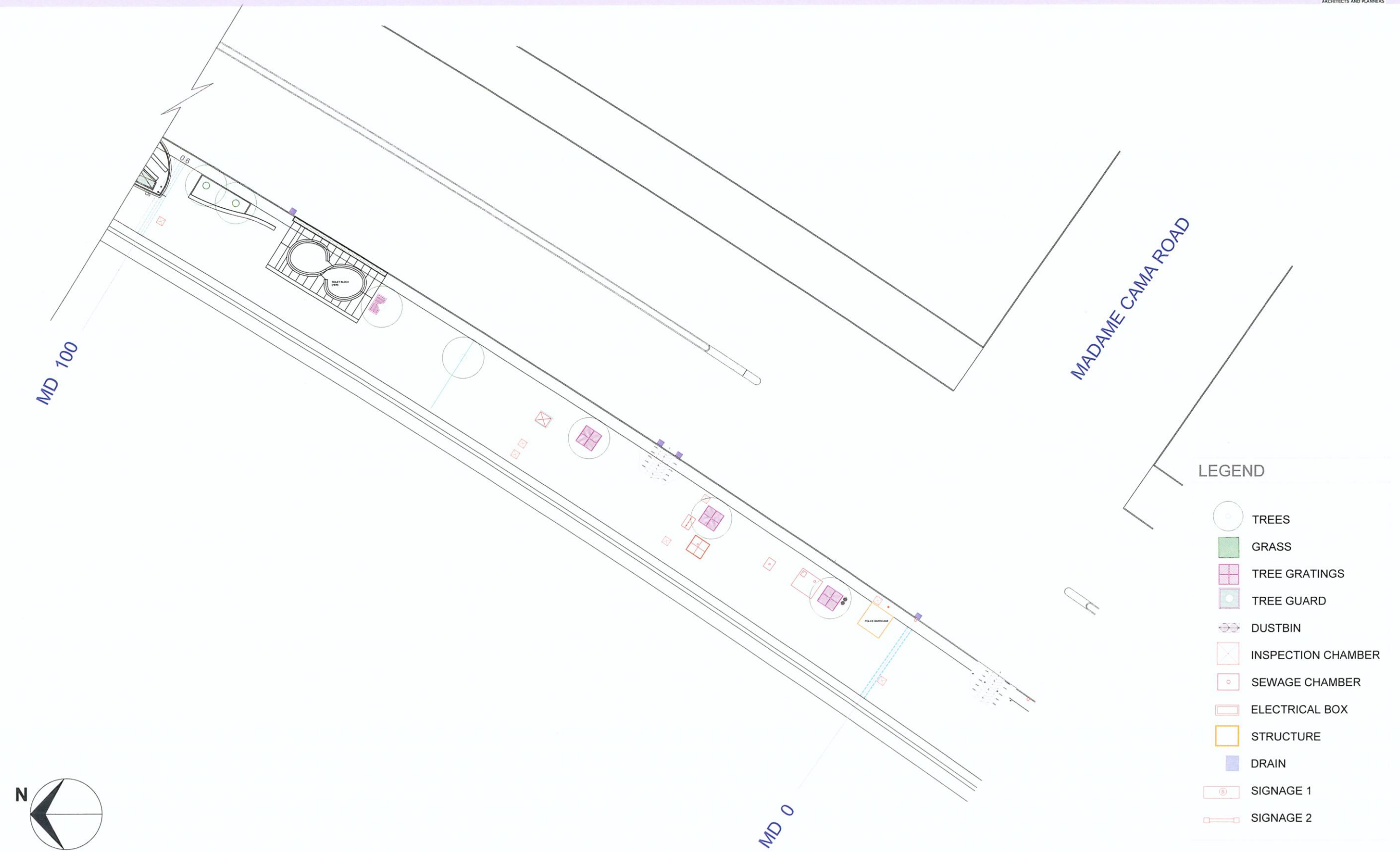


Disability	No.	Question	Answers						Notes	Photograph no	Recommendation as per MoUD guidelines
NCPA		Interval /Serial No.	300-400			400- MD 000					
			Yes	No	NA	Yes	No	NA			
INTERSECTIONS											
L/VI		Is the footpath at the intersection 1800mm wide?								G1.6	
		Is a median is present?								G1.1	11.4- Medians and Refuge Islands
L/VI		Is the median an area at ground level? Can it be used as refuge area during crossing?							Intersection is present but No zebra crossing is provided.		
L/VI		Are the signals easily readable and are they placed such that they can be seen while crossing?							The traffic lights are placed such that they aren't easily identifiable. The orientation of these traffic lights meant for pedestrians are inefficient.	G1.2	11.5- Traffic Signals
VI		Is there an audible alert when the signal goes on and off?							No audible alert.		11.5- Traffic Signals
		Is there an interval indicating device on the traffic signal?							No time interval indicating device present.		11.5- Traffic Signals
		Is the time interval allowed for crossing programmed according to the slowest crossing persons?							It was observed that at most of the crossings had a very short interval which will not allow a person to cross at a comfortable pace.		11.5- Traffic Signals

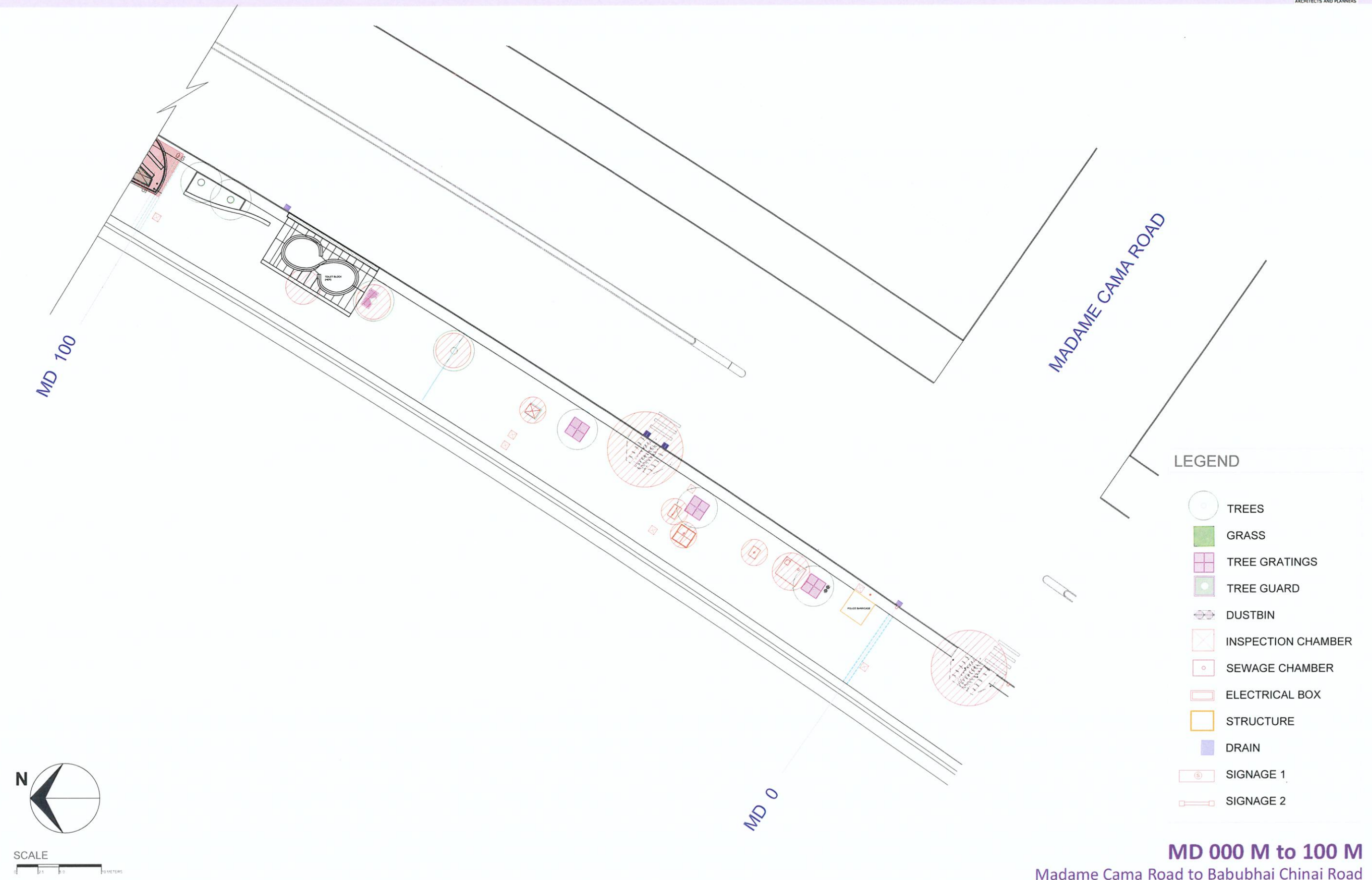
MADAME CAMA ROAD TO GOBIND MAHAL STRETCH

MD 000 M to 400 M

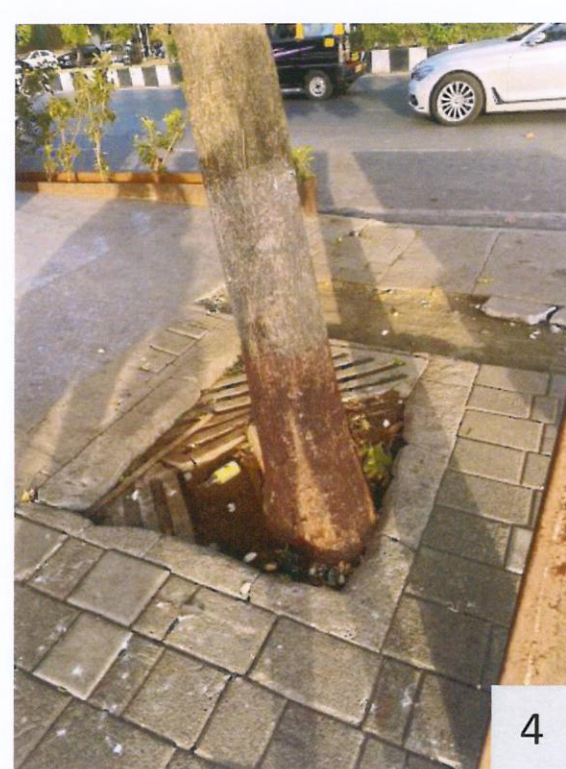
Interval: 000 M at Madame Cama Road to
400 M at Sea Green Hotel

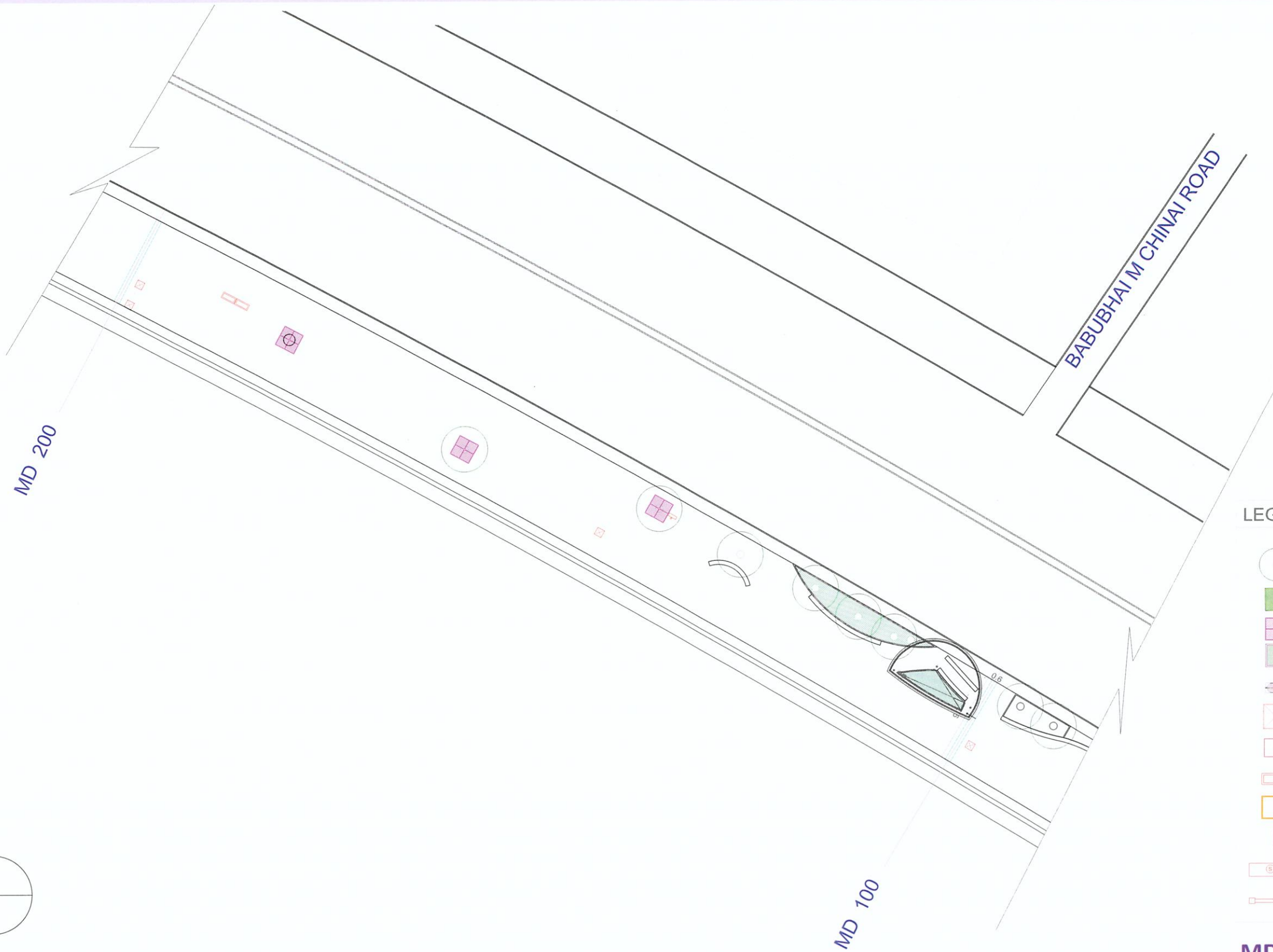


MD 000 M to 100 M
Madame Cama Road to Babubhai Chinai Road















LAYOUT PLAN INDICATING BARRIERS



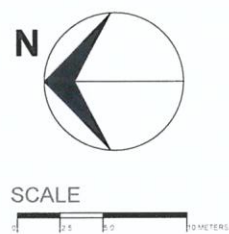


LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 100 M to 200 M

Babubhai Chinai Road to Oceana

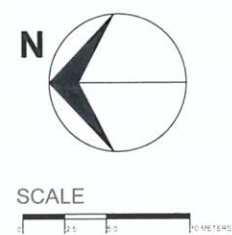


LAYOUT PLAN

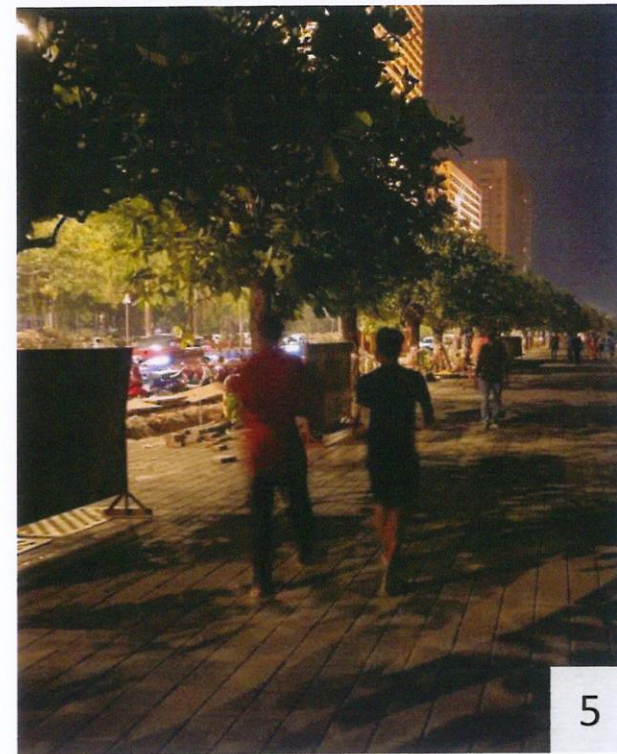
LEGEND

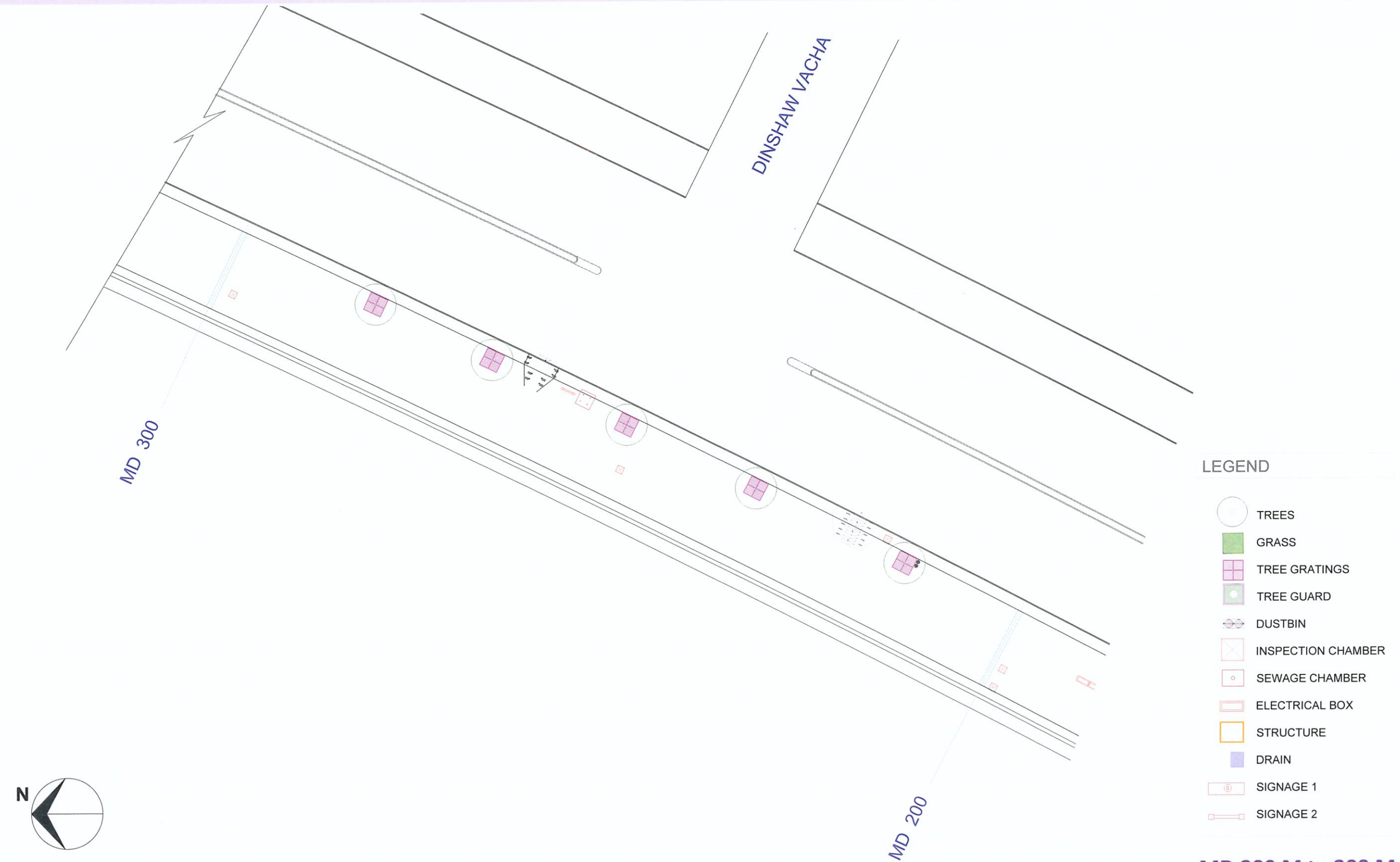
-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 100 M to 200 M
Babubhai Chinai Road to Oceana















LAYOUT PLAN INDICATING BARRIERS

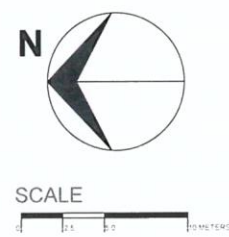




LEGEND

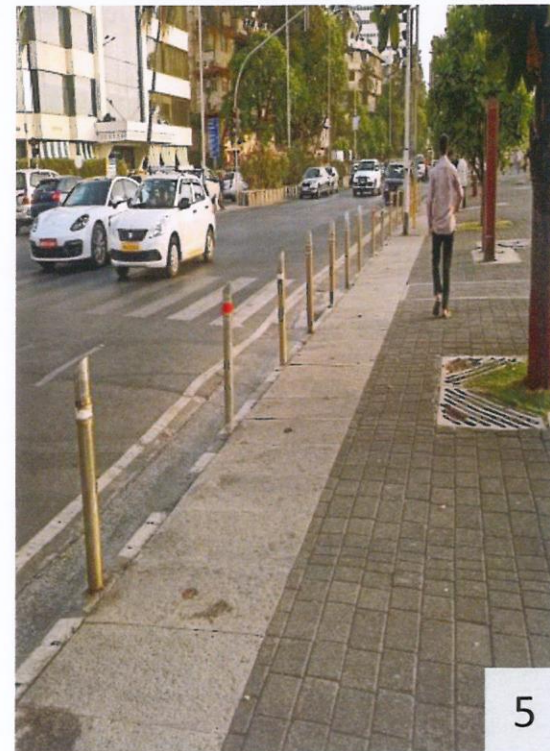
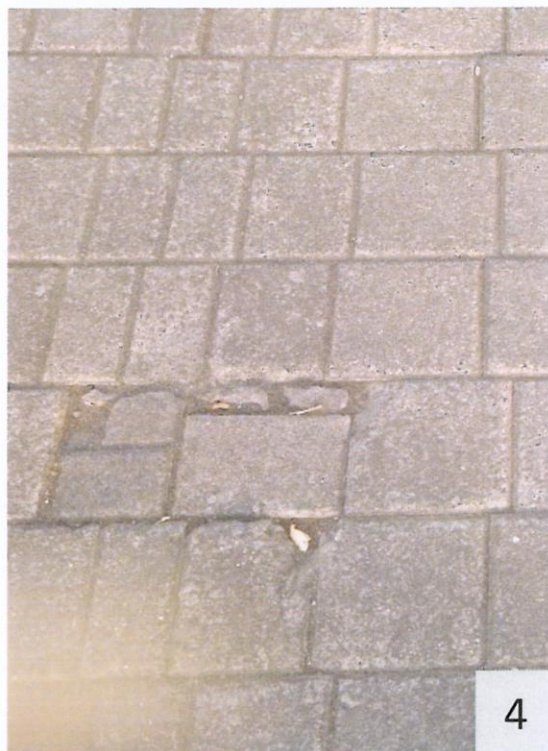
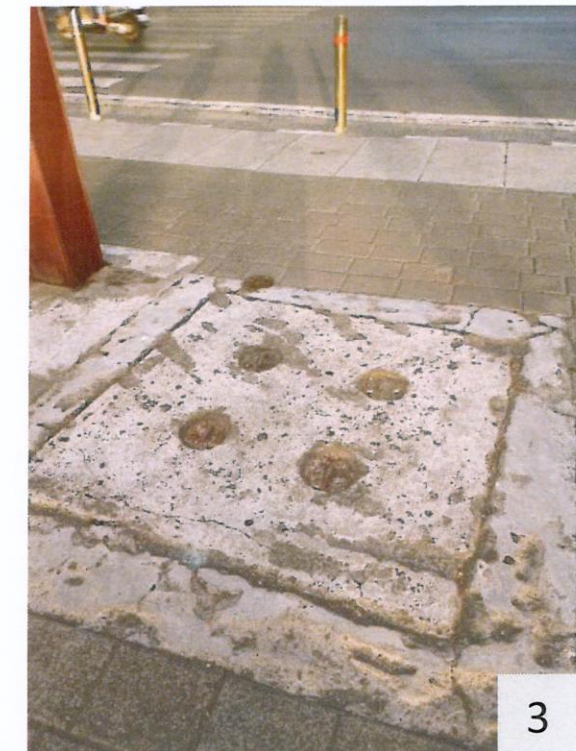
-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

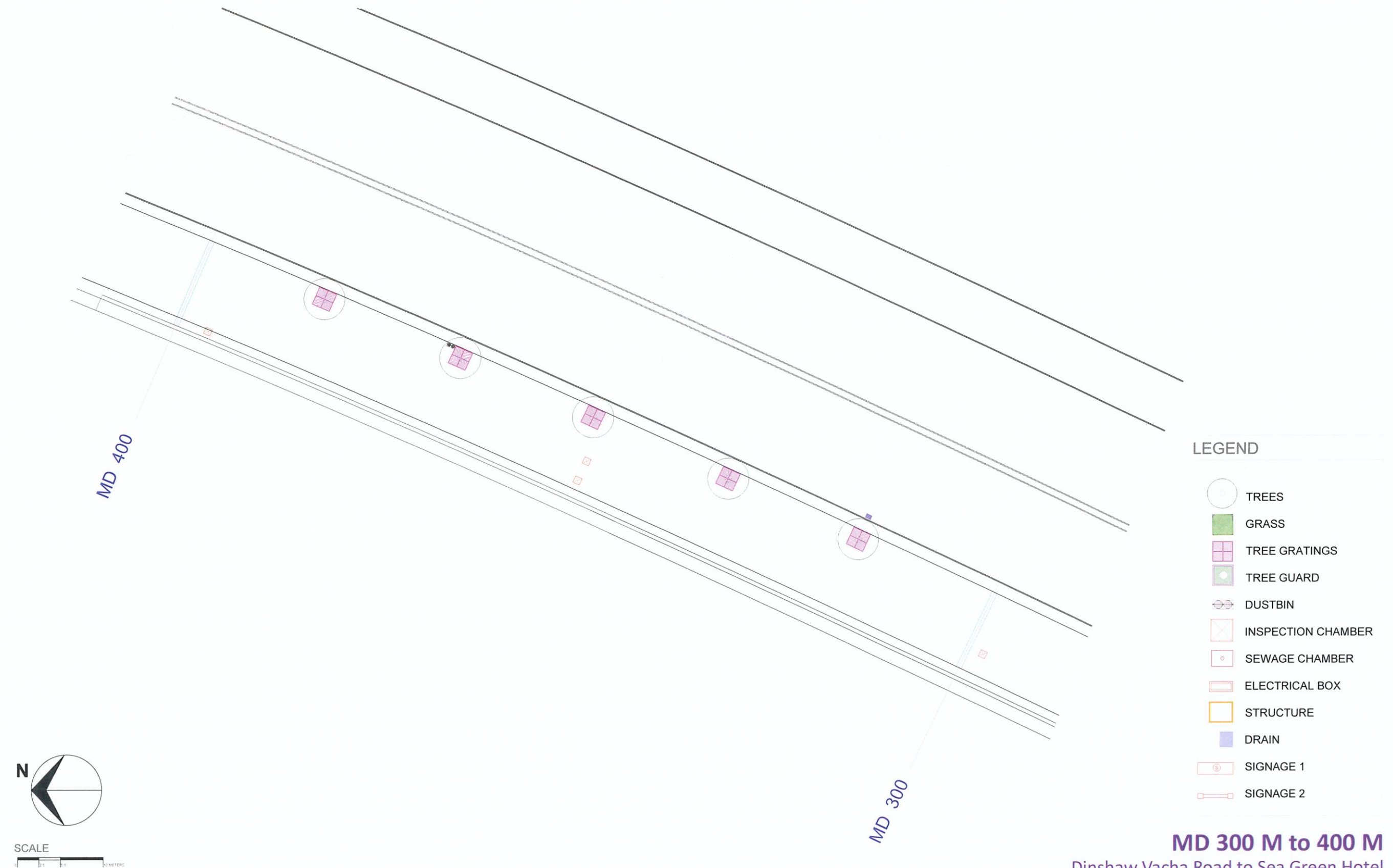
MD 200 M to 300 M
Oceana to Dinshaw Vacha Road















LAYOUT PLAN INDICATING BARRIERS

MD 200 to 300 M



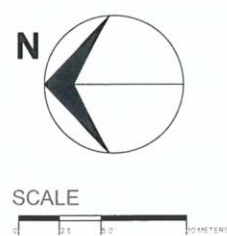


LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 300 M to 400 M

Dinshaw Vacha Road to Sea Green Hotel



LAYOUT PLAN INDICATING BARRIERS

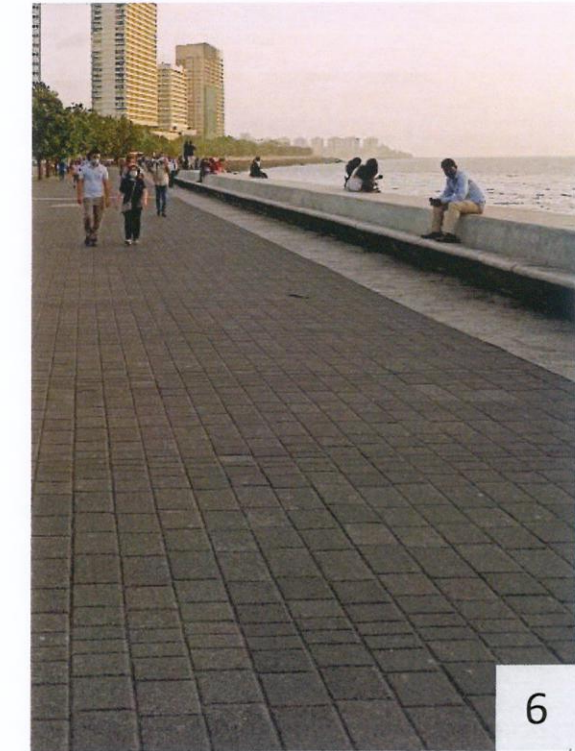
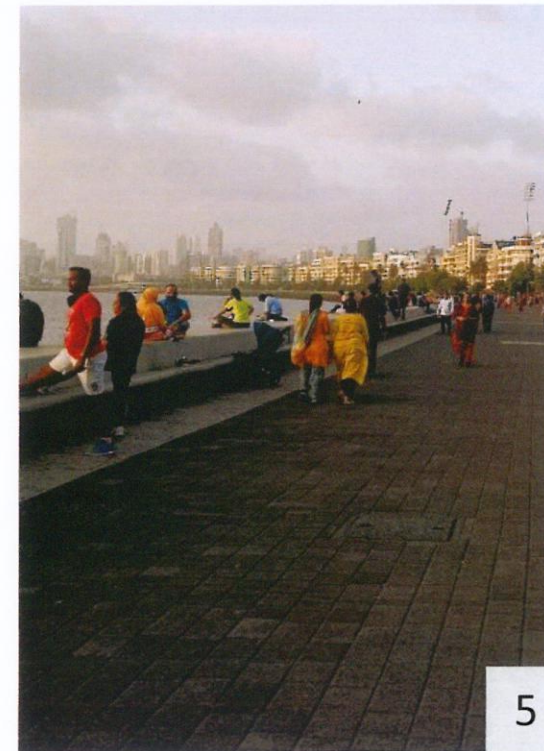
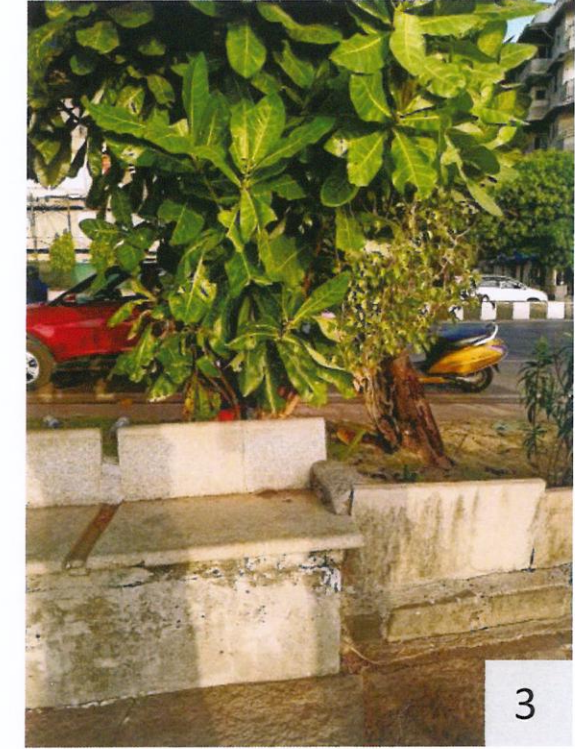
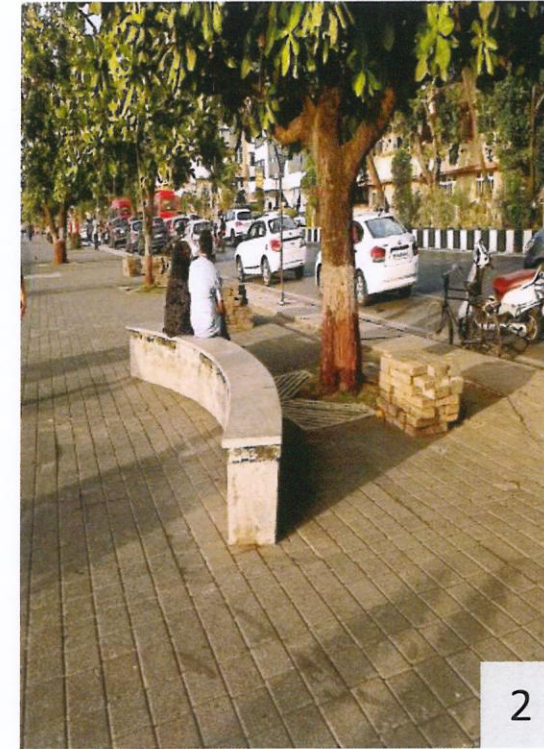
MD 300 to 400 M



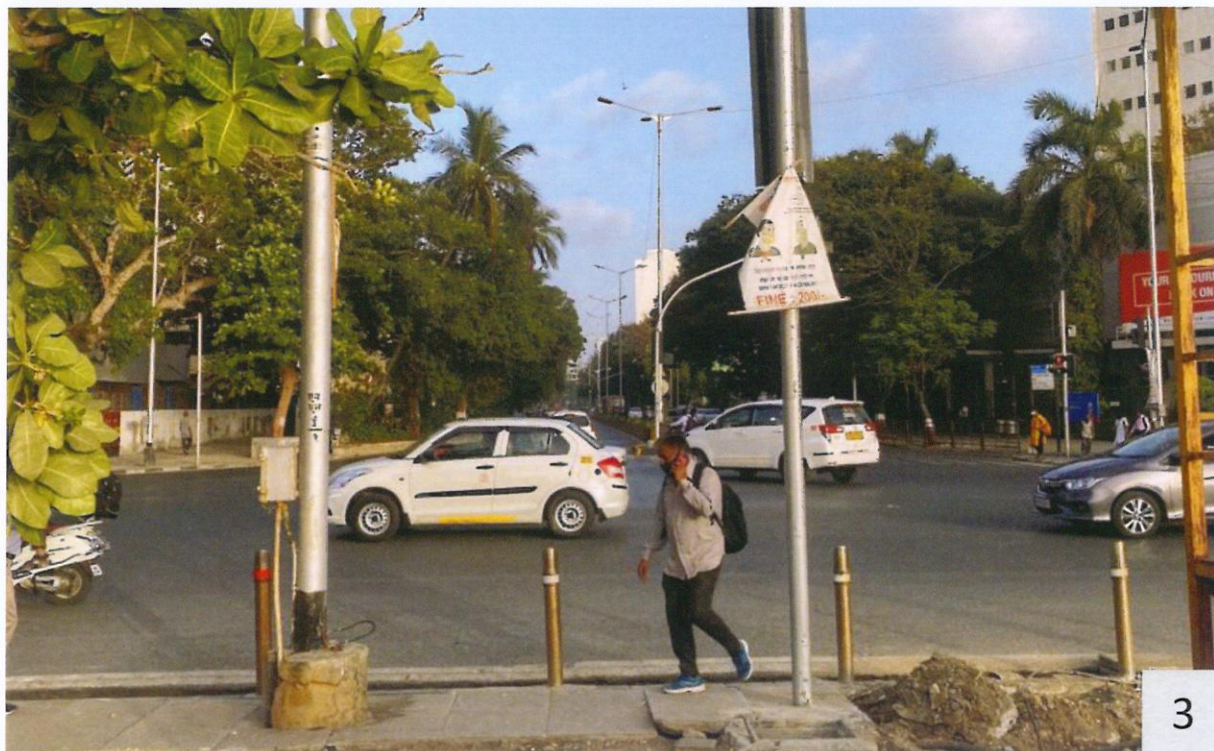
Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoU guidelines
Marine Drive		Interval/Serial No.	0-100			100-200			200-300			300-400					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
PROMENADE																	
L/VI	11.1	Is the pedestrian pathway /promenade is minimally 1800mm wide?														I1.1, I2.1, I3.1, I4.1	
		Is the promenade is along the entire length of the road?															
L/VI		Is it less than 150mm high?													Its at a level of 200 mm to 300mm in the interval 0-100M.	I3.5, I3.6	11.1- Sidewalks/ footpaths
L/VI		Are there no protruding objects or barriers on the pathway?													Inspection Chambers not well flushed with the paving of the promenade also act as a barrier in addition to electrical boxes, destination signages and undulating surfaces at certain spots on the promenade.	I1.2, I1.3, I1.4, I1.6, I1.7, I2.3, I2.4, I3.2, I3.3, I3.4, I3.5,I4.2, I4.3	11.1- Sidewalks/ footpaths
L/VI		Are the protruding objects guarded?													No guardings provided.	I1.6, L1.5, L1.6	11.1- Sidewalks/ footpaths 5.1.4- Barriers and Hazards
		Is the pathway levelled?													Undulating at some points because of broken paving and unusual slopes.	I1.2, I1.3, I1.4,I3.2,I3.4	11.1- Sidewalks/ footpaths
L		Is there 1500 mm x 1500mm space to allow a wheelchair user to turn around at some point on the pathway?														I3.6	
L/VI		Is the finish non-slip and non-reflective?															
VI		Is the pathway well illuminated at night?													Since there are no lights on the promenade itself, the illumination is by the street lights on the median. Most of this light is obstructed by the tree foliage.	I2.5	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			0-100			100-200			200-300			300-400					
Marine Drive		Interval/Serial No.	Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
VI		Is there a colour contrast between the pathway and seating?													There is a constrast between the pathway and the seating depending on daylight factors and for persons without disabilities. However, for persons with partial visual impairment or color blindness, this constrast might not be visible. But considering that the promenade width is 12000 mm which is more than required and that the promenade is heritage listed, this constrast can be considered to be sufficient.	J1.1	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways
L		Does the footpath have kerb cuts for persons to get on and get off the pathway at intersections?													Intervals 100 to 400 does not have an intersection. The intersection in the interval 0-100m does not have a kerb cut ramped entrance to get off and on the promenade.	I3.6	11.2- Kerb Ramps at walkways and pedestrian crossing
L/VI		Does the footpath have kerb cuts for persons to get on and get off the pathway?														I3.6	11.2- Kerb Ramps at walkways and pedestrian crossing
VI		Have tactile warning blocks been installed next to all entry and exit points from the pathway													No tactile markings are provided.		11.1- Sidewalks/ footpaths
		Are the trees on the promenade guarded?														I4.4	11.1- Sidewalks/ footpaths
		Are there dustbins on the promenade?															
		Are the dustbins accessible- at a height between 900-1000mm?													They are at the height of 1200mm.	L1.6	3.2- Reach Range
		Are the Inspection chambers well flushed with the footpath?														I4.3	

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoU guidelines
Marine Drive		Interval/Serial No.	0-100			100-200			200-300			300-400					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
L/VI		Are the pathways maintained and kept free of unwanted barriers such as furniture, planters, etc?													At the time of the audit, bricks, pipes and debris were stacked at certain spots on the promenade. Although this stacking of construction materials is temporary, care must be taken that they are placed such that all the access points and utilities are free of such barriers. The promenade has not been designed to include police barricades. These are however seen as a present day necessity the result being that they cause an obstacle.	I1.6, I1.7	11.1- Sidewalks/ footpaths



Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval /Serial No.	0-100			100-200			200-300			300-400					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
RESTING SPACES																	
L/VI		Where there are large spaces, are resting facilities provided at 30 meters of intervals?														J1.1	
		Is there an adjoining space for a wheelchair next to benches and public seats?													Seating is continuous- the promenade seating abutting the shore.	J1.1	
L/VI		Are public seats with height of 450-480mm?													Only the lower seating. The seating (katta) abutting the sea is higher and not accessible.	J1.1, J1.2, J1.3	
L/VI		Are knee spaces at accessible tables with a height of 750mm and knee space of 750mm wide and 480mm deep?													No tables on the promenade		















Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			0-100			100-200			200-300			300-400					
Marine Drive		Interval /Serial No.	Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
INTERSECTIONS																	
L/VI		The footpath at the intersection is wide as 1800mm?													Intersection present on all these intervals.	K1.1, K1.2	
		Median is present?														K1.1	11.4- Medians and Refuge Islands
L/VI		The median as an area at ground level to be used as refuge area during crossing?														K1.2	
L/VI		The signals are easily readable and are placed such that they can be seen while crossing?													The traffic lights are placed such that they aren't easily identifiable. The orientation of these traffic lights meant for pedestrians are inefficient.	K1.4	
VI		There is an audible alert when the signal goes on and off?													No audible alert.		
		There is an interval indicating device on the traffic signal?													No time interval indicating device present.		
		The time interval allowed for crossing should be programmed according to the slowest crossing persons;															

MADAME CAMA ROAD TO GOBIND MAHAL STRETCH

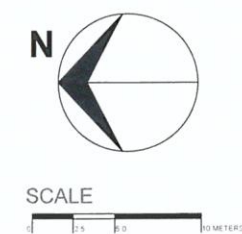
MD 400 M to 800 M

Interval: 400 M at Sea Green Hotel to
800 M at Ganga Vihar

LEGEND












-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 400 M to 500 M
Sea Green Hotel to Veer Nariman Road



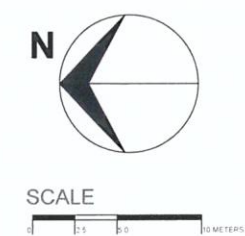
LAYOUT PLAN

LEGEND

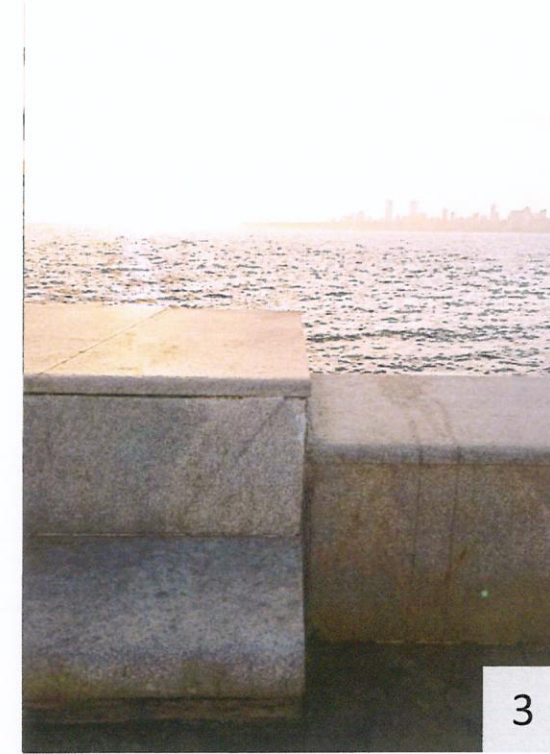
-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

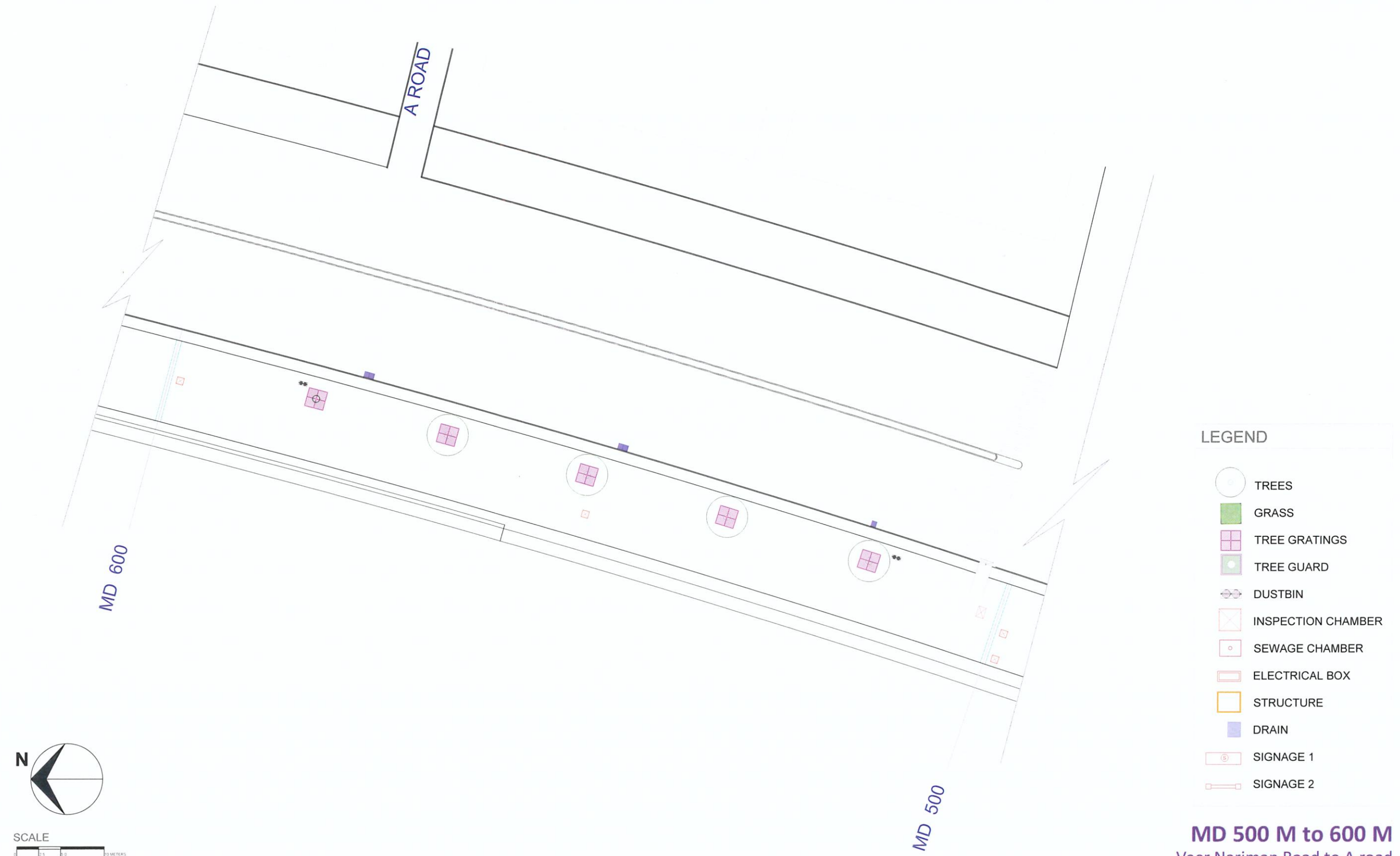
MD 400 M to 500 M

Sea Green Hotel to Veer Nariman Road



LAYOUT PLAN INDICATING BARRIERS



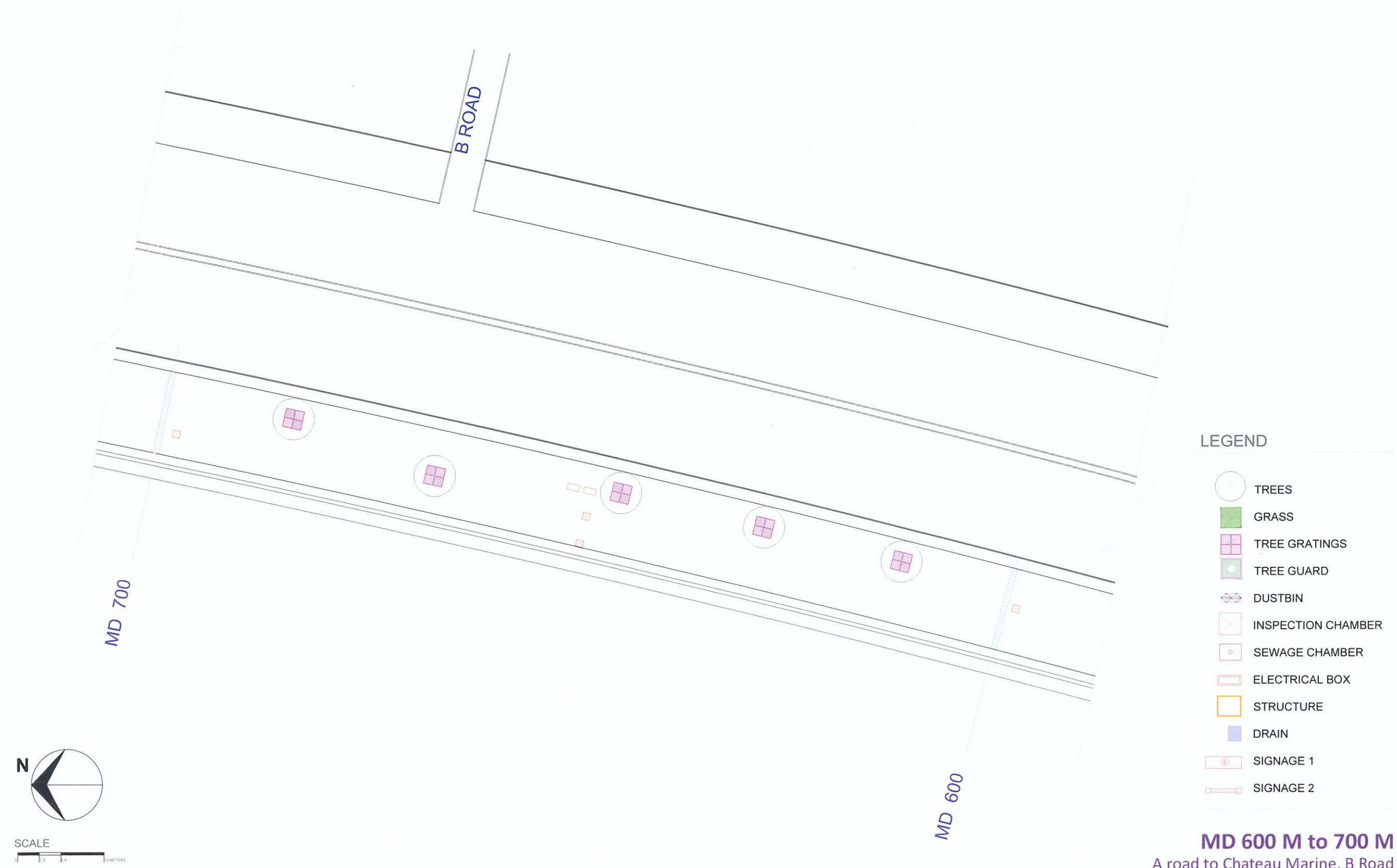


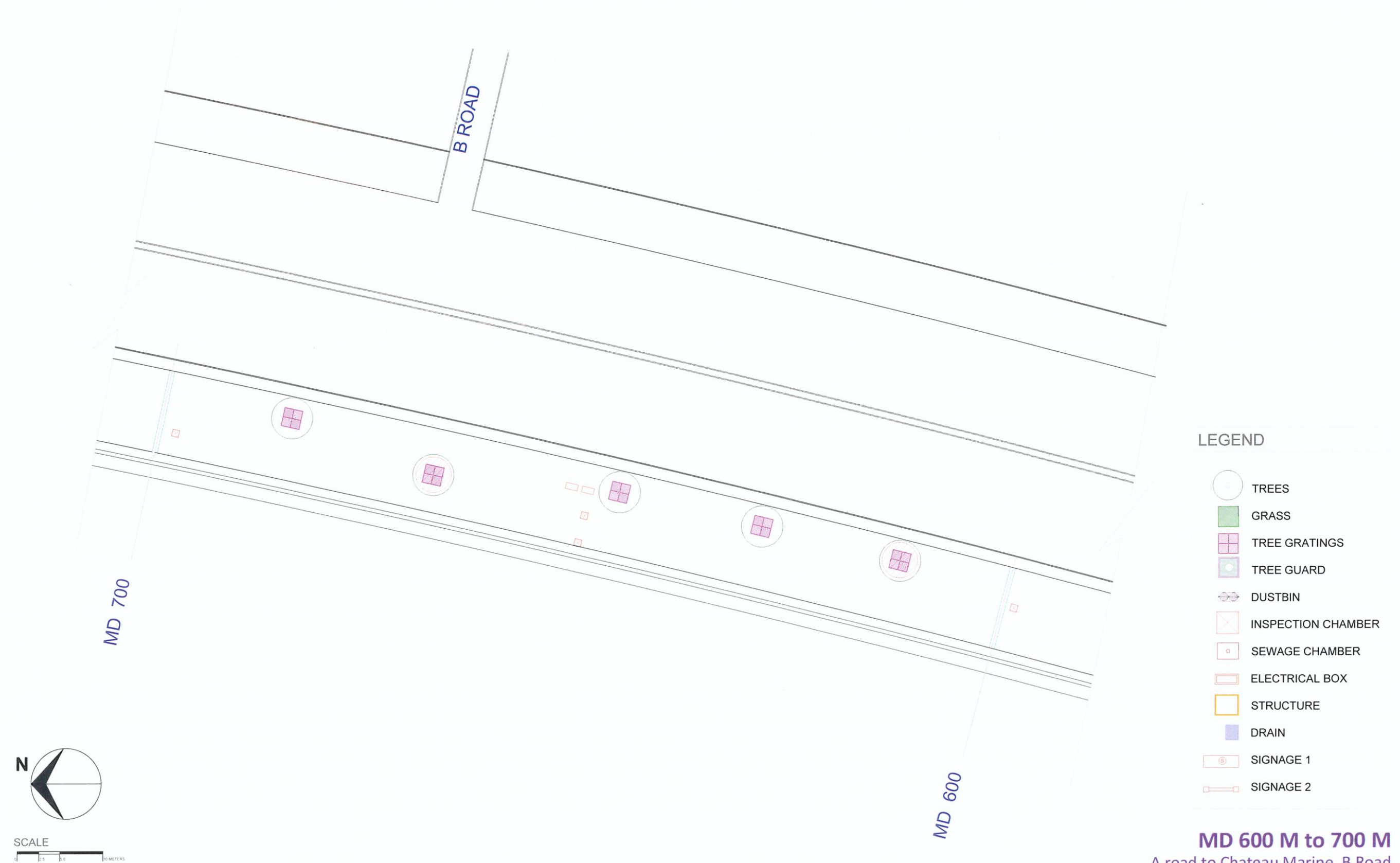
MD 500 M to 600 M
Veer Nariman Road to A road

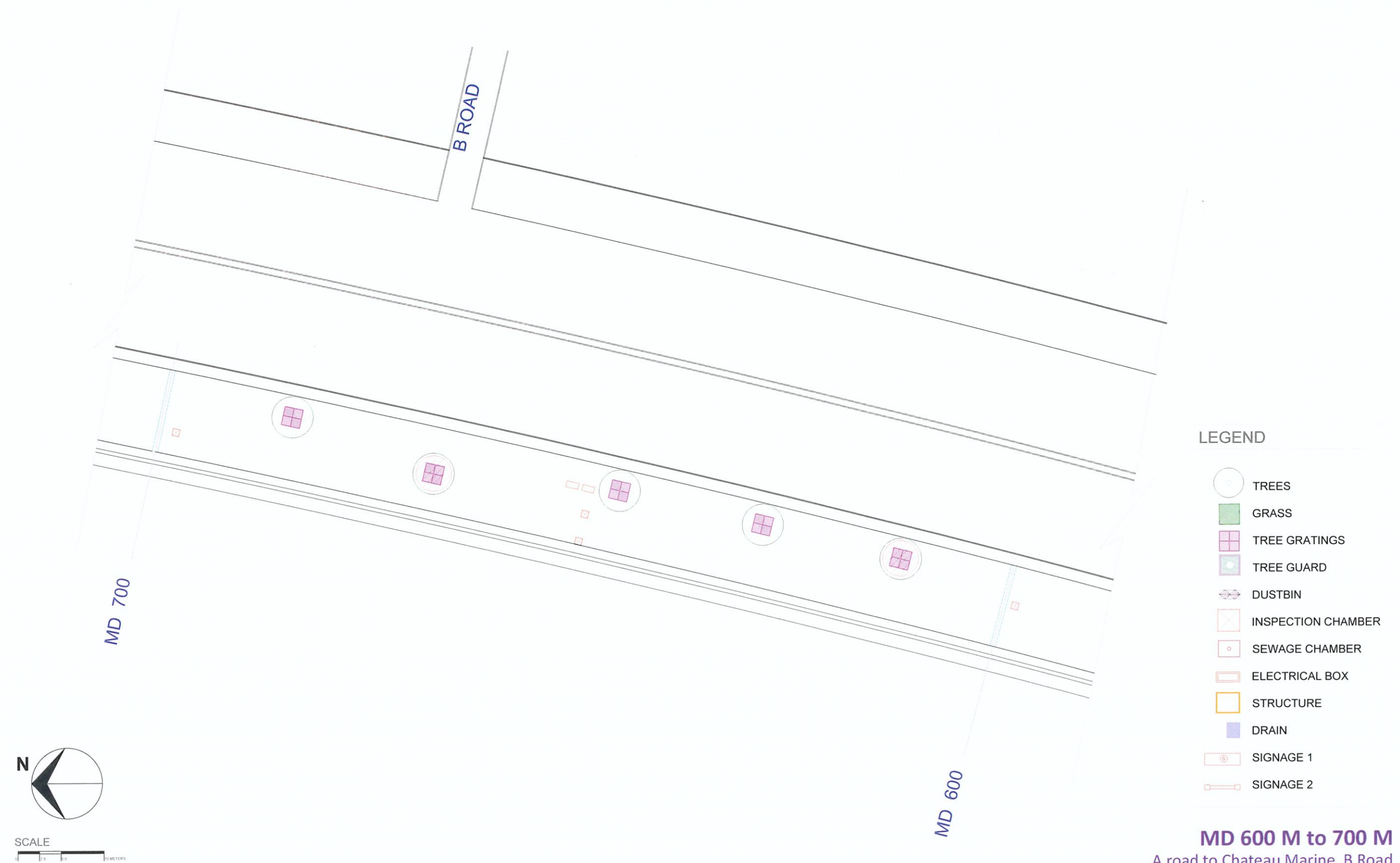


MD 500 to 600 M

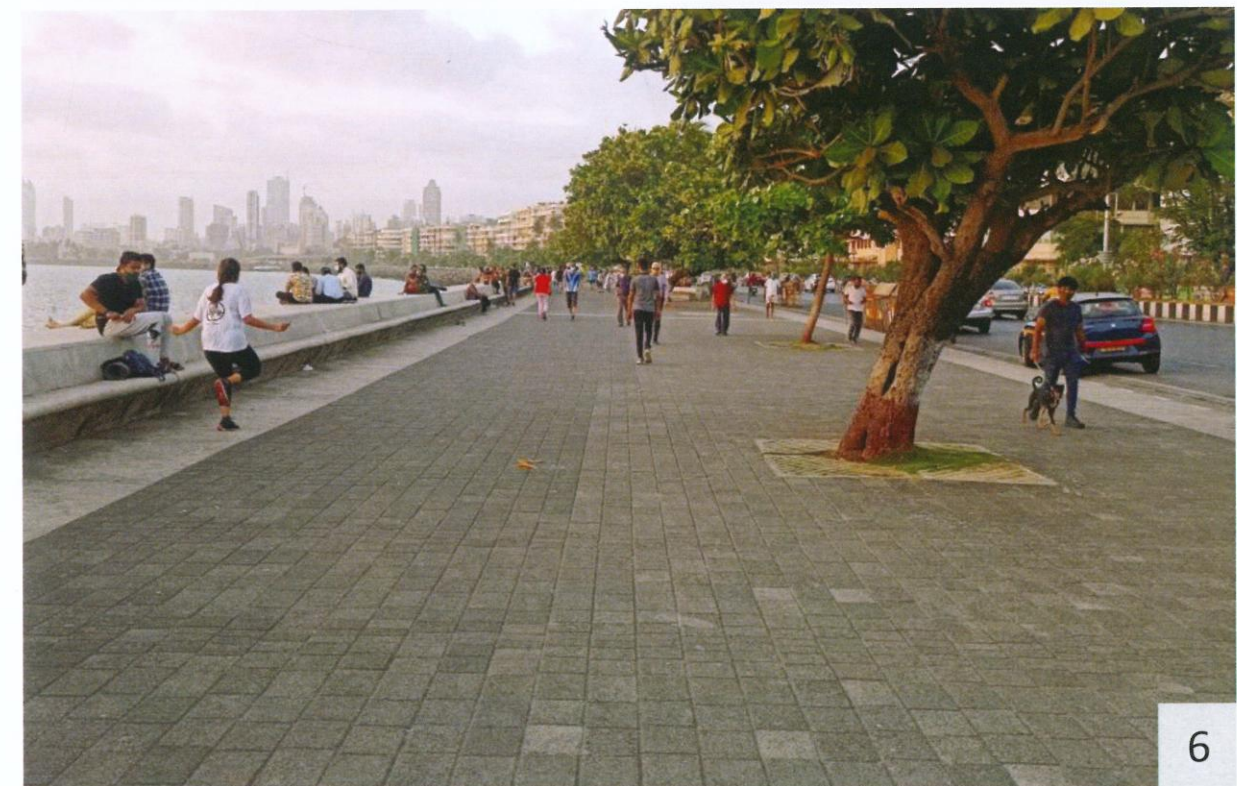
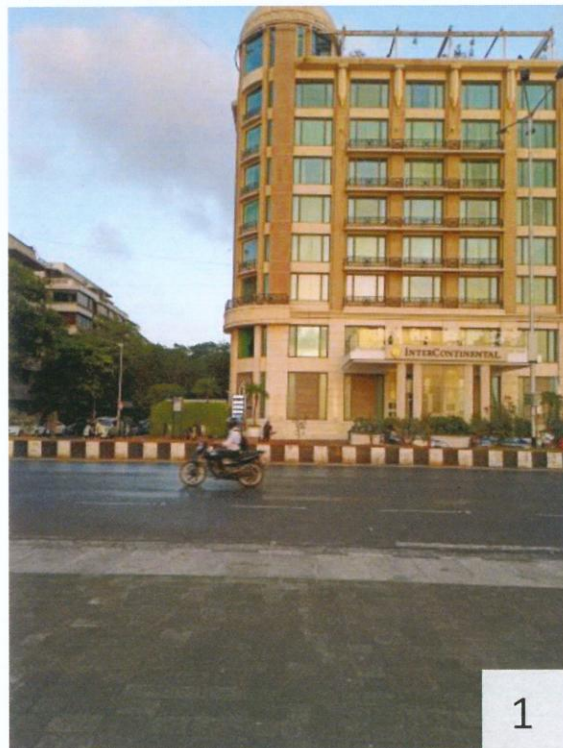






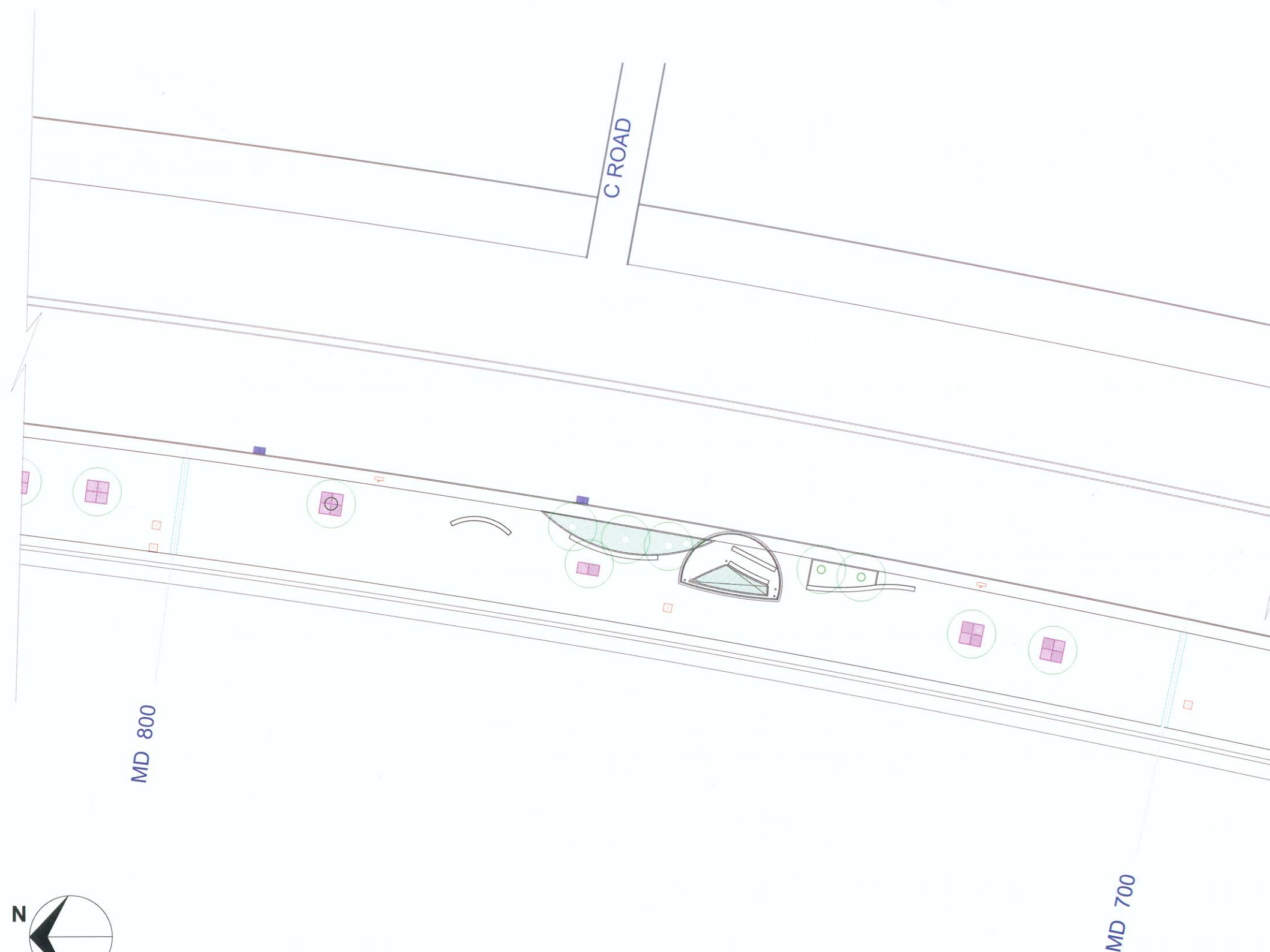


MD 600 to 700 M



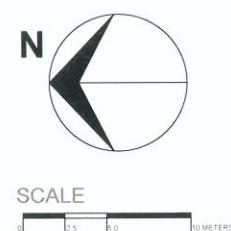
PARAMETER: **PROMENADE**

ANNEXURE NUMBER: **M3**

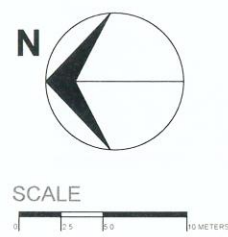
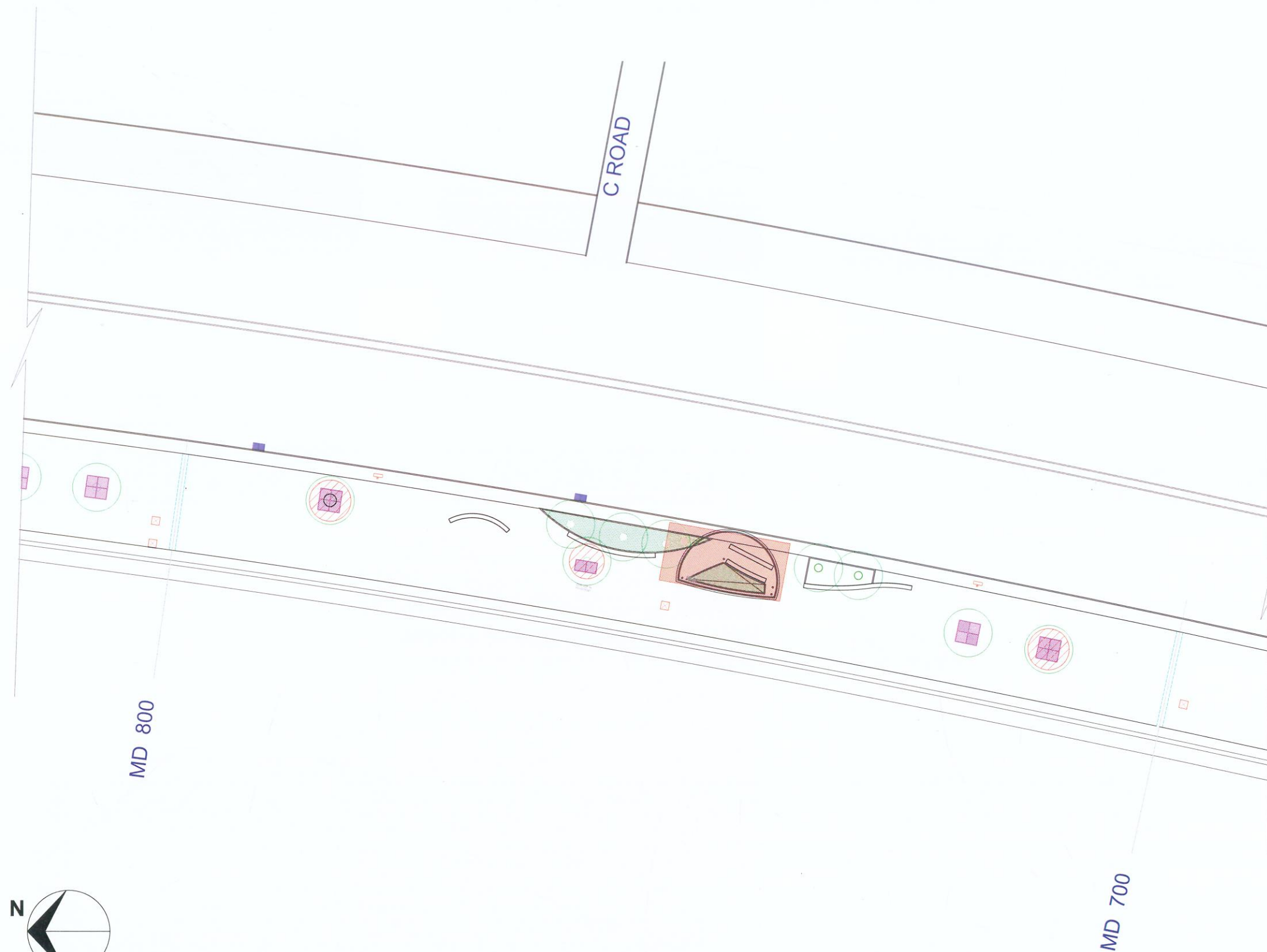


LEGEND

- TREES
- GRASS
- TREE GRATINGS
- TREE GUARD
- DUSTBIN
- INSPECTION CHAMBER
- SEWAGE CHAMBER
- ELECTRICAL BOX
- STRUCTURE
- DRAIN
- SIGNAGE 1
- SIGNAGE 2



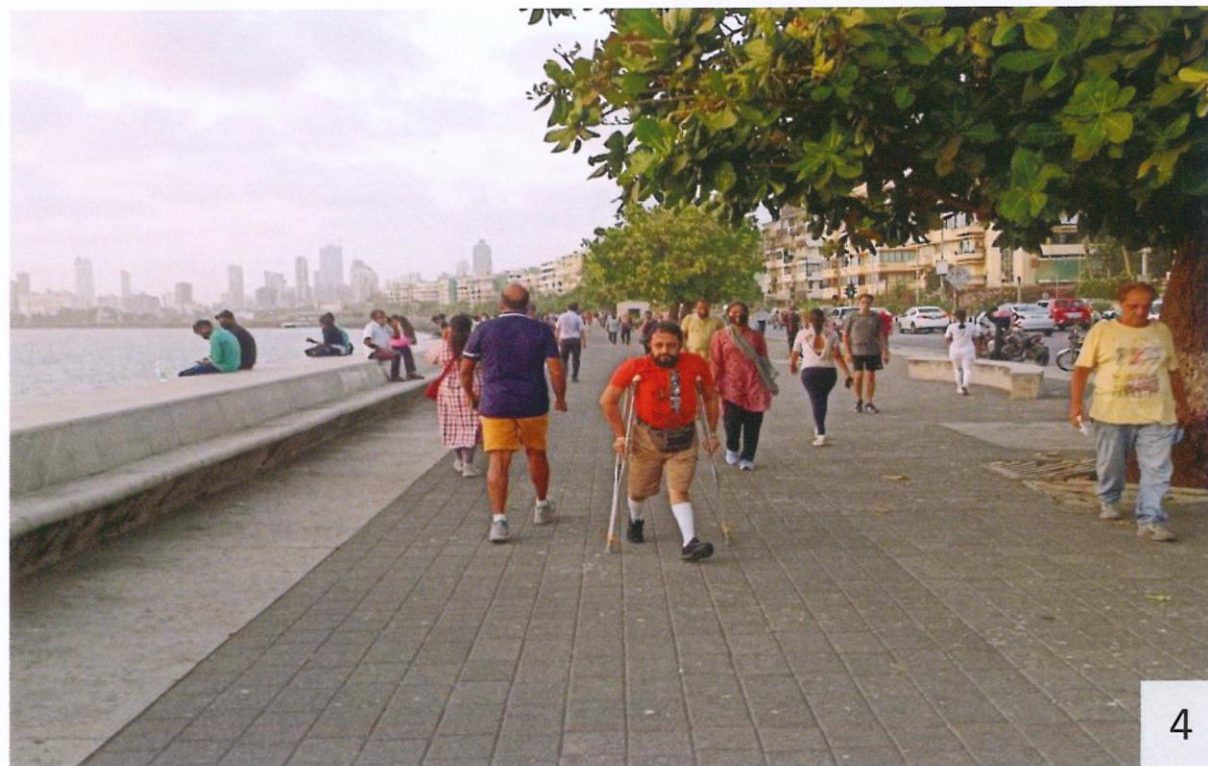
MD 700 M to 800 M
Chateau Marine, B Road to Ganga Vihar



LEGEND

- TREES
- GRASS
- TREE GRATINGS
- TREE GUARD
- DUSTBIN
- INSPECTION CHAMBER
- SEWAGE CHAMBER
- ELECTRICAL BOX
- STRUCTURE
- DRAIN
- SIGNAGE 1
- SIGNAGE 2

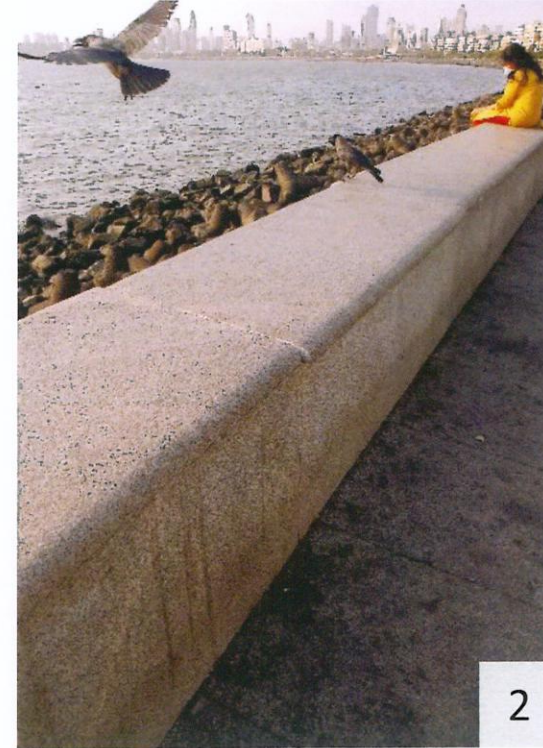
MD 700 M to 800 M
Chateau Marine, B Road to Ganga Vihar



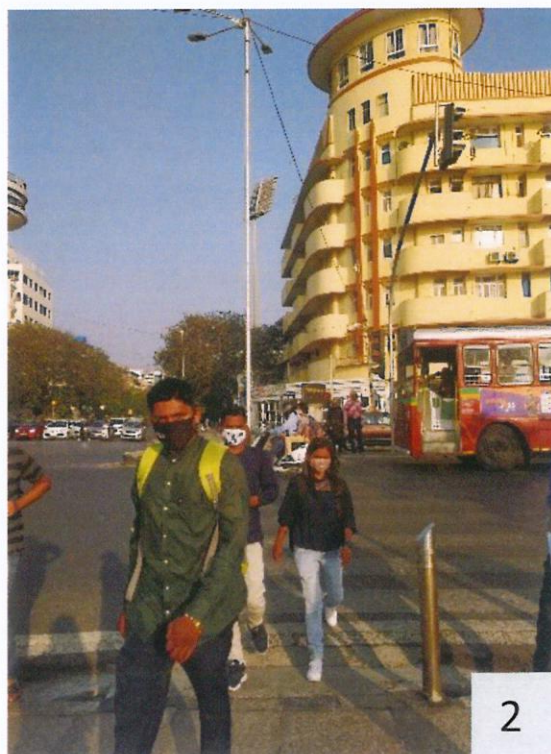
Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	400-500			500-600			600-700			700-800					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
PROMENADE																	
L/VI	11.1	Is the pedestrian pathway /promenade is minimally 1800mm wide?													M1.7, M1.4, M2.1, M2.2, M3.4, M3.6, M4.2, M4.4		
		Is the promenade is along the entire length of the road?															
L/VI		Is it less than 150mm high?													Its at a level of 200 mm to 300mm.	11.1- Sidewalks/ footpaths	
L/VI		Are there protruding objects or barriers on the pathway?													Interval 400 to 500 do not have protuding objects.	M1.1, M1.2, M1.6, 11.1- Sidewalks/ footpaths	
L/VI		Are the protruding objects guarded?													No guards provided.	M1.7 11.1- Sidewalks/ footpaths 5.1.4- Barriers and Hazards	
		Is the pathway levelled?													Undulating at some points because of broken paving.	M1.2, M1.6, M2.3, M3.3, M4.1, M4.3 11.1- Sidewalks/ footpaths	
L		Is there 1500 mm x 1500mm space to allow a wheelchair user to turn around at some point on the pathway?													M1.7, M2.1, M3.6, M4.4		
L/VI		Is the finish non-slip and non-reflective?													M1.7, M2.1, M3.6, M4.4		
VI		Is the pathway well illuminated at night?													Although this stretch is fairly illuminated at night as compared to rest of Marine Drive, it may be difficult for a person with partial vision to navigate this stretch.	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways	

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			400-500			500-600			600-700			700-800					
Marine Drive		Interval/Serial No.	Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
VI		Is there a colour contrast between the pathway and seating?													There is a contrast between the pathway and the seating depending on daylight factors and for persons without disabilities. However, for persons with partial visual impairment or color blindness, this contrast might not be visible. But considering that the promenade width is 12000 mm which is more than required and that the promenade is heritage listed, this contrast can be considered to be sufficient.	M1.7, M2.1, M3.6, M4.4	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways
L		Does the footpath have kerb cuts for persons to get on and get off the pathway at intersections?													Interval 500-800m does not have an intersection. The intersection in the interval 400-500 m does not have a kerb cut ramped entrance to get off and on the promenade.		11.2- Kerb Ramps at walkways and pedestrian crossing
L/VI		Does the footpath have kerb cuts for persons to get on and get off the pathway?															11.2- Kerb Ramps at walkways and pedestrian crossing
VI		Have tactile warning blocks been installed next to all entry and exit points from the pathway													No tactile markings are provided.		11.1- Sidewalks/ footpaths
		Are the trees on the promenade guarded?														M1.7, M2.6, M3.6, M4.3	11.1- Sidewalks/ footpaths
		Are there dustbins on the promenade?														P1.1	
		Are the dustbins accessible- at a height between 900-1000mm?													They are at the height of 1200mm.	P1.1	3.2- Reach Range
		Are the Inspection chambers well flushed with the footpath?													No inspection chambers present in 400 to 500 interval of the promenade.	M1.2, M2.4,OI	

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			400-500			500-600			600-700			700-800					
Marine Drive		Interval/Serial No.	Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
L/VI		Are the pathways maintained and kept free of unwanted barriers such as furniture, planters, etc?															11.1- Sidewalks/ footpaths



Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
		Interval /Serial No.	400-500			500-600			600-700			700-800					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
RESTING SPACES																	
L/VI		Where there are large spaces, are resting facilities provided at 30 meters of intervals?														M1.7, M2.1, M3.6, M4.4	
		Is there an adjoining space for a wheelchair next to benches and public seats?													The seating is continuous-most of the seating runs continuously abutting the shoreline.		
L/VI	5.11	Are public seats with height of 450-480mm?													The lower seating is not provided in the interval 400 to 600 M. The height of the seating/embarkment in this interval is 600mm.	M1.3	Seating should be at a height of 450-480mm. 5.11. Seating spaces
L/VI		Are there knee spaces at accessible tables with a height of 750mm and knee space of 750mm wide and 480mm deep?													There are no tables on the promenade.		

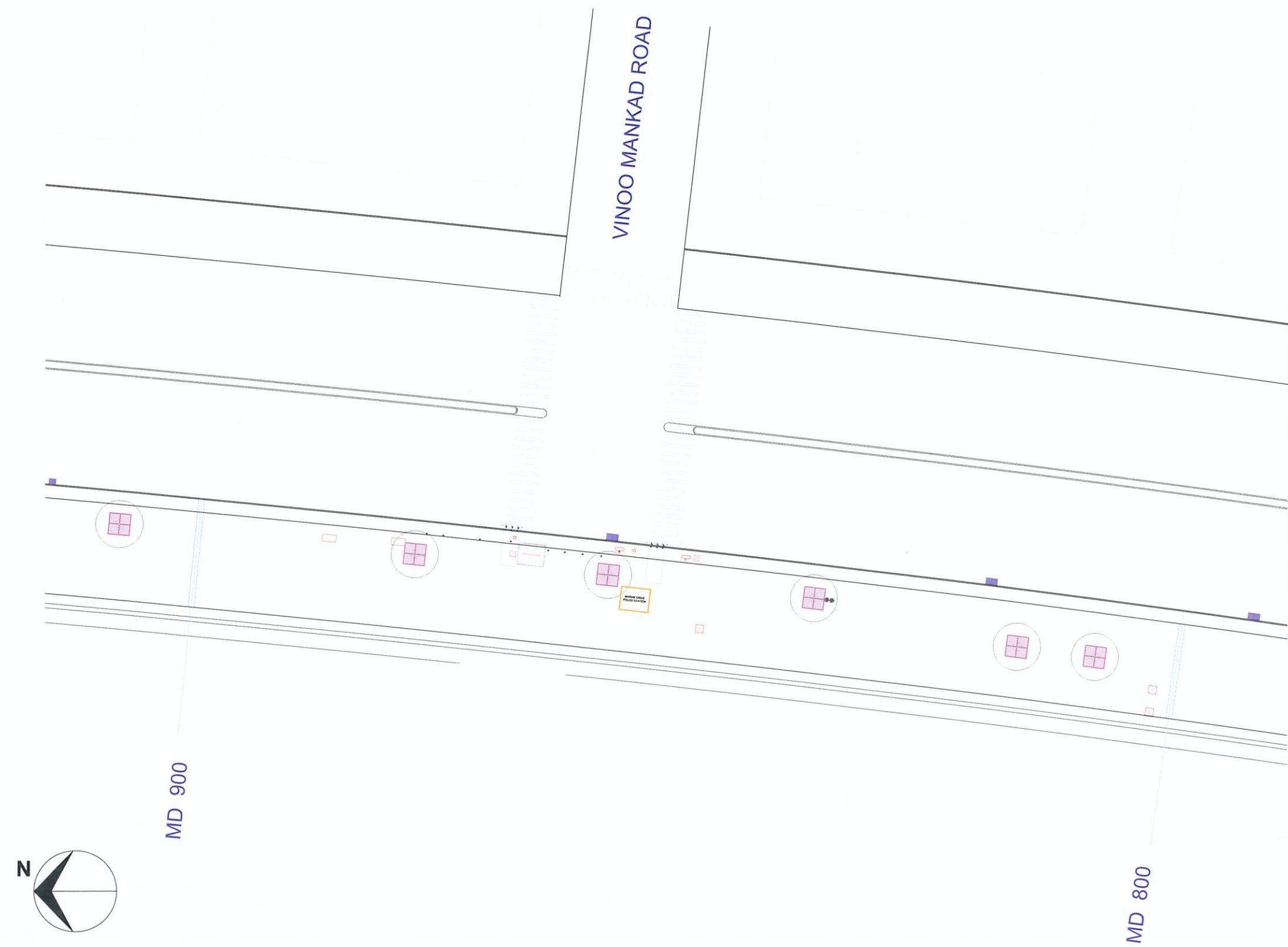


Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			400-500			500-600			600-700			700-800					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
INTERSECTIONS																	
L/VI		The footpath at the intersection is wide as 1800mm?													Intersection present on all these intervals.	O1.1, O1.2, O1.3, O1.4	11.4- Medians and Refuge Islands
		Median is present?														O1.1, O1.2,	
L/VI		The median as an area at ground level to be used as refuge area during crossing?															
L/VI		The signals are easily readable and are placed such that they can be seen while crossing?													The traffic lights are placed such that they aren't easily identifiable. The orientation of these traffic lights meant for pedestrians are inefficient.	O1.4	
VI		There is an audible alert when the signal goes on and off?													No audible alert.		
		There is an interval indicating device on the traffic signal?													No time interval indicating device present.		
		The time interval allowed for crossing should be programmed according to the slowest crossing persons;															













MADAME CAMA ROAD TO GOBIND MAHAL STRETCH

MD 800 M to 1200 M

Interval: 800 M at Ganga Vihar to 1200 M at Matruchhaya















LEGEND

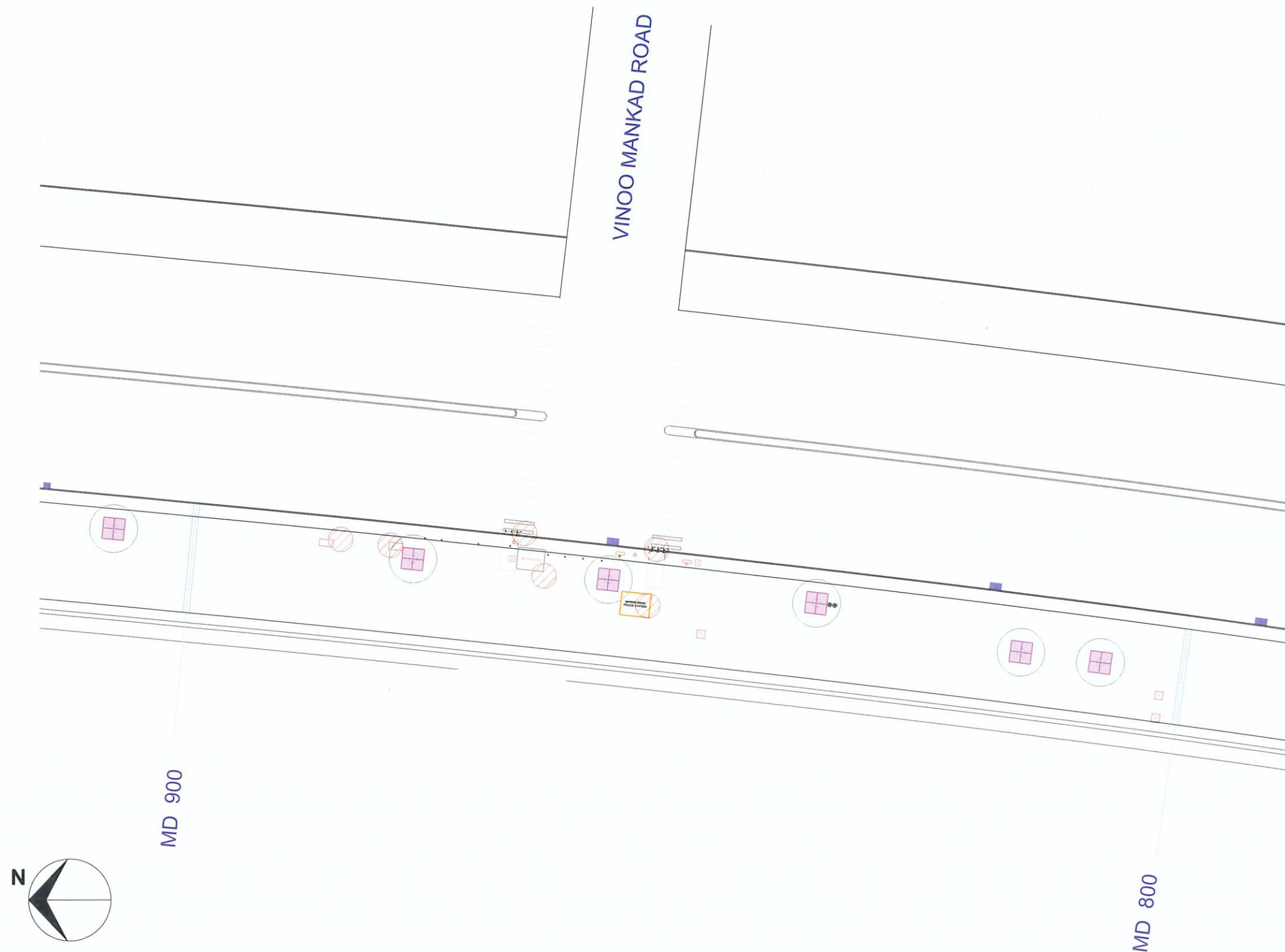
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-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 800 M to 900 M
Ganga Vihar to Krishna Mahal

LEGEND

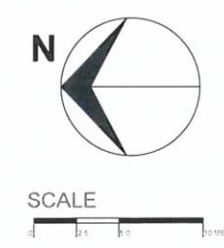
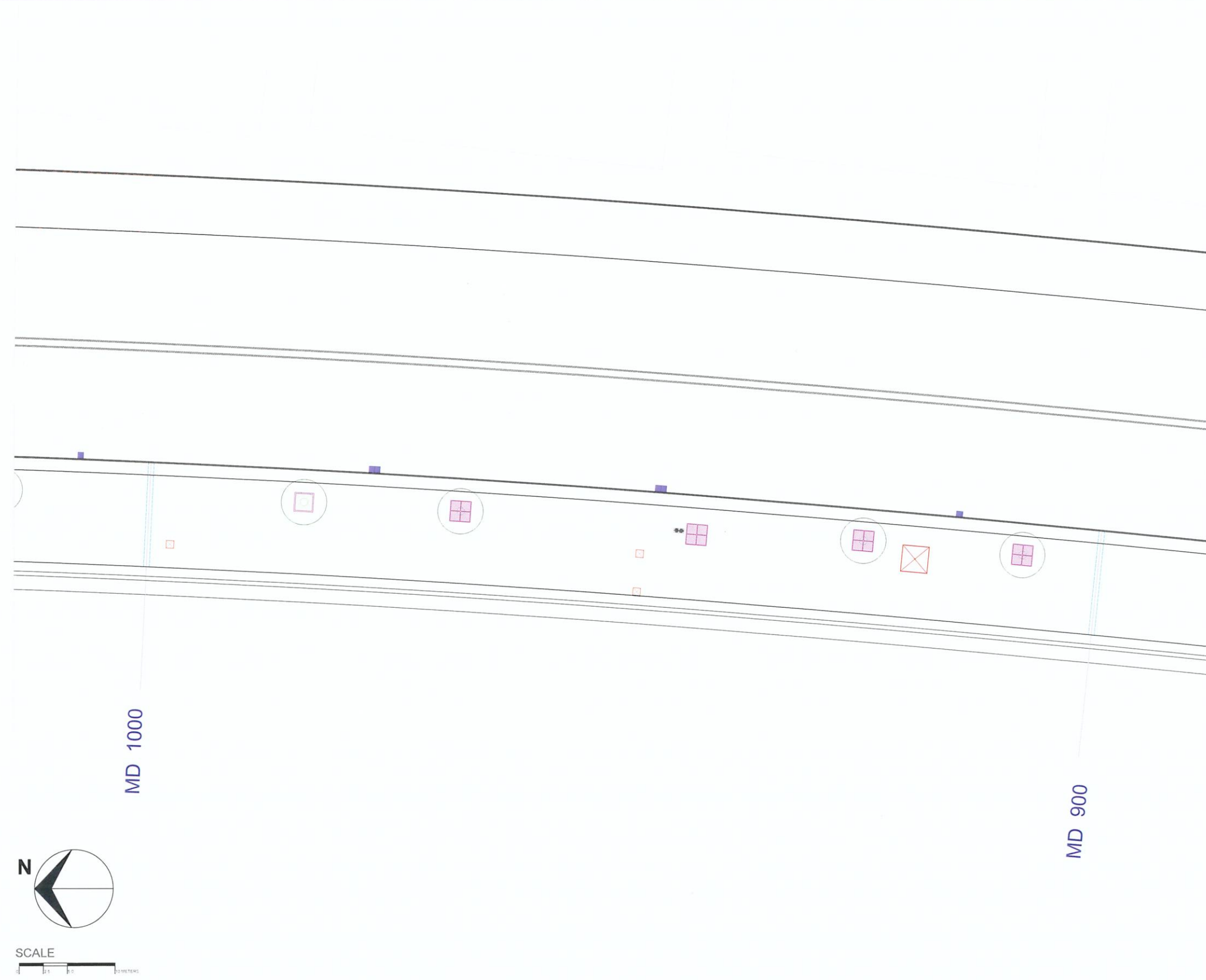
-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2













MD 800 M to 900 M
Ganga Vihar to Krishna Mahal



LAYOUT PLAN INDICATING BARRIERS

















- LEGEND**
-  TREES
 -  GRASS
 -  TREE GRATINGS
 -  TREE GUARD
 -  DUSTBIN
 -  INSPECTION CHAMBER
 -  SEWAGE CHAMBER
 -  ELECTRICAL BOX
 -  STRUCTURE
 -  DRAIN
 -  SIGNAGE 1
 -  SIGNAGE 2

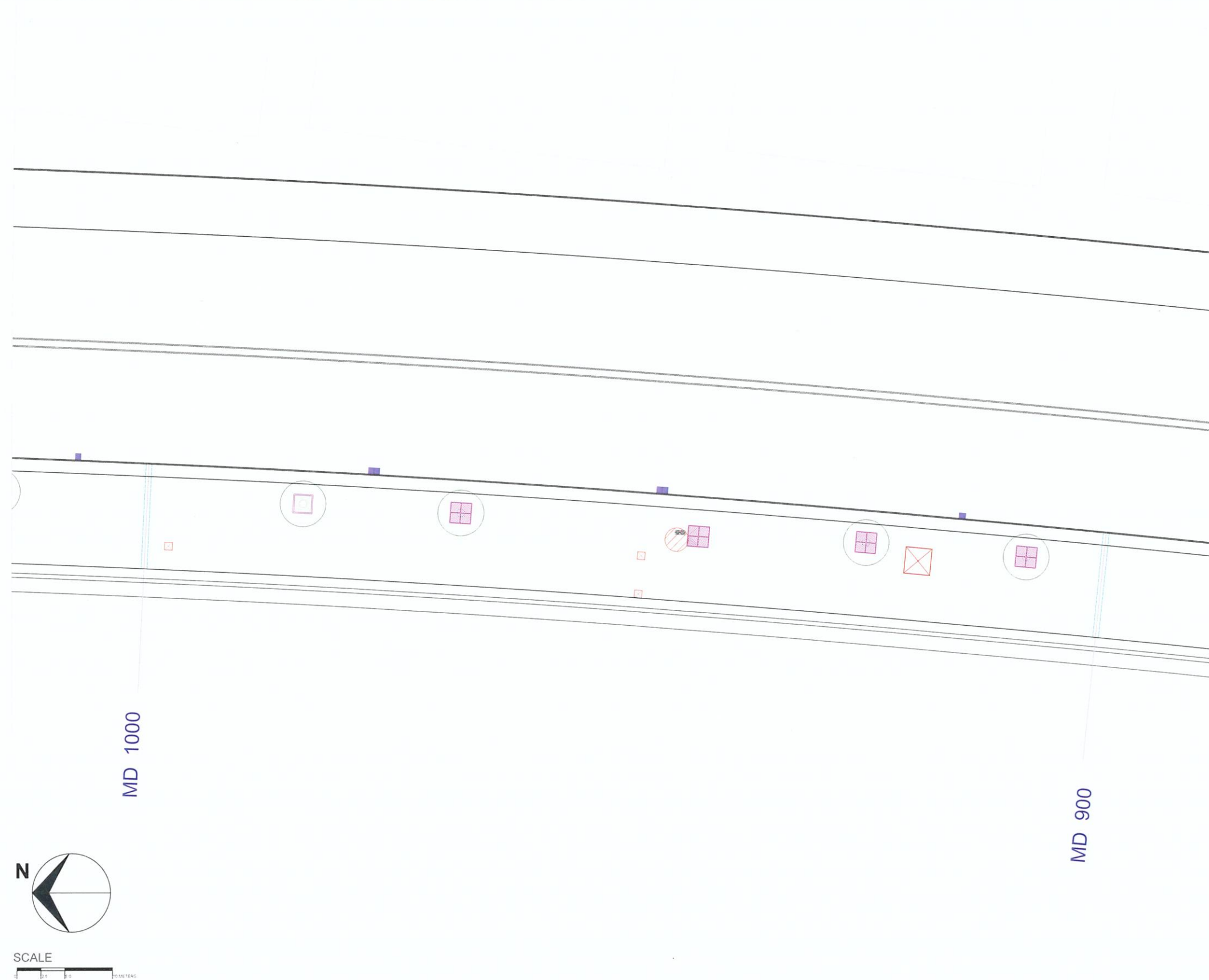
MD 900 M to 1000 M
Krishna Mahal to Zaver Mahal

LAYOUT PLAN

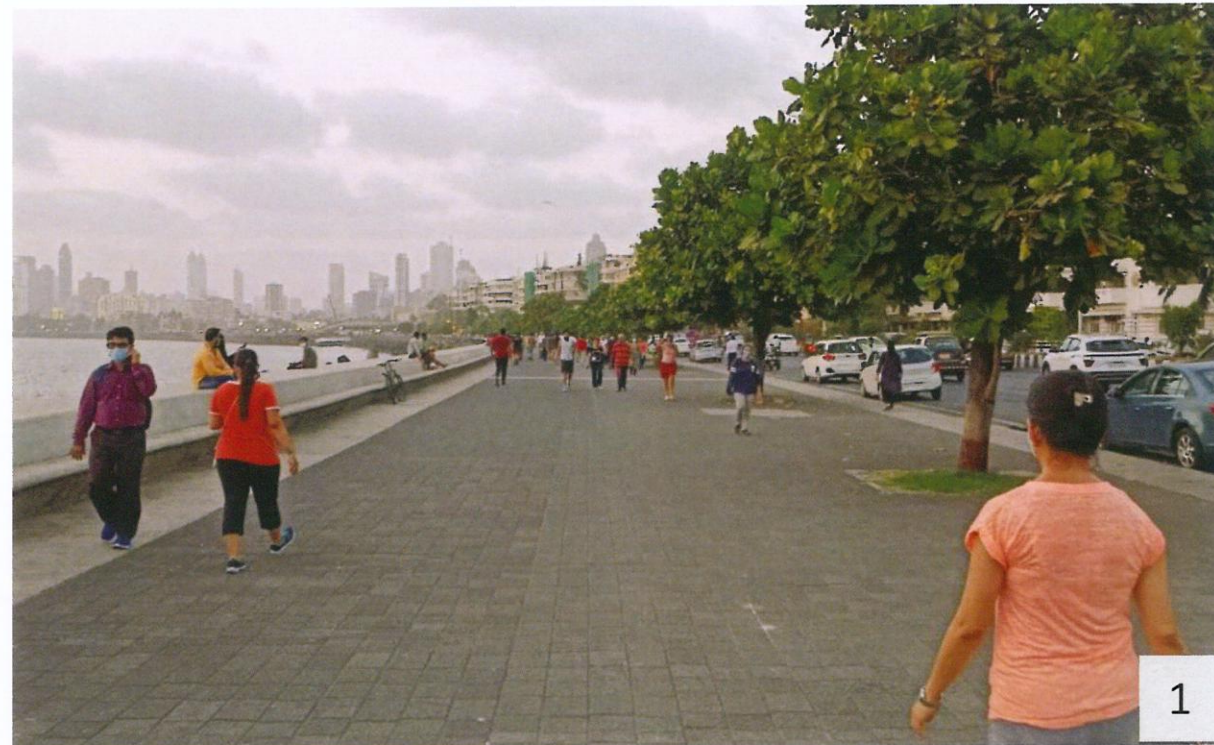
LEGEND

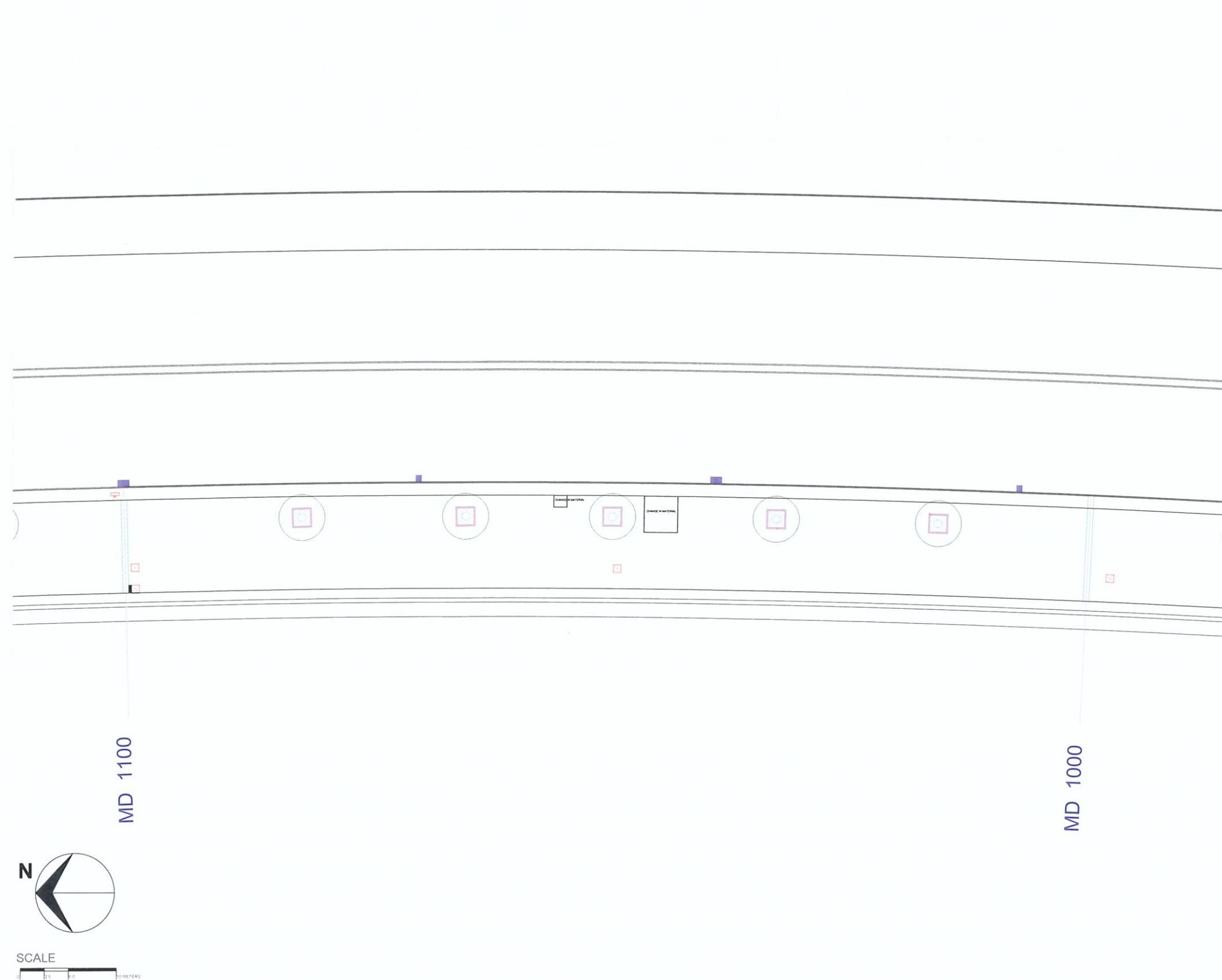
-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 900 M to 1000 M
Krishna Mahal to Zaver Mahal



LAYOUT PLAN INDICATING BARRIERS

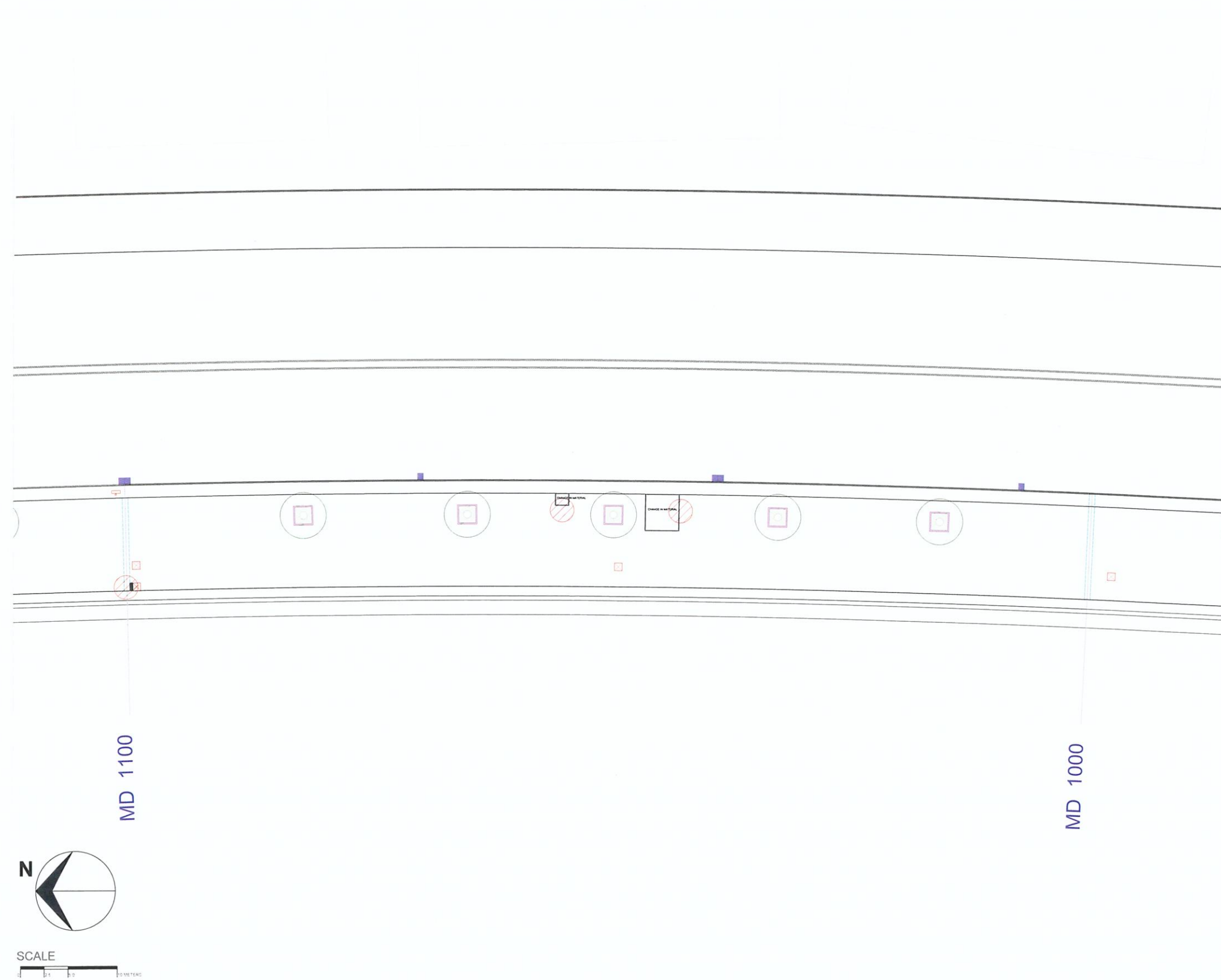




LEGEND	
	TREES
	GRASS
	TREE GRATINGS
	TREE GUARD
	DUSTBIN
	INSPECTION CHAMBER
	SEWAGE CHAMBER
	ELECTRICAL BOX
	STRUCTURE
	DRAIN
	SIGNAGE 1
	SIGNAGE 2

MD 1000 M to 1100 M
Zaver Mahal to Hemprabha Building

LAYOUT PLAN










LEGEND	
	TREES
	GRASS
	TREE GRATINGS
	TREE GUARD
	DUSTBIN
	INSPECTION CHAMBER
	SEWAGE CHAMBER
	ELECTRICAL BOX
	STRUCTURE
	DRAIN
	SIGNAGE 1
	SIGNAGE 2

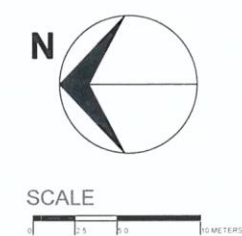
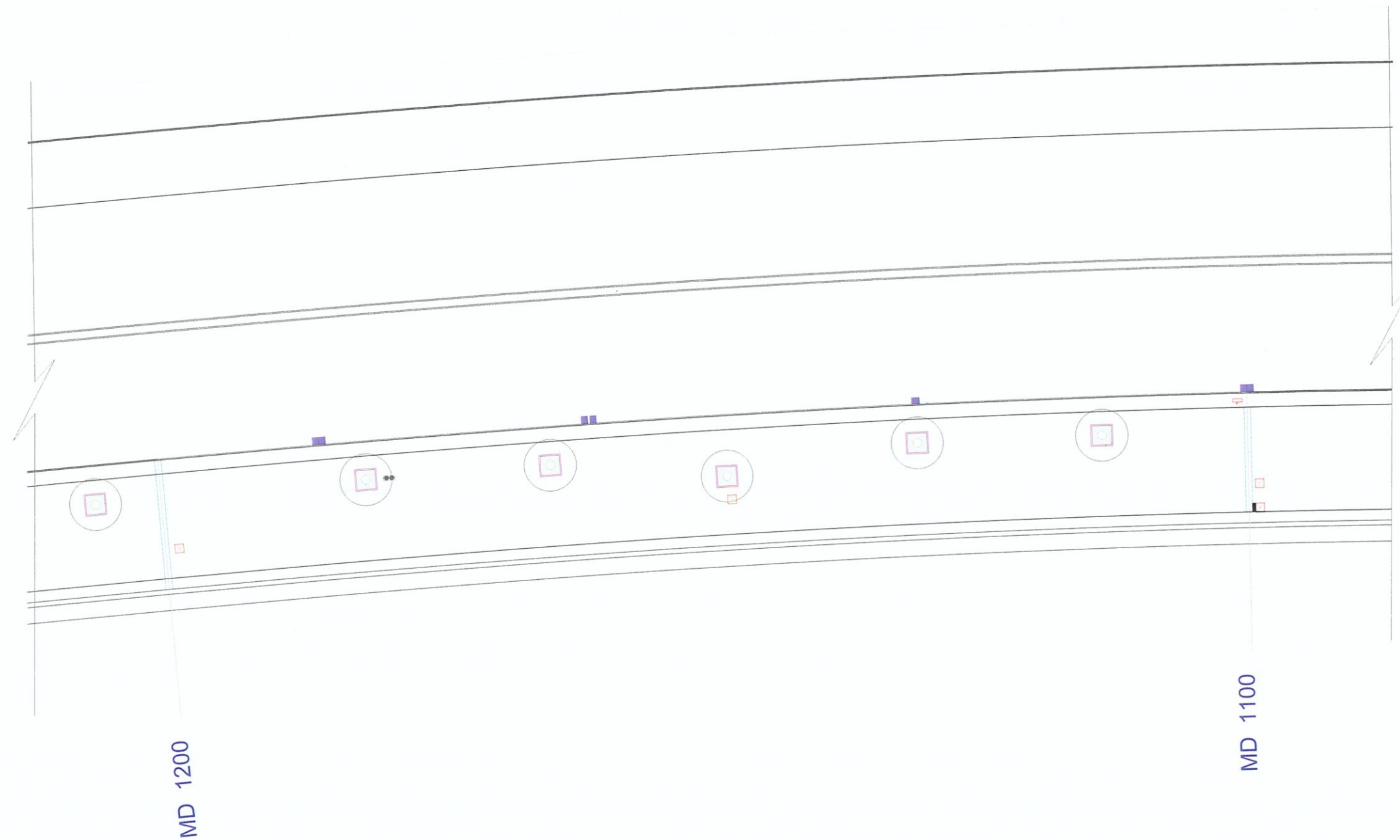
MD 1000 M to 1100 M
Zaver Mahal to Hemprabha Building



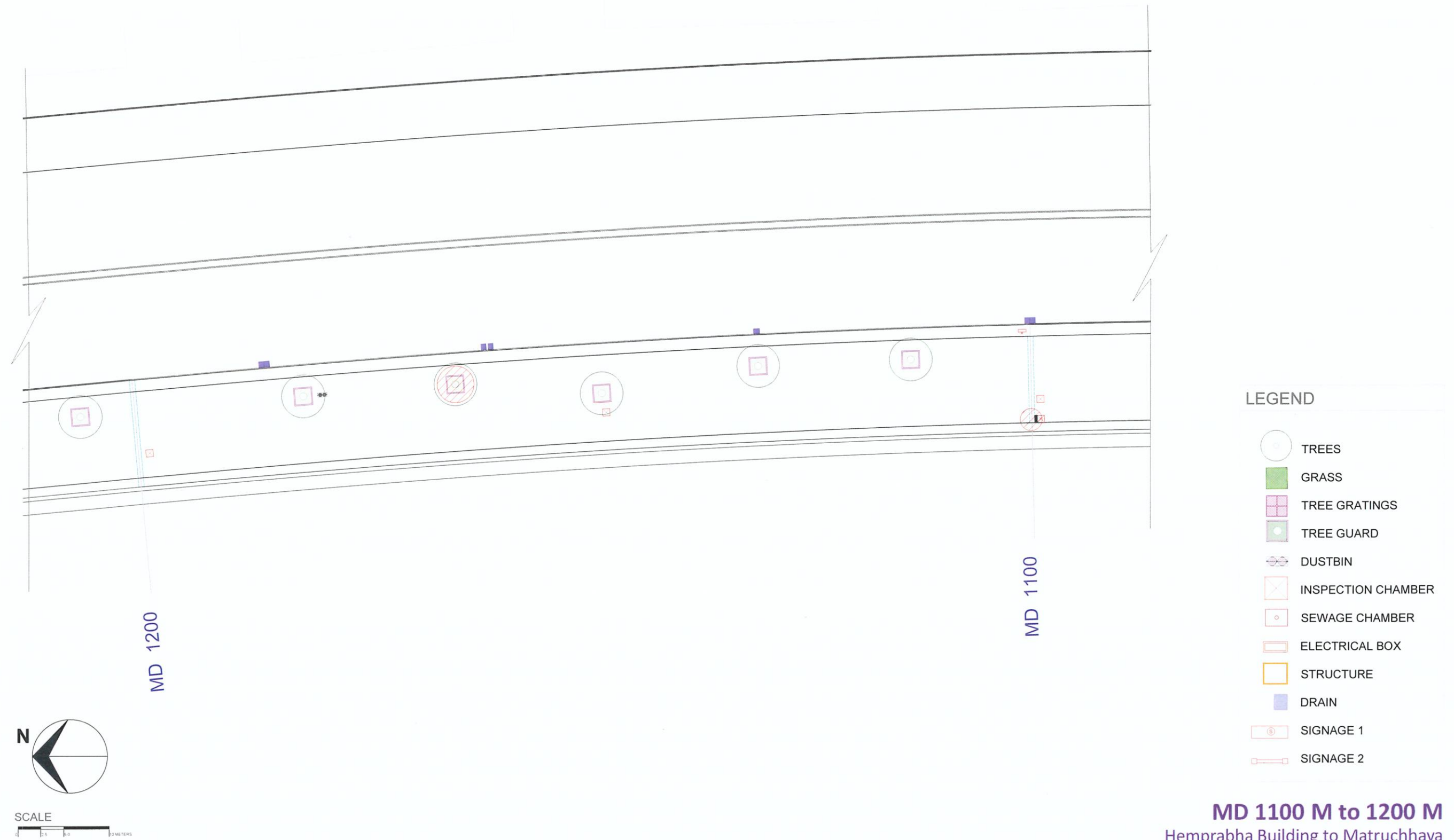
LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 1100 M to 1200 M
Hemprabha Building to Matruchhaya



LAYOUT PLAN





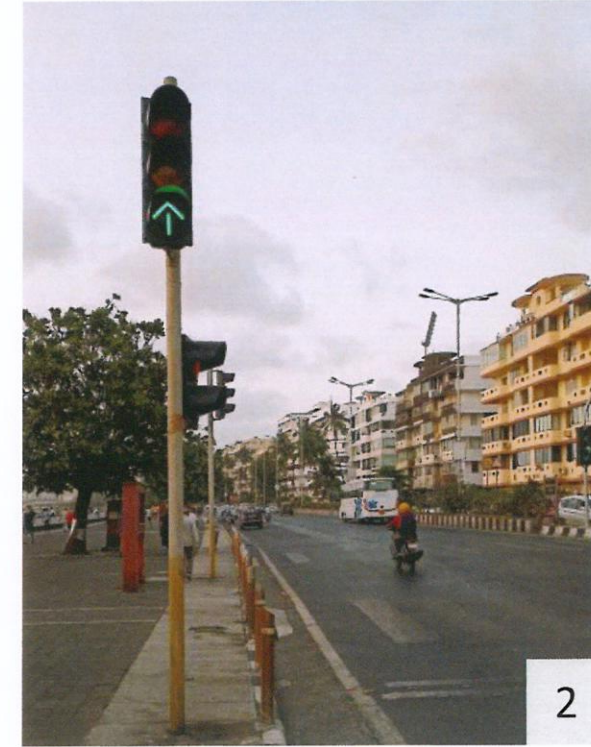
Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	800-900			900-1000			1000-1100			1100-1200					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
PROMENADE																	
L/VI	11.1	Is the pedestrian pathway /promenade is minimally 1800mm wide?													Q1.1, Q1.2, Q2.1, Q2.2, Q3.1, Q3.2, Q4.1, Q4.2		
		Is the promenade is along the entire length of the road?															
L/VI		Is it less than 150mm high?													Its at a level of 200 mm to 300mm.	11.1- Sidewalks/ footpaths	
L/VI		Are there protruding objects or barriers on the pathway?													Inspection Chambers not flushed with the paving of the promenade act as a barrier. Electrical boxes and temporary structures present on site acting as barriers.	Q1.3, Q1.4, Q1.5, Q2.3, Q3.4, Q3.5	11.1- Sidewalks/ footpaths
L/VI		Are the protruding objects guarded?													No guards provided.		11.1- Sidewalks/ footpaths 5.1.4- Barriers and Hazards
		Is the pathway levelled?													Undulating at some points because of broken paving and unusual slopes.	Q2.3, Q3.5, Q3.4	11.1- Sidewalks/ footpaths
L		Is there 1500 mm x 1500mm space to allow a wheelchair user to turn around at some point on the pathway?														Q1.1, Q1.2, Q2.1, Q2.2, Q3.1, Q3.2, Q4.1, Q4.2	
L/VI		Is the finish non-slip and non-reflective?														Q1.1, Q1.2, Q2.1, Q2.2, Q3.1, Q3.2, Q4.1, Q4.2	
VI		Is the pathway well illuminated at night?													Since there are no lights on the promenade itself, the illumination is by the street lights on the median. Most of this light is obstructed by the tree foliage.	Q1.2	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways

Disability	No.	Question	Interval												Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	800-900			900-1000			1000-1100			1100-1200					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
VI		Is there a colour contrast between the pathway and seating?													There is a contrast between the pathway and the seating depending on daylight factors and for persons without disabilities. However, for persons with partial visual impairment or color blindness, this contrast might not be visible. But considering that the promenade width is 12000 mm which is more than required and that the promenade is heritage listed, this contrast can be considered to be sufficient.	Q1.1, Q1.2, Q2.1, Q2.2, Q3.1, Q3.2, Q4.1, Q4.2	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways
L		Does the footpath have kerb cuts for persons to get on and get off the pathway at intersections?													Interval -50 to 200m does not have an intersection. The intersection in the interval 200-300m does not have a kerb cut ramped entrance to get off and on the promenade.	Q1.4	11.2- Kerb Ramps at walkways and pedestrian crossing
L/VI		Does the footpath have kerb cuts for persons to get on and get off the pathway?														Q1.4	11.2- Kerb Ramps at walkways and pedestrian crossing
VI		Have tactile warning blocks been installed next to all entry and exit points from the pathway													No tactile markings are provided.		11.1- Sidewalks/ footpaths
		Are the trees on the promenade guarded?														Q2.4, Q4.4	11.1- Sidewalks/ footpaths

Disability	No.	Question	Interval/Serial No.												Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	800-900			900-1000			1000-1100			1100-1200					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
		Are there dustbins on the promenade?	Yes			Yes			Yes			Yes				T1.2	
		Are the dustbins accessible- at a height between 900-1000mm?	Yes			Yes			Yes			Yes			They are at the height of 1200mm.	T1.2	3.2- Reach Range
		Are the Inspection chambers well flushed with the footpath?	Yes									Yes				Q2.3, Q3.5	
L/VI		Are the pathways maintained and kept free of unwanted barriers such as furniture, planters, etc?							Yes			Yes			Planters/ pots are kept around the police station. Barricades are kept horizontally on the ground.	Q1.3,Q1.5, Q2.3	11.1- Sidewalks/ footpaths



Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			800-900			900-1000			1000-1100			1100-1200					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
RESTING SPACES																	
L/VI		Where there are large spaces, are resting facilities provided at 30 meters of intervals?														R1.1, R1.2, R1.3, R1.4,	
		Is there an adjoining space for a wheelchair next to benches and public seats?													The seating is continuous-most of the seating runs continuously abutting the shoreline.		
L/VI		Are public seats with height of 450-480mm?													The lower seating complies with the regulation. However, the embankment which serves as a popular seating and from where the sea and horizon are visible, is higher and not accessible.	R1.3	
L/VI		Are there knee spaces at accessible tables with a height of 750mm and knee space of 750mm wide and 480mm deep?													There are no tables on the promenade.		















Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
			800-900			900-1000			1000-1100			1100-1200					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
INTERSECTIONS																	
L/VI		Is the footpath at the intersection 1800mm wide?													Intersection only present at Interval 800-900 M.	S1.1	11.4- Medians and Refuge Islands
		Is a median is present?														S1.3	
L/VI		Is the median an area at ground level? Can it be used as refuge area during crossing?															
L/VI		Are the signals easily readable and are they placed such that they can be seen while crossing?													The traffic lights are placed such that they are not easily identifiable. The orientation of these traffic lights meant for pedestrians are inefficient.	S1.2	
VI		Is there an audible alert when the signal goes on and off?													No audible alert.		
		Is there an interval indicating device on the traffic signal?													No time interval indicating device present.		
		Is the time interval allowed for crossing programmed according to the slowest crossing persons?													It was observed that at most of the crossings had a very short interval which will not allow a person to cross at a comfortable pace.		

MADAME CAMA ROAD TO GOBIND MAHAL STRETCH

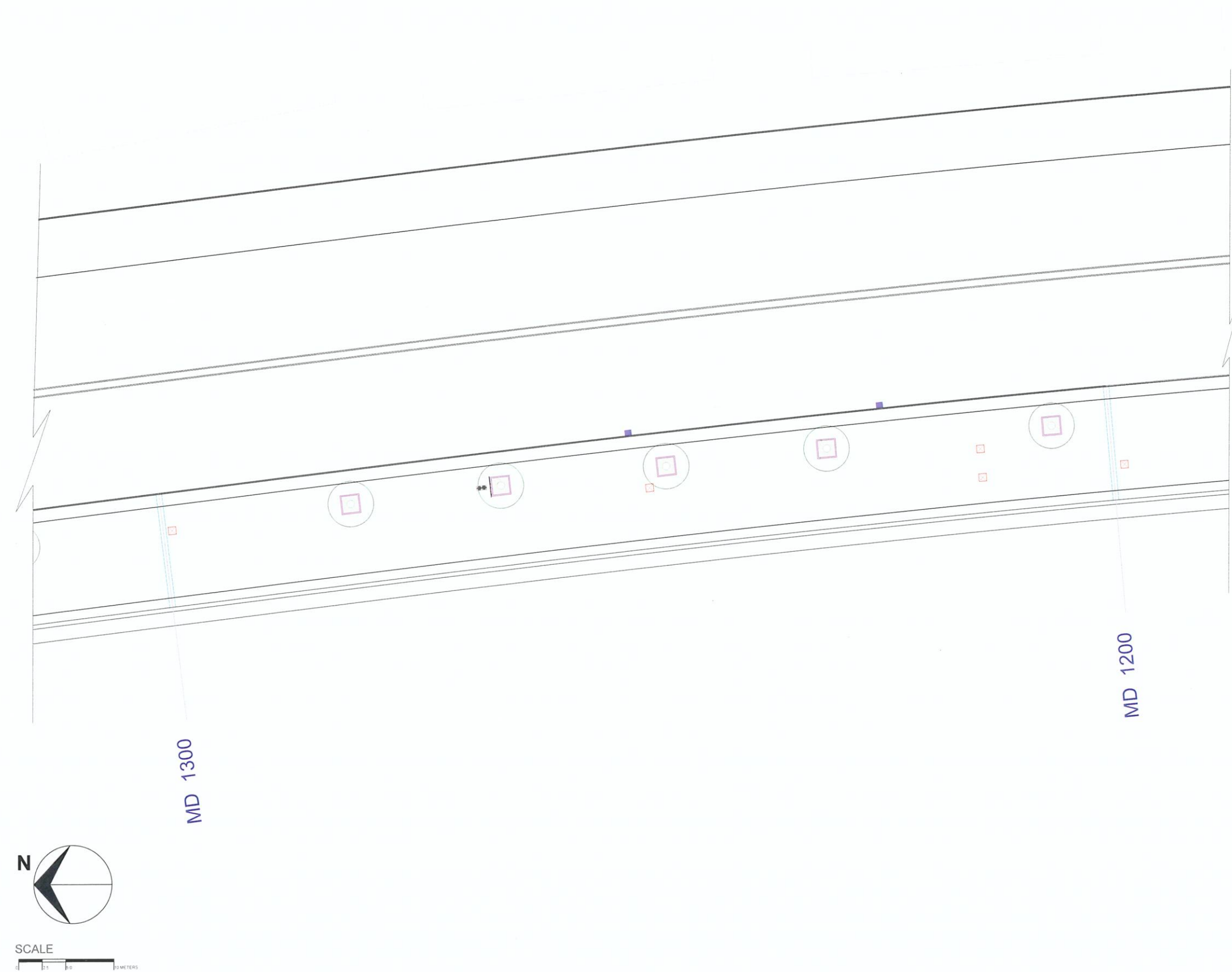
MD 1200 M to 1500 M

Interval: 1200 M at Matruchhaya to 1500 M at Gobind Mahal

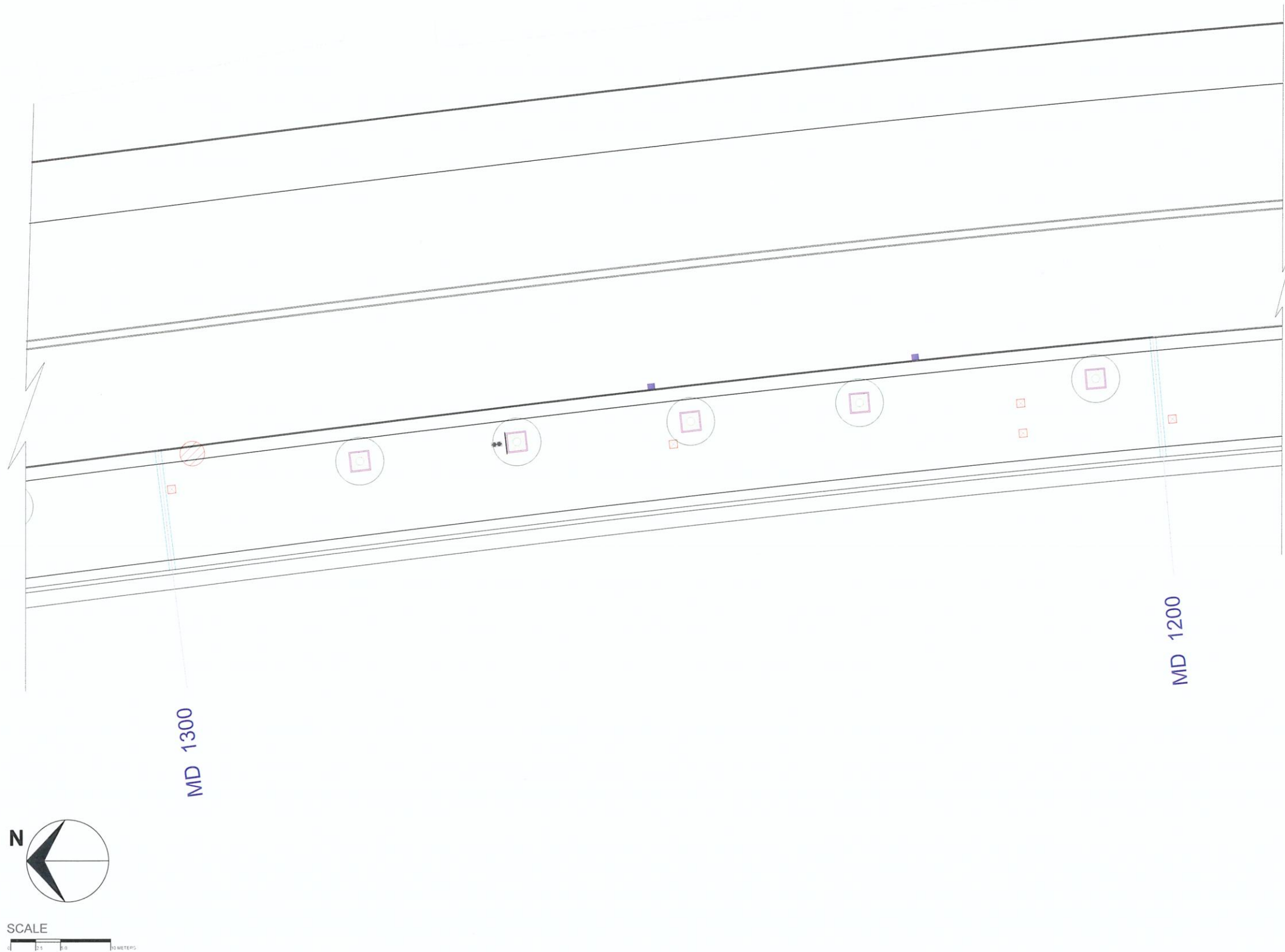
LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2













MD 1200 M to 1300 M
Matruchhaya to Al Sabah Court



LAYOUT PLAN



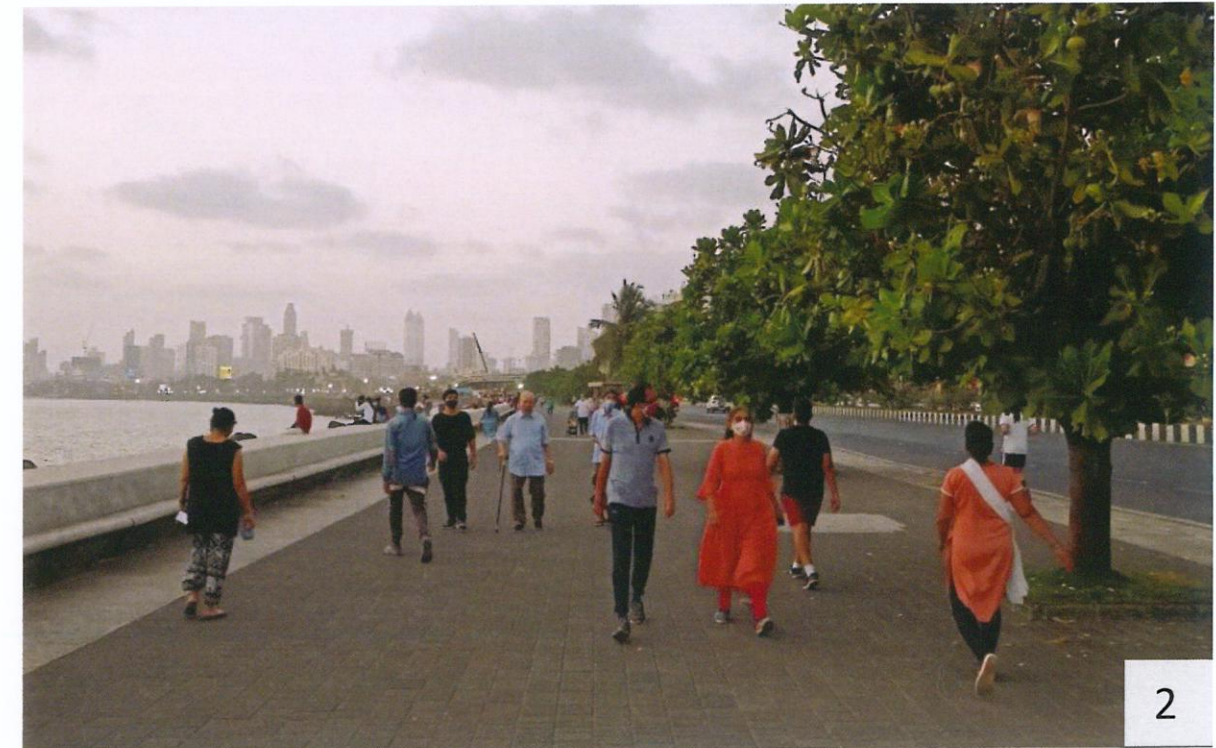
LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2













MD 1200 M to 1300 M
Matruchhaya to Al Sabah Court

LAYOUT PLAN INDICATING BARRIERS

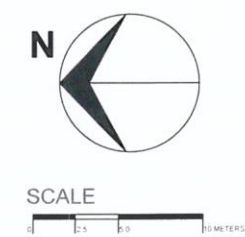
MD 1200 to 1300 M



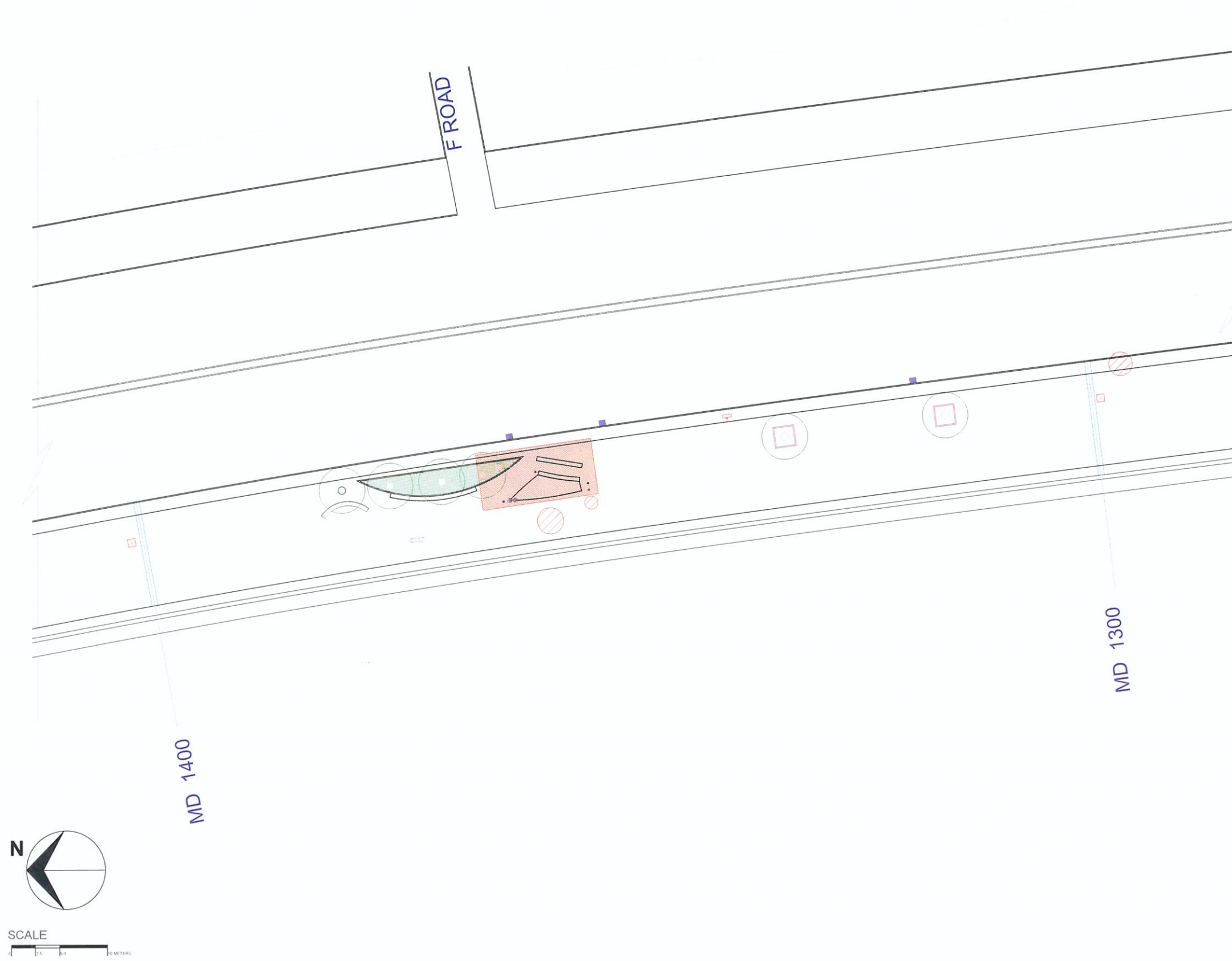
LEGEND













-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 1300 M to 1400 M
Al Sabah Court to Shriniketan



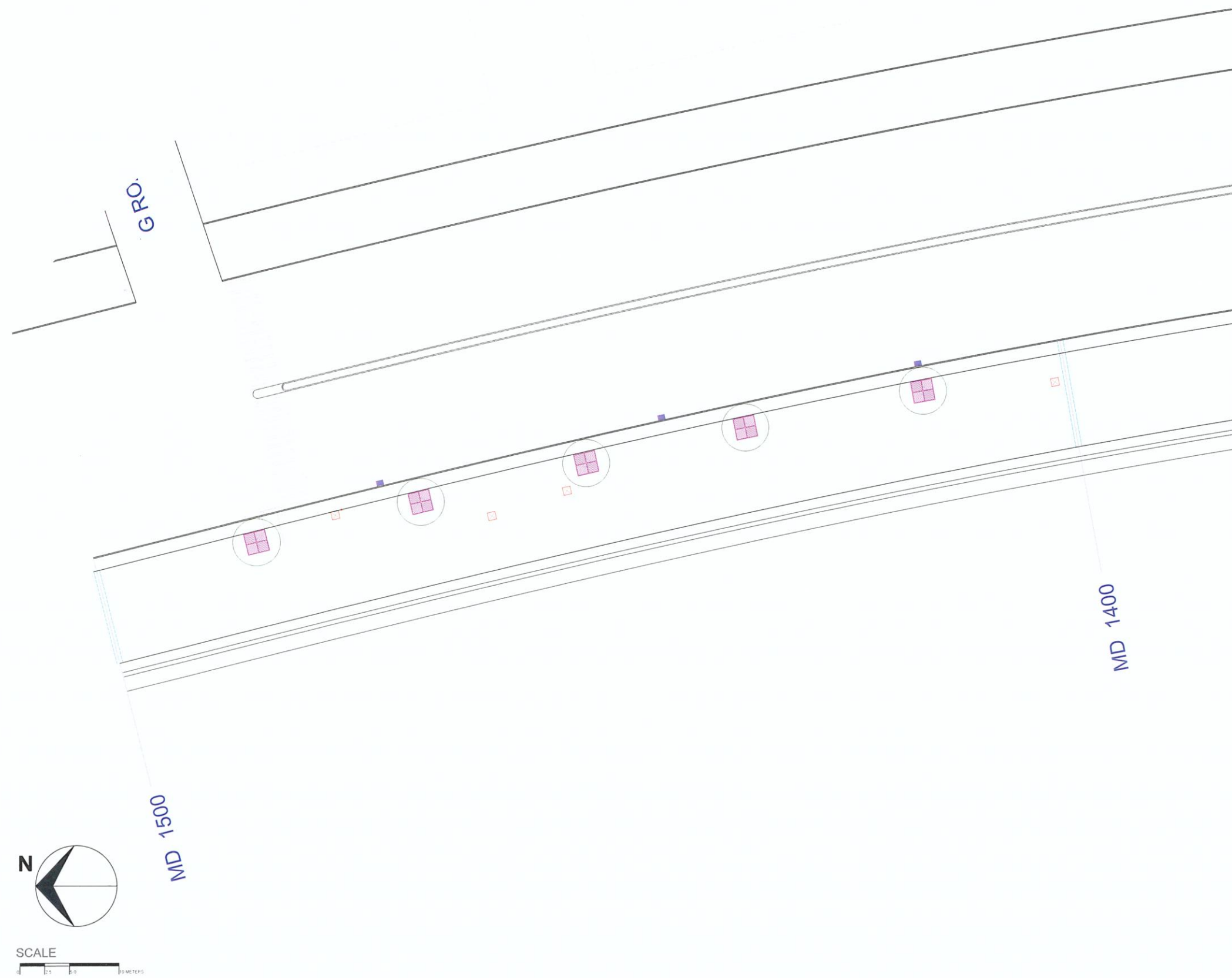
LAYOUT PLAN















- LEGEND**
-  TREES
 -  GRASS
 -  TREE GRATINGS
 -  TREE GUARD
 -  DUSTBIN
 -  INSPECTION CHAMBER
 -  SEWAGE CHAMBER
 -  ELECTRICAL BOX
 -  STRUCTURE
 -  DRAIN
 -  SIGNAGE 1
 -  SIGNAGE 2

MD 1300 M to 1400 M
Al Sabah Court to Shriniketan

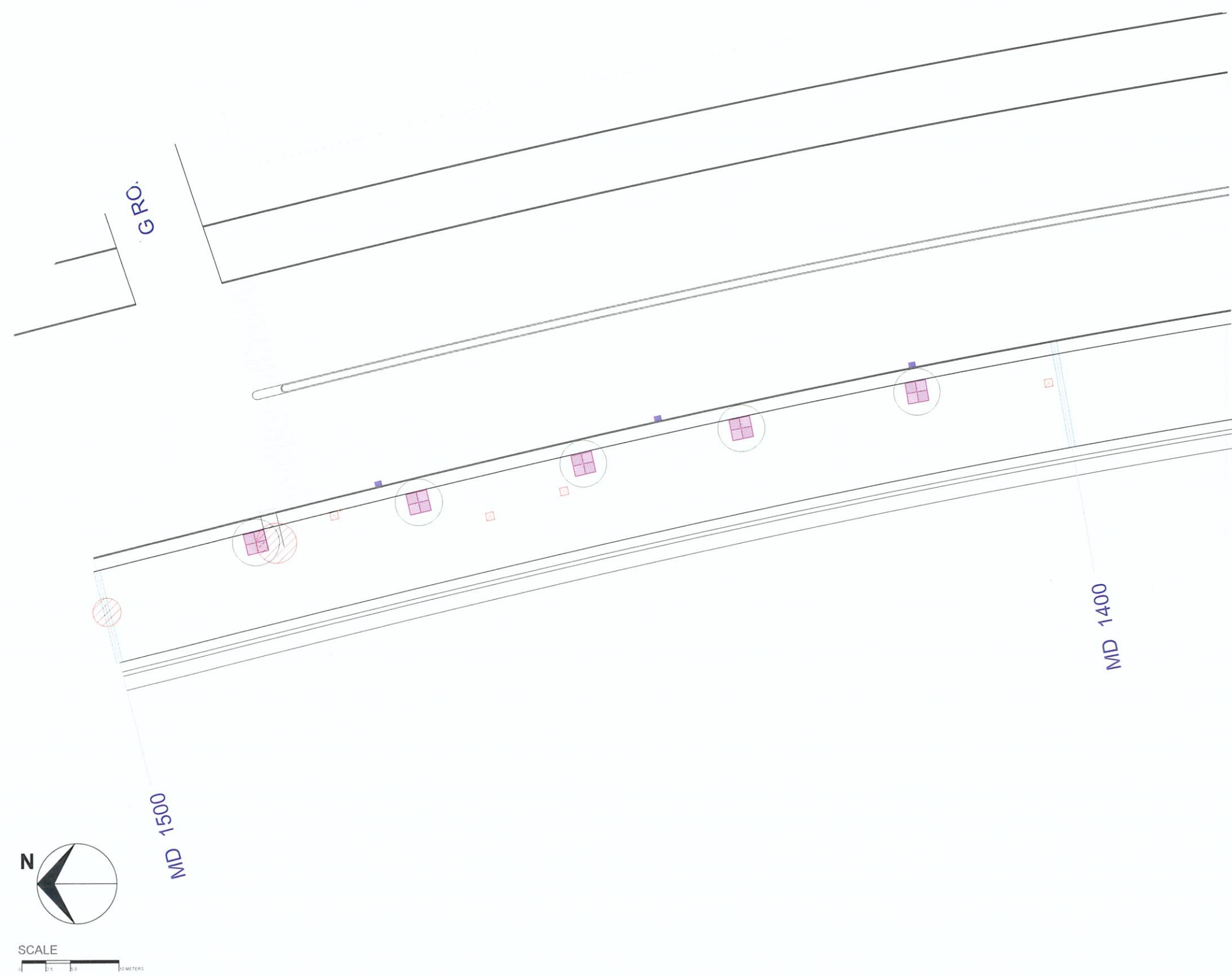




LEGEND

-  TREES
-  GRASS
-  TREE GRATINGS
-  TREE GUARD
-  DUSTBIN
-  INSPECTION CHAMBER
-  SEWAGE CHAMBER
-  ELECTRICAL BOX
-  STRUCTURE
-  DRAIN
-  SIGNAGE 1
-  SIGNAGE 2

MD 1400 M to 1500 M
Shriniketan to Gobind Mahal



LAYOUT PLAN INDICATING BARRIERS

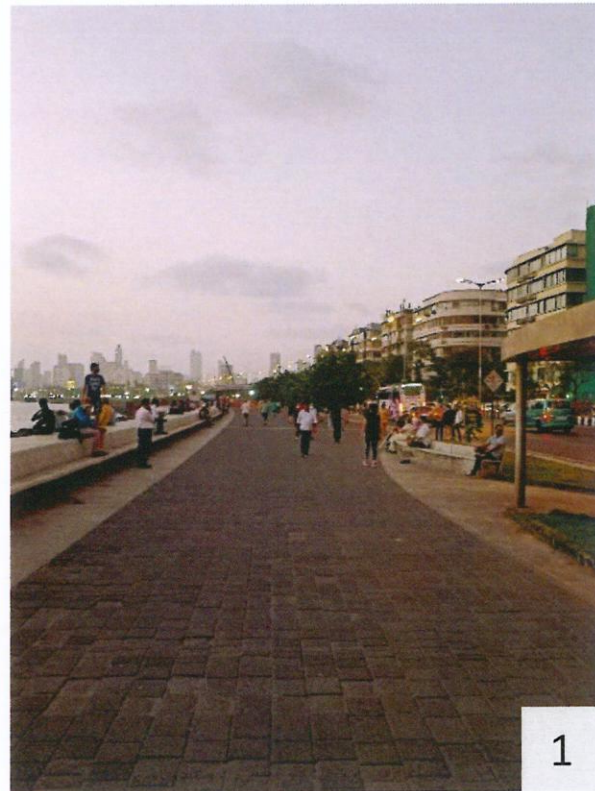
MD 1400 to 1500 M



Disability	No.	Question	Answers									Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	1200-1300			1300-1400			1400-1500					
			Yes	No	NA	Yes	No	NA	Yes	No	NA			
PROMENADE														
L/VI	11.1	Is the pedestrian pathway /promenade is minimally 1800mm wide?											U1.1, U1.2, U2.1, U2.4	
		Is the promenade is along the entire length of the road?											U1.3, U3.3	
L/VI		Is it less than 150mm high?										Its at a level of 200 mm to 300mm.	V1.1	11.1- Sidewalks/ footpaths
L/VI		Are there protruding objects or barriers on the pathway?										Inspection Chambers not flushed with the paving of the promenade act as a barrier.	U2.3, U3.4	11.1- Sidewalks/ footpaths
L/VI		Are the protruding objects guarded?										No guards provided.		11.1- Sidewalks/ footpaths 5.1.4- Barriers and Hazards
		Is the pathway levelled?										Undulating at some points because of broken paving and unusual slopes.	U1.1, U1.2, U2.1, U2.4	11.1- Sidewalks/ footpaths
L		Is there 1500 mm x 1500mm space to allow a wheelchair user to turn around at some point on the pathway?											U1.1, U1.2, U2.1, U2.4, U3.1, U3.2, U3.3	
L/VI		Is the finish non-slip and non-reflective?												
VI		Is the pathway well illuminated at night?										Since there are no lights on the promenade itself, the illumination is by the street lights on the median. Most of this light is obstructed by the tree foliage.	U2.5	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkways

Disability	No.	Question	Answers									Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	1200-1300			1300-1400			1400-1500					
			Yes	No	NA	Yes	No	NA	Yes	No	NA			
VI		Is there a colour contrast between the pathway and seating?										There is a constrast between the pathway and the seating depending on daylight factors and for persons without disabilities. However, for persons with partial visual impairment or color blindness, this constrast might not be visible. But considering that the promenade width is 12000 mm which is more than required and that the promenade is heritage listed, this constrast can be considered to be sufficient.	V1.1, V1.2, V1.3	11.1- Sidewalks/ footpaths 5.1.8- Lighting and Walkway
L		Does the footpath have kerb cuts for persons to get on and get off the pathway at intersections?										Interval -50 to 200m does not have an intersection. The intersection in the interval 200-300m does not have a kerb cut ramped entrance to get off and on the promenade.	W1.1, W1.2	11.2- Kerb Ramps at walkways and pedestrian crossing
L/VI		Does the footpath have kerb cuts for persons to get on and get off the pathway?												11.2- Kerb Ramps at walkways and pedestrian crossing
VI		Have tactile warning blocks been installed next to all entry and exit points from the pathway										No tactile markings are provided.		11.1- Sidewalks/ footpaths

Disability	No.	Question	Answers									Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	1200-1300			1300-1400			1400-1500					
			Yes	No	NA	Yes	No	NA	Yes	No	NA			
		Are the trees on the promenade guarded?											V1.3	11.1- Sidewalks/ footpaths
		Are there dustbins on the promenade?												
		Are the dustbins accessible- at a height between 900-1000mm?										They are at the height of 1200mm.		3.2- Reach Range
		Are the Inspection chambers well flushed with the footpath?												
L/VI		Are the pathways maintained and kept free of unwanted barriers such as furniture, planters, etc?												11.1- Sidewalks/ footpaths



Disability	No.	Question	Answers									Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval /Serial No.	1200-1300			1300-1400			1400-1500					
			Yes	No	NA	Yes	No	NA	Yes	No	NA			
RESTING SPACES														
L/VI		Where there are large spaces, are resting facilities provided at 30 meters of intervals?										U1.1, U1.2, U2.1, U2.4, U3.1, U3.2		
		Is there an adjoining space for a wheelchair next to benches and public seats?										The seating is continuous-most of the seating runs continuously abutting the shoreline.	U1.1, U1.2, U2.1, U2.4, U3.1, U3.2	
L/VI		Are public seats with height of 450-480mm?										The lower seating complies with the regulation. However, the embankment which serves as a popular seating and from where the sea and horizon are visible, is higher and not accessible.	V1.1, V1.2, V1.3	
L/VI		Are there knee spaces at accessible tables with a height of 750mm and knee space of 750mm wide and 480mm deep?										There are no tables on the promenade.		



Disability	No.	Question	Answers									Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval /Serial No.	1200-1300			1300-1400			1400-1500					
			Yes	No	NA	Yes	No	NA	Yes	No	NA			
INTERSECTIONS														
L/VI		Is the footpath at the intersection 1800mm wide?											U1.1, U1.2, U2.1, U2.4, U3.1, U3.2	
		Is a median is present?												11.4- Medians and Refuge Islands
L/VI		Is the median an area at ground level? Can it be used as refuge area during crossing?										Intersection is present but No zebra crossing is provided.		
L/VI		Are the signals easily readable and are they placed such that they can be seen while crossing?										Interval 1400 to 1500 does not have a traffic signal.	W1.1	
VI		Is there an audible alert when the signal goes on and off?										No audible alert.		11.5- Traffic Signals
		Is there an interval indicating device on the traffic signal?										No time interval indicating device present.		
		Is the time interval allowed for crossing programmed according to the slowest crossing persons?										It was observed that at most of the crossings had a very short interval which will not allow a person to cross at a comfortable pace.		

General Observations

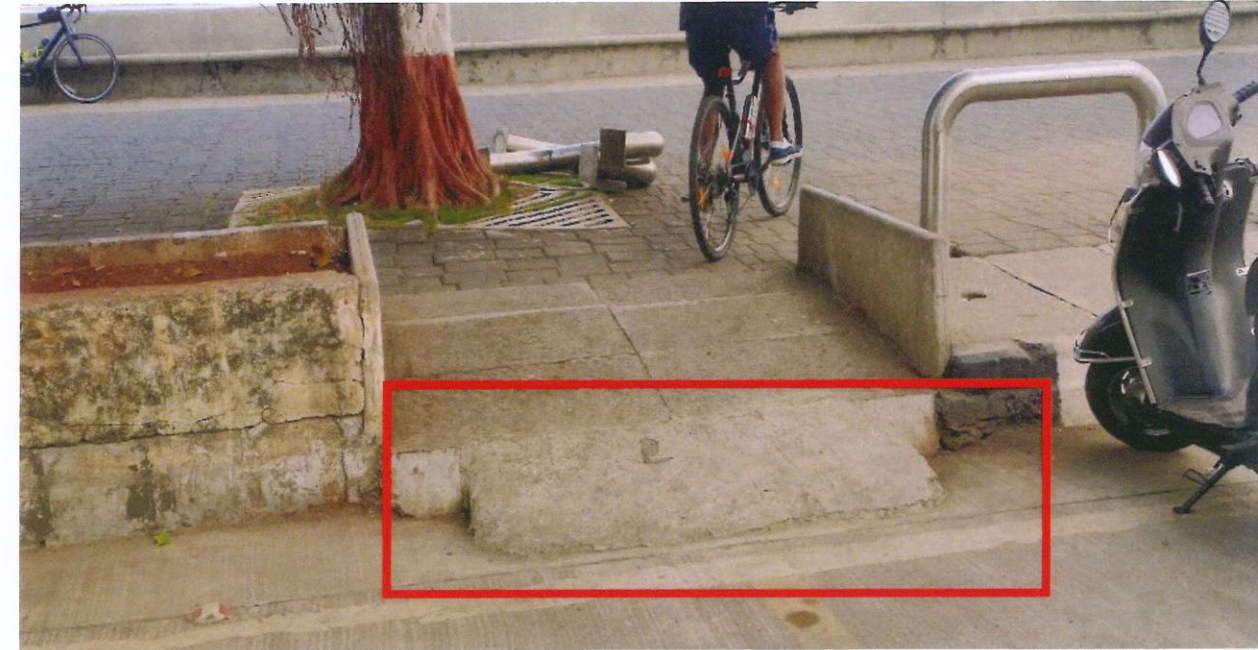
GENERAL OBSERVATIONS

1. Ramps and access ways to and from the promenade



Kerb ramp present at the intersection has an efficient gradient but the road is at a higher level than the point at which the ramp starts. This makes a valley between the road and the promenade with a steeper slope from the end of ramp to the road making it difficult to negotiate.

The bollards placed at the center of the access way is the path of the wheelchair access.



Ramped accesses to the promenade are of an incorrect gradient.

GENERAL OBSERVATIONS

Ramps and access ways to and from the promenade



Ramped accesses to the promenade are of an inefficient gradient.
There is no indication or signage provided to identify these ramped access point to and from the promenade.

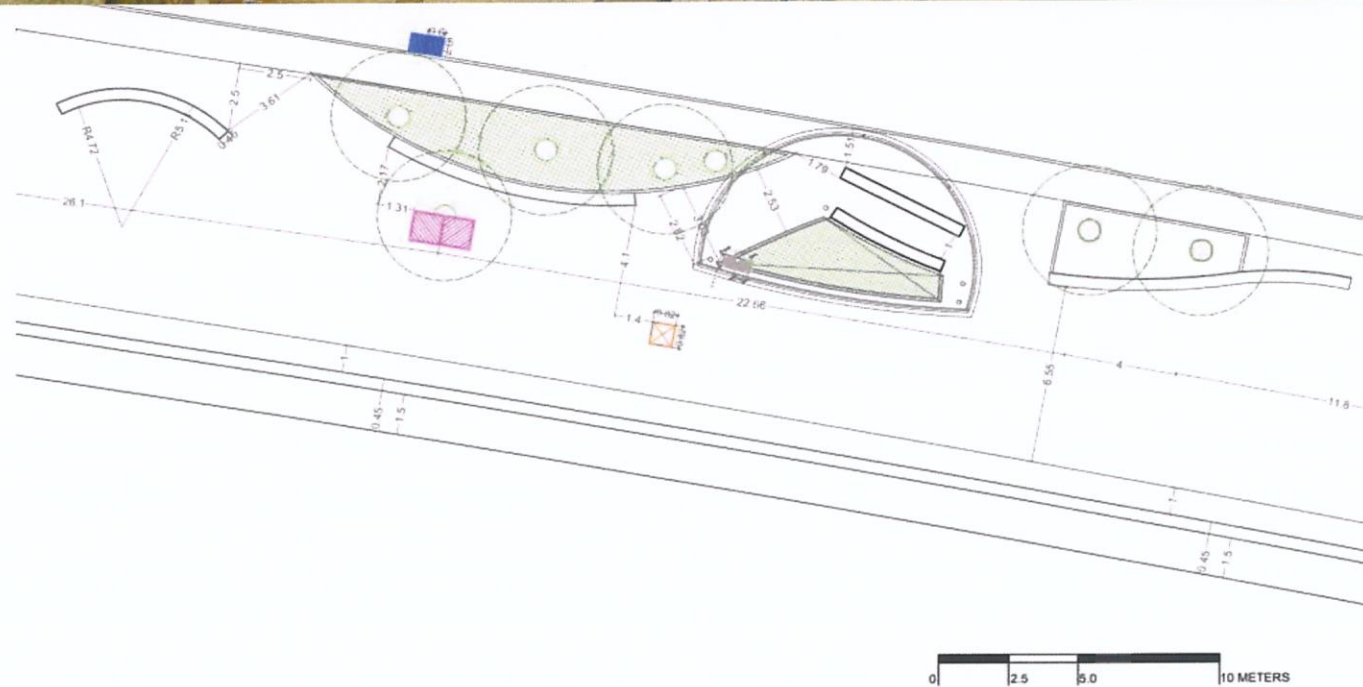
GENERAL OBSERVATIONS

2. Bus stops



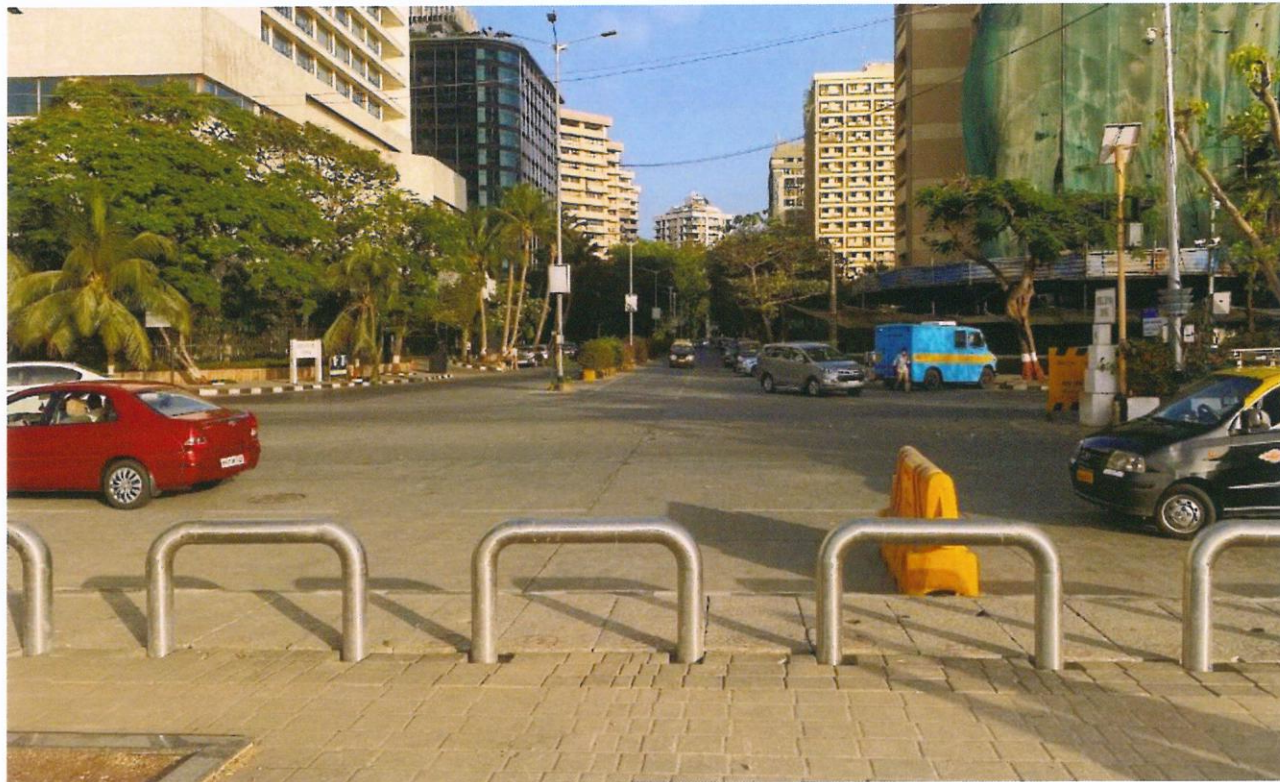
The road is at a lower level than the promenade and there is no ramped access to the road level from the bus stop for person to alight the bus. There is no dedicated wheelchair parking indicated at the bus stop.

The bus numbers are not readable and are not placed at an accessible height.



GENERAL OBSERVATIONS

3. Newly installed bollards



The newly installed bollards are 700 to 800 mm apart making them inaccessible for a wheelchair user. Minimum width required for a wheelchair to access a space is 900mm.

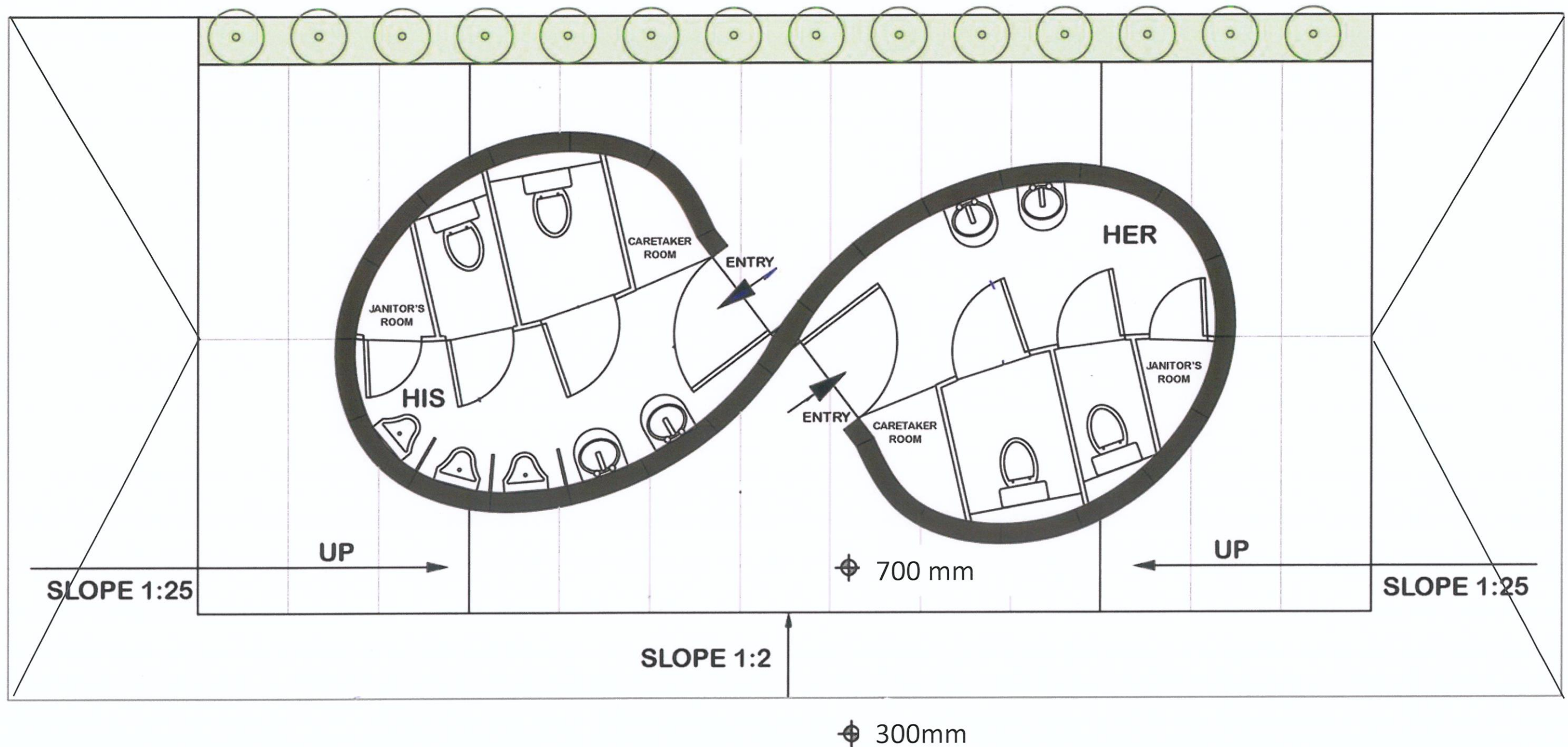
GENERAL OBSERVATIONS

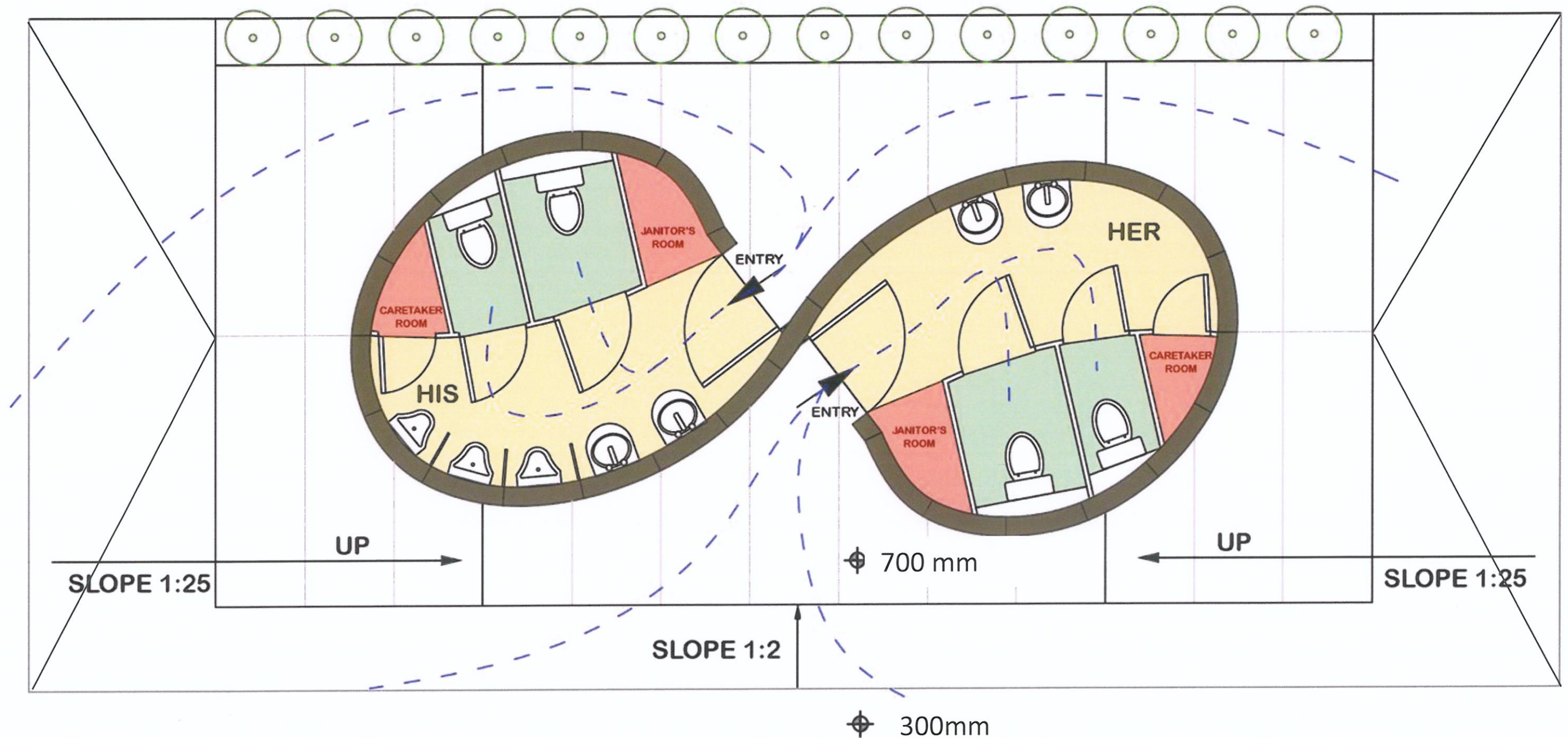
4. Tree gratings

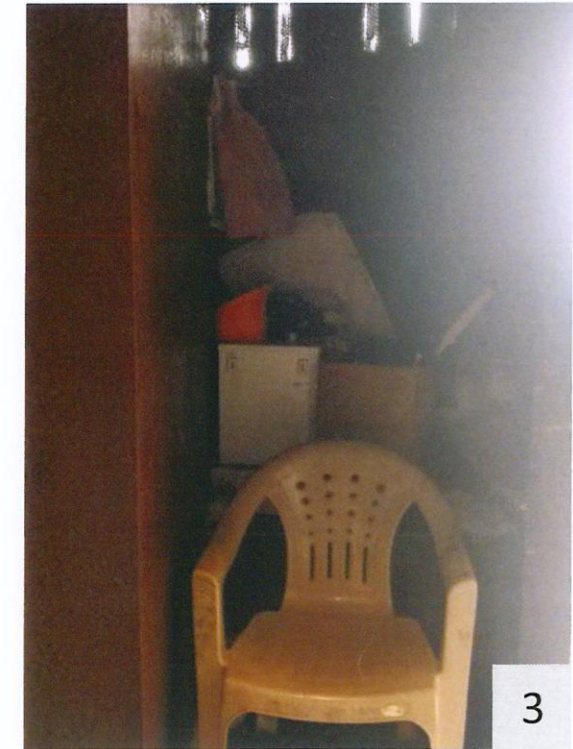
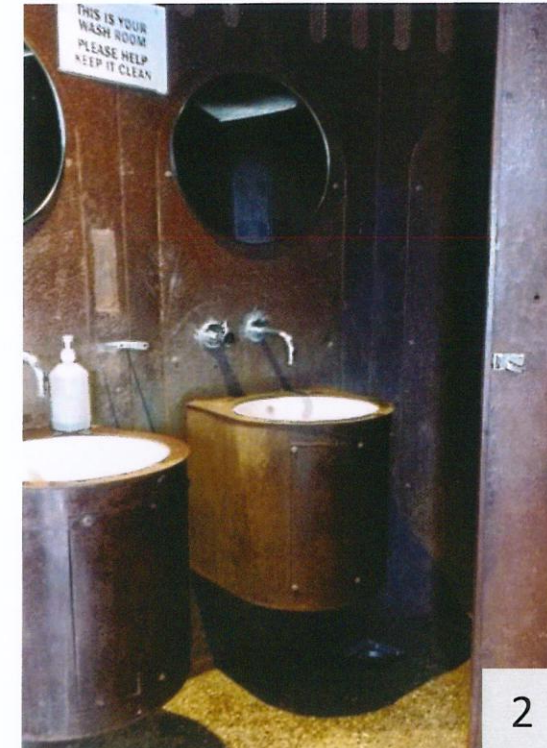
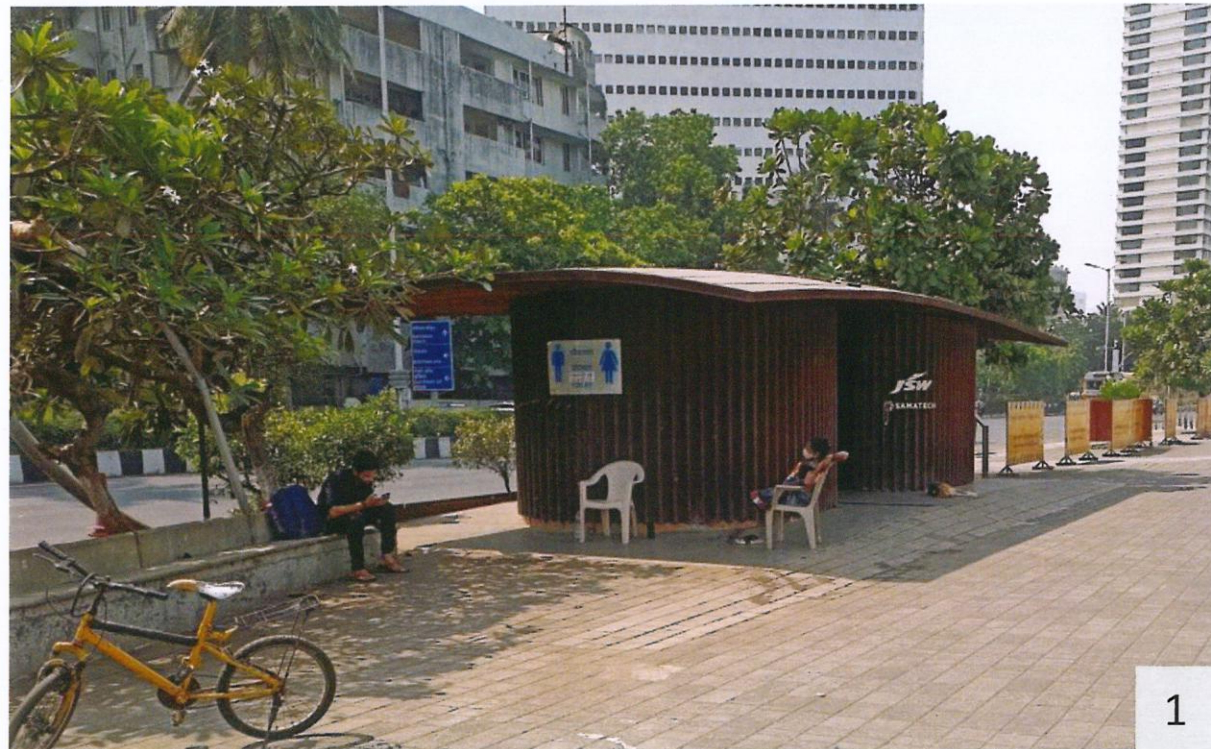


The growing roots of the trees resulting in broken grating and immediate paving. This creates an uneven surface making the area around the trees inaccessible for persons with disabilities.

Public Toilet





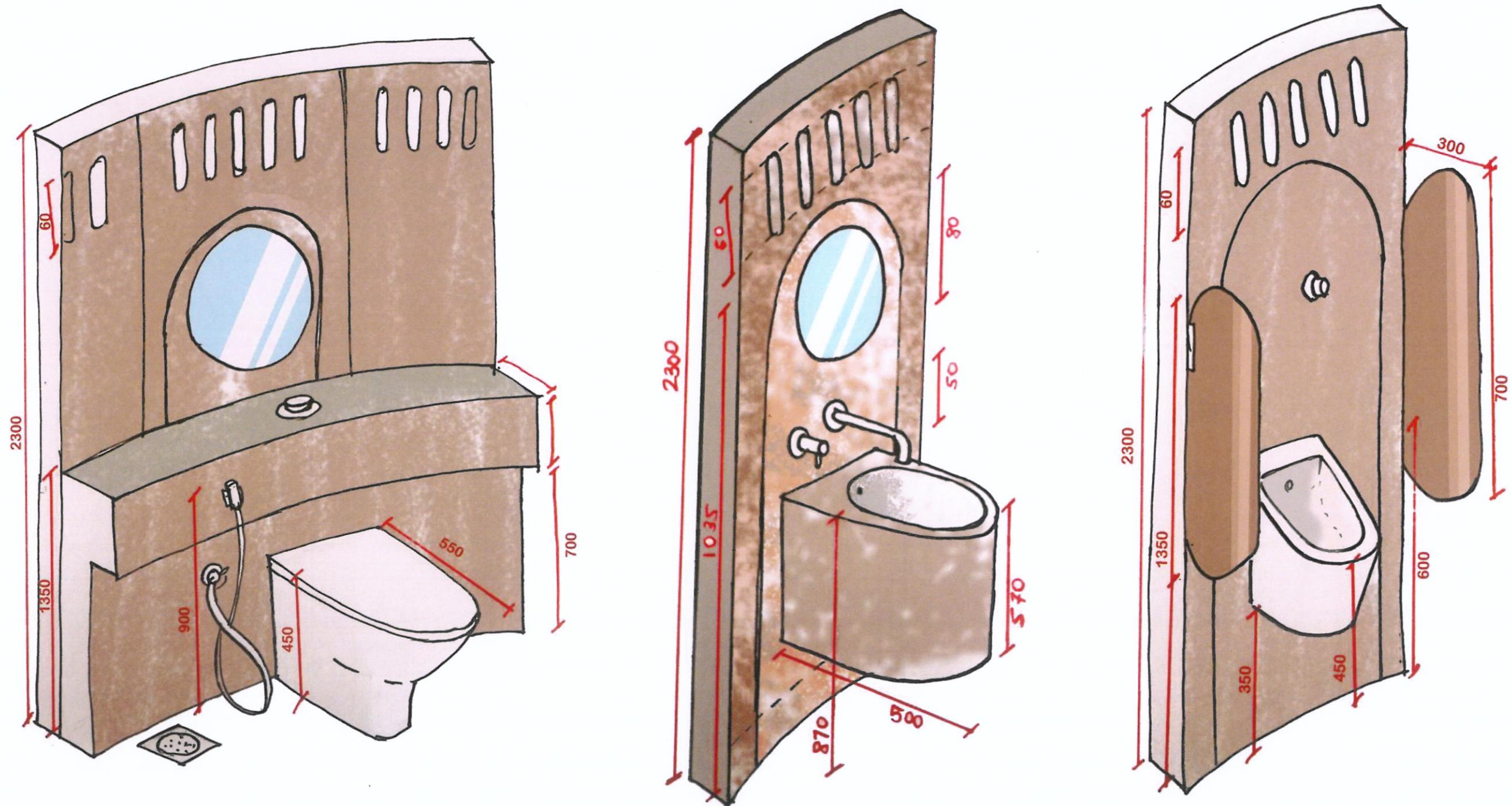


MD 000 to 100 M



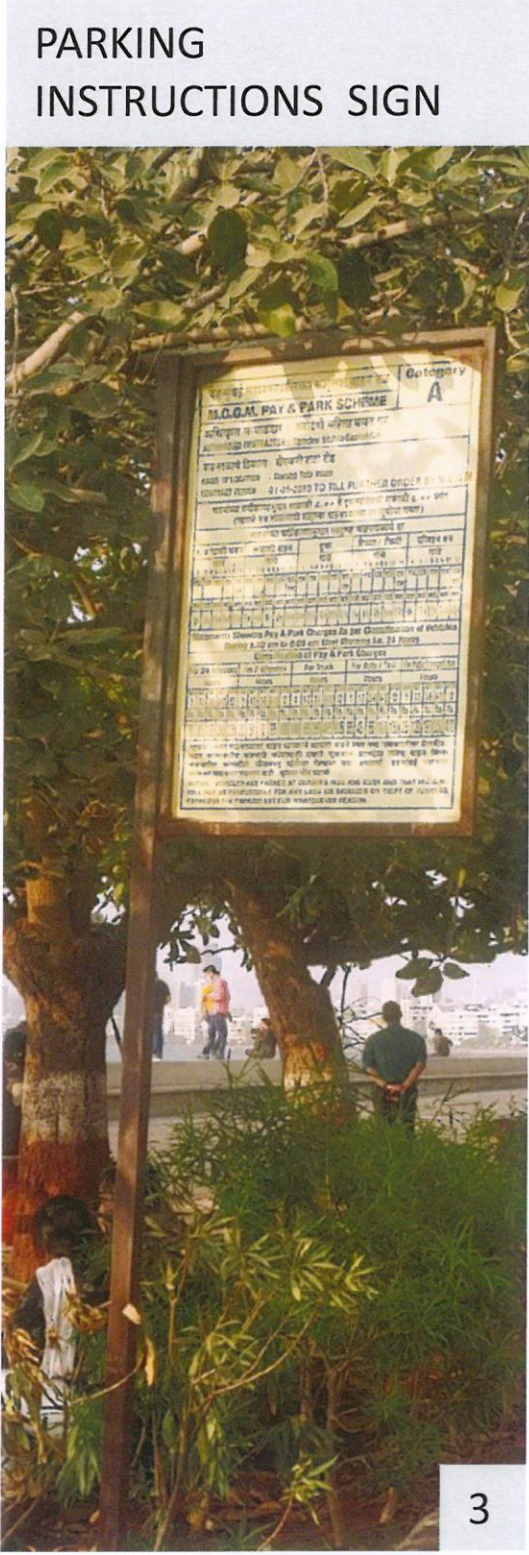
Disability	No.	Question	Answers			Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	0-100					
			Yes	No	NA			
TOILET								
L/VI		Are there accessible toilets for Persons with Disabilities?					J1.1, J1.6	8. Access to Toilet Facility
		Are the toilets easily identifiable?						
L/VI		Is there sufficient space of 2m x 2.2m inside the toilets to manoeuvre a wheelchair?				The dimension of toilet cubicle is 1300mm x 1550mm which is less than required.	J1.4, J2.3, J2.4	8. Access to Toilet Facility 8.2. Unisex Accessible Toilet
L/VI		Are water closet (WC) and bidets mounted at a height between 450mm – 480mm?						
L/VI		Is the space between the WC and the closest adjacent wall, fitted with a grab bar is between 450 mm – 500mm?				There are no grab bars on any of the cubicles.	J1.4, J2.3, J2.4	8.7- Water Closet grab bars
		Is the accessible washbasin mounted at a height between 750mm – 850mm?				The washbasin is at a height of 870mm.	J1.2, J2.2	11.1- Sidewalks/ footpaths
L/VI		Is the lower edge of the mirror positioned at a height not exceeding 1m?				No, lower edge of mirror is at 1300mm.	J1.2, J2.2	8.8- Washroom Accessories
L/VI		Are the accessible showers provided with a folding seat?				No shower area provided.		
L/VI		Are the grab bars installed near WC and showers at a height between 750 – 850 mm?				No grab bars provided.	J1.4, J2.3, J2.4	8.7- Water Closet grab bars
L/VI		Do grab bars have a diameter of 38 mm?						

Disability	No.	Question	Answers			Notes	Photograph no	Recommendation as per MoUD guidelines
Marine Drive		Interval/Serial No.	0-100					
			Yes	No	NA			
		Are faucets easy to grip and operate with one hand?						8.8- Washroom Accessories
		Is the tap lever-type?				Operational lever is not connected to the faucet.		
L/VI		Is the toilet equipped with an emergency alarm system?				No alarm provided.		
L/VI		Can doors be locked from inside and releasable form outside under emergency situations?						8.8- Washroom Accessories
L/VI		Are flushing arrangements, dispensers and toilet paper mounted between 300mm and 800mm?				No toilet paper holder provided.		
L/VI		Are flushing equipments easy to operate?				Flushing nib is push type.	J1.4, J2.3, J2.4	
L/VI		Is the floor material skid proof, well drained and waterproof?				The washroom is not well drained, water logging areas present.		
L/VI		Is there adequate colour and tonal contrast between the fixtures, walls and the flooring?				No contrast between the walls and flooring.	J1.5, J1.2, J2.2	



All measurements are in millimetres.

Signages



TOILET SIGNAGE



TOILET ENTRANCE SIGNAGE



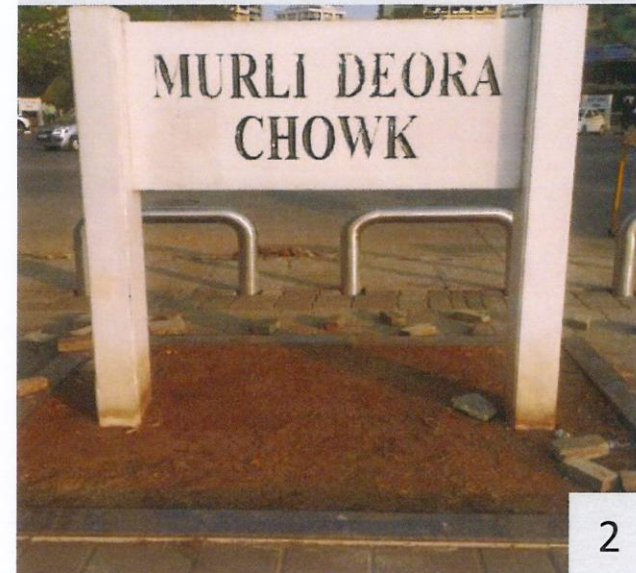
TOILET PROJECT DETAILS



DESTINATION SIGNAGE TYPE 1



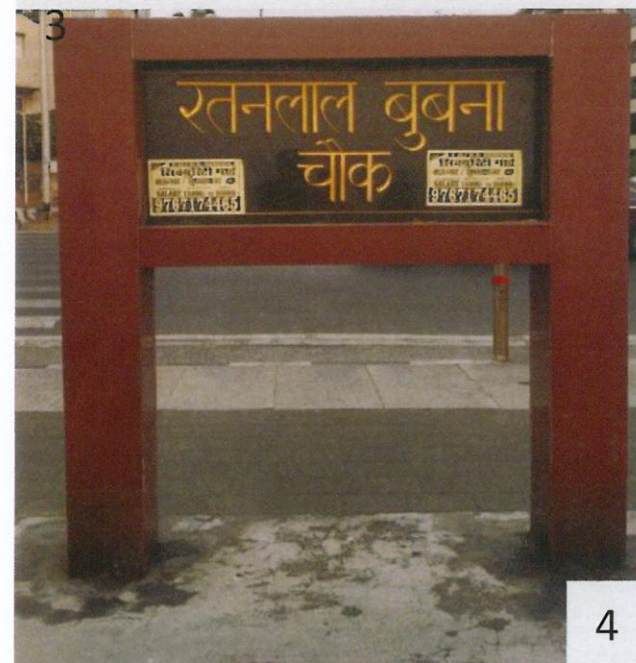
DESTINATION SIGNAGE TYPE 2



DESTINATION SIGNAGE TYPE 3

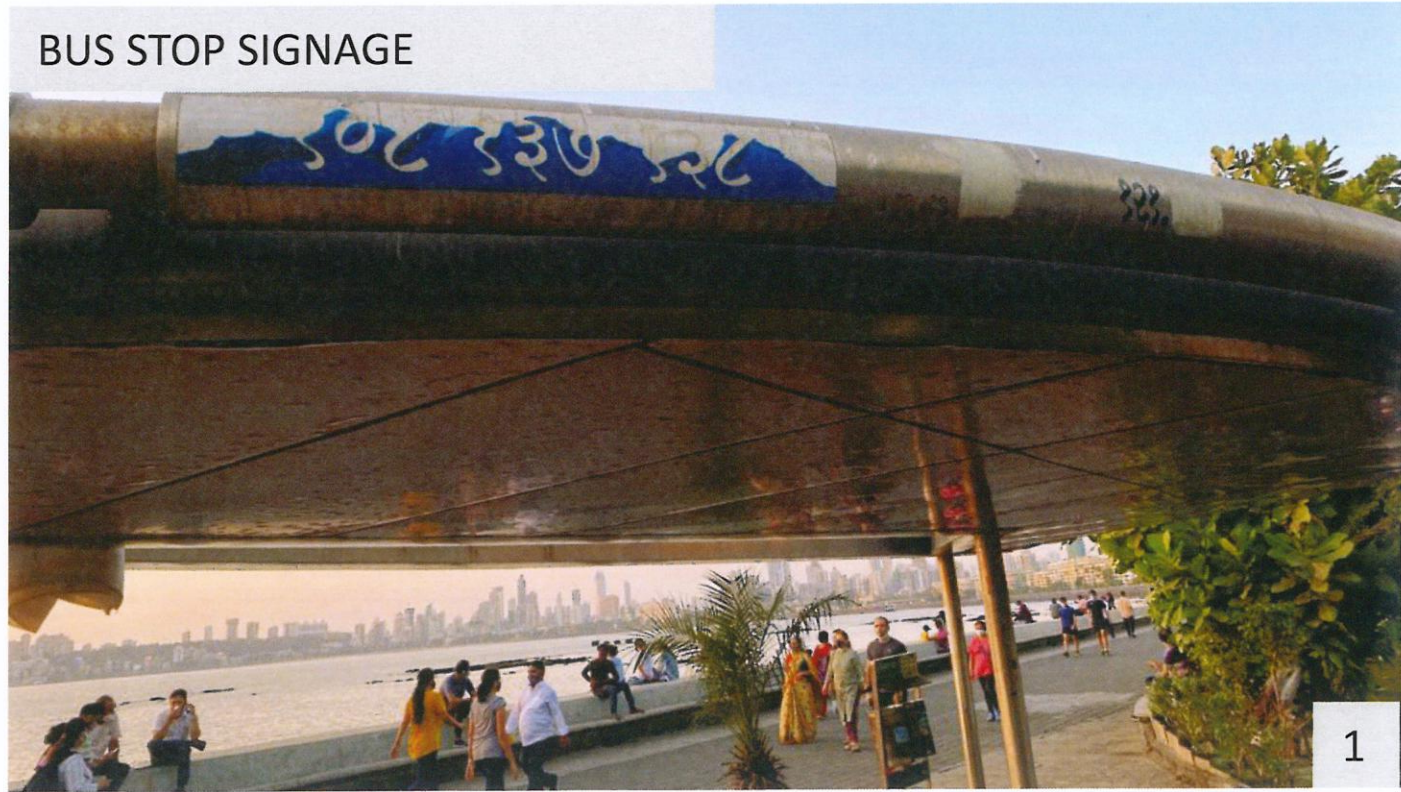


DESTINATION SIGNAGE TYPE 3



DESTINATION SIGNAGE TYPE 3





Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
		Interval/Serial No.	Parking sign			Parking Instructions			Toilet			Directional					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
SIGNAGES																	
L/VI		Are accessible spaces identified by the international symbol of accessibility?													There are no dedicated accessible spaces.	K1.1, K1.2, K1.3, K2.2, K2.2, K2.3	6.1. Signage Provisions 6.2. Types of Signage
		Are there directional signs indicating the location of accessible facilities?													There are no accessible facilities provided except for the ramps at the entryways, but even those are not provided with an directional signage and destination signage.		
L/VI		Are maps, information panels and wall-mounted signs placed at a height between 900mm and 1800mm?													Signs at a height of 1900 to 2000mm.	K1.1, K1.2, K1.3, K2.2	6.3. Location of Signage
L/VI		Are signs clear, simple and easy to read?													Font size is not readable from a distance.	K1.1, K1.2, K1.3, K2.2	
		Is the colour of signs clearly distinguishable?															
L/VI		Is the surface of the sign processed so as to prevent glare?													Parking sign, instruction and toilet are in metal.	K1.1, K1.2, K1.3, K2.2	
L/VI		Is the sign supplement by a text in embossed letters or in Braille available next to information signs?														K1.1, K1.2, K1.3, K2.2	
L/VI		Is the lettering size proportional to the reading distance?														K1.1, K1.2, K1.3	6.4. Universal Signage

Disability	No.	Question	Answers												Notes	Photograph no	Recommendation as per MoUD guidelines
		Interval/Serial No.	Destination Type 1			Destination Type 2			Destination Type 3			Bus stops					
			Yes	No	NA	Yes	No	NA	Yes	No	NA	Yes	No	NA			
SIGNAGES																	
L/VI		Are accessible spaces identified by the international symbol of accessibility?													Written in Devangiri script.	K3.1, K3.2, K3.4, K3.5, K4.1	6.1. Signage Provisions 6.2. Types of Signage
		Are there directional signs indicating the location of accessible facilities?													In destination type 3 the signage is weathered off.	K4.1, K3.5	
L/VI		Are maps, information panels and wall-mounted signs placed at a height between 900mm and 1800mm?															6.3. Location of Signage
L/VI		Are signs clear, simple and easy to read?													Font size is not readable.		
		Is the colour of signs clearly distinguishable?															
L/VI		Is the surface of the sign processed so as to prevent glare?													Golden etching for destination signage gives glare. Signage for bus stops on metal are is not readable.	K4.1, K3.1, K3.2, K3.3	
L/VI		Is the sign supplement by a text in embossed letters or in Braille available next to information signs?															
L/VI		Is the lettering size proportional to the reading distance?															6.4. Universal Signage

CONCLUSION

The access audit findings show that promenade is fairly accessible to persons with disability (PwDs), and the recommendations must be incorporated to make the promenade completely accessible. Common observations and larger strategies for all public pedestrian pathways so that a person with special needs can maneuver his/her way without assistance are:

1. Promenade: The access points to and from the promenade are not executed efficiently. As noted in the general observations, although the ramps are of sufficient gradient at certain points, the road is at a higher level therefore the slope between the promenade edge and the road level is steep and cannot be negotiated by persons using wheelchair.
2. Barriers and protruding objects: As our promenade are designed to run all our services underneath it, it is important to design it in a way that they don't act as barriers. For a planned promenade, these barriers should be well guarded and provided with warning tactile markings around them to warn a person of the barrier/obstacles.
3. The inspection chambers at certain intervals were not levelled with the paving hence creating a gap on which one can trip and fall.
4. The bus stops are inaccessible. The road is at a lower level than the promenade and there is no ramped access to the road level at which a person will alight the bus.
5. The bus numbers should be readable on the bus stop signage and should have audio signals for persons with visual impairment.

6. The median should have a refuge area-tactile at road level, indicating a resting stop while crossing this will ensure maximum accessibility and safety for children, senior citizens, pregnant women and persons with disabilities.
7. There is not accessible toilet provided along the audited stretch of the promenade.
8. Accessible access points to and from the promenade should be easy to identify by persons with disabilities.
9. Signages play a vital role in a public realm, they should be provided according to the standards.

Note: This Audit not only specifically considers space standards for PwDs but also aim at accessibility for all- especially, senior citizens, children, pregnant women, persons with temporary medical conditions-like fracture, weak bones, muscle sprains, etc.

REFERENCES

- Harmonised Guidelines and Space Standards for Barrier Free Built Environment for Persons with Disability and Elderly Persons, February 2016 - Government of India, Ministry of Urban Development
- Accessible India Campaign checklist
- Code of Accessibility in the built environment 2007 - Building and construction authority
- UN Design guidelines
- www.accessibleindia.gov.in

