

*L'œuvre architecturale de Le Corbusier,
une contribution exceptionnelle au Mouvement moderne*
*The Architectural Work of Le Corbusier,
an outstanding contribution to the modern movement*

Rapport de la Conférence Permanente **State of Conservation Reports**

November 2017

Allemagne, Argentine, Belgique, France, Inde, Japon, Suisse
Germany, Argentina, Belgium, France, India, Japan, Switzerland

1. Executive Summary of the report

In response to the recommendations adopted by the World Heritage Committee (Decision 40 COM 8B.31, hereinafter the Decision), the States Parties of Germany, Argentina, Belgium, France, India, Japan, and Switzerland (hereinafter the States Parties) approved the State of Conservation report and its Annex during the Third International Standing Conference (hereinafter the Conference) on November 8, 2017 in Tokyo. Prior to the Conference, the State Parties and Le Corbusier Foundation, the Secretariat of the Conference, held multiple technical meetings as well as a meeting with Ms. Regina Durighello, Director, Unit of Counsel of ICOMOS International to clarify appropriate expected reaction following the recommendations by the Committee.

With regard to introducing the Heritage Impact Assessment procedures for proposed development at all component sites (**paragraph 4. a) of the Decision**), each State Party organized the management system and regulations in the area of component part(s) and its/their buffer zone(s), and has developed how to evaluate projects that may negatively affect the property based on its legal framework.

With regard to developing monitoring indicators for all component sites (**paragraph 4.b) of the Decision**), the State Parties set up the indicators from the viewpoints of each attribute of OUV, authenticity, integrity, and conservation and management based on common format.

With regard to developing agreed overall conservation approaches and procedures for the series (**paragraph 4. c) of the Decision**), common principles, objectives and management strategy were defined, and the Committee of Experts was set up under the Le Corbusier Foundation which is available for providing expert advice to the States Parties.

With regard to considering how the power of the Standing Conference might be refined to allow full understanding by all States Parties of major development proposals in all component sites in relation to the potential impact on the overall series, (**paragraph 4. d) of the Decision**), the role of the Conference has been defined, namely collecting information through the State Parties, responsible local authorities and network of international experts by Le Corbusier Foundation, and discussing matters at the annual meeting.

With regard to submitting the Management Plan (**paragraph 4. e) of the Decision**) and to progressing with the Conservation Plan for Chandigarh (**paragraph 4.f) of the Decision**), and to clarifying the protection of the buffer zone for the Maison Guiette (**paragraph 4. g) of the Decision**), Indian and Belgium authorities present concrete measures and advanced plans.

With regard to clarifying the implications of the new Heritage Law in France (**paragraph 4. h) of the Decision**), French authority presents the substance of new law for ensuring the preservation and maintenance of the property and its buffer zone by the state and local authorities.

With regard to submitting proposals from the Conference on the approach to any further extensions to the series and on its ultimate scope (**paragraph 4. i) of the Decision**), the Conference will carefully monitor the efforts made by the various States Parties concerned to include on their Tentative Lists works that are candidates for an extension of the Series, and remains available to assist them.

2. Response to the Decision of the World Heritage Committee

At its 40th session, the World Heritage Committee adopted Decision 40 COM 8B. 31, in which nine recommendations were made to the State Parties.

Recommandations du Comité (40 COM 8B.31)

Recommande que les États parties, avec le soutien de l'ICOMOS si demandé, prennent en considération les points suivants :

- a) introduire des procédures d'évaluation d'impact sur le patrimoine pour les aménagements proposés sur tous les éléments constitutifs ;
- b) élaborer des indicateurs de suivi pour tous les éléments constitutifs ;
- c) mettre au point des approches et procédures de conservation globales concertées pour la série ;
- d) examiner la manière dont le pouvoir de la Conférence permanente pourrait être précisé afin de permettre à tous les États parties de comprendre pleinement les propositions d'aménagements majeurs dans tous les éléments constitutifs, par rapport à leur impact potentiel sur la série dans son ensemble ;
- e) soumettre le plan de gestion pour Chandigarh ;
- f) faire progresser le plan de conservation pour Chandigarh ;
- g) clarifier la protection de la zone tampon pour la maison Guiette ;
- h) clarifier les implications de la nouvelle loi sur le patrimoine en France ;
- i) soumettre les propositions de la Conférence permanente concernant l'approche pour toute autre extension de la série et sa portée finale.

Recommendations of the Committee (40 COM 8B.31)

Recommends that the States Parties, with the support of ICOMOS if requested, shall take the following points into consideration :

- a) introduce heritage impact assessment procedures for proposed developments on all components ;
- b) develop monitoring indicators for all components ;
- c) develop concerted aggregate conservation approaches and procedures for the Series ;
- d) consider how the power of the Standing Conference can be clarified in order to allow all States Parties to fully understand the major development proposals in all the components, with respect to the potential impact of these on the series as a whole ;
- e) submit the management plan for Chandigarh ;
- f) advance the conservation plan for Chandigarh ;
- g) clarify the protection of the buffer zone for the Maison Guiette ;
- h) clarify the implications of the new heritage law in France ;
- i) submit the proposals of the Standing Conference concerning the approach to be adopted for any other extension to the Series and its ultimate scope.

a) Introduire des procédures d'évaluation d'impact sur le patrimoine pour les aménagements proposés sur tous les éléments constitutifs

a) introduce heritage impact assessment procedures for proposed developments on all components

Allemagne / Germany

All measures are regularly evaluated and realized according to the Management Plan. Twice a year the state of the property inscribed is screened and all measures are coordinated at the "round table Weissenhof", together with representatives of the monument protection authorities, proprietors and other stakeholders. (for details consider the Local Monitoring Plan). In the future the Monitoring Group of ICOMOS Germany will be present at these meetings. Since the inscription there have been no changes neither at the site nor the buffer zone.

Argentine / Argentina

There is no impact on the Casa Curutchet property specifically, after its inscription on the World Heritage List. The modification of the dividing wall South-East previously existed.

Regarding the buffer zone, a change of color has been introduced in the facade of the neighboring building towards the South-West. This façade was pink combined with white details in its opertures. Now it's all painted white.

No presentation has been submitted regarding the change of color to the Municipality of La Plata or to the National Commission of Monuments, Places and Historical Properties regarding the change of color of the façade. This presentation is compulsory given its character as a National Historic Monument.

La Plata Municipality has proceeded to close the premises, working a Contraventional Act for the absence of the necessary documentation – an integral project of patrimonial intervention - for a correct intervention on the heritage building. To date, only a preliminary draft has been received.

From the Site Committee and the organizations that integrate it, efforts have been made to clarify and resolve this conflict, as soon as possible.

Belgique / Belgium

Pour la ville d'Anvers (c-à-d la maison Guiette), des procédures d'évaluation d'impact sur le patrimoine sont en place pour les grands projets et les projets emblématiques. Le Code de l'Urbanisme de la ville d'Anvers précise que l'opportunité de la nouvelle fonction proposée pour cet endroit et la qualité au niveau architectural et au niveau de l'ensemble urbain ainsi que la durabilité et l'impact sur la mobilité doivent être formellement évalués.

Art. 8, §2 du Code de l'Urbanisme: Specifiek voor de mogelijke impact die deze gebouwen hebben door hun hoogte, worden deze beoordeeld en afgewogen op basis van:

- 1° criteria voor de locatiegeschiktheid zoals: de impact op het stedelijk functioneren, het stadsbeeld, mobiliteit en milieueffecten (zoals wind, lucht en geluid, licht- en zonnetoetreding, energie, biodiversiteit)*
- 2° criteria voor de architecturale geschiktheid zoals: de beeldkwaliteit, de verblijfskwaliteit, keuze-architectuur en modal-split, duurzaamheid.*

France / France

L'impact sur le patrimoine pour tout aménagement proposé sur les éléments français du bien inscrit est régulièrement évalué conformément aux plans de gestion et aux indicateurs dédiés. Chaque projet sur ces édifices protégés au titre de monuments historiques nécessite l'établissement d'une étude préalable, suivi d'une demande d'autorisation de travaux (pour les édifices classés au titre des monuments historiques) ou de permis de construire (pour les édifices inscrits au titre des monuments historiques). Ses autorisations d'urbanisme sont suivies par les services patrimoniaux de l'État (les conservations régionales des monuments historiques et les unités départementales de l'architecture et du patrimoine) et les services d'urbanisme municipaux. Pour ce qui concerne les études d'impact, elles relèvent du ministère de la Transition écologique et solidaire via ses inspecteurs des sites. Les architectes des bâtiments de France, dans leur mission régalienne, donnent leurs avis via les autorisations au titre du code de l'urbanisme conformément à la nouvelle loi LCAP (loi relative à la liberté de la création, à l'architecture et au patrimoine). Enfin, les projets susceptibles de concerner les biens inscrits au patrimoine mondial peuvent être présentés en Commission nationale du patrimoine et de l'architecture, composée d'experts en matière de patrimoine et d'environnement, comme la prévoit la nouvelle loi LCAP. Par ailleurs, ICOMOS France a organisé un séminaire consacré aux études d'impact en novembre 2017 afin d'encourager la mise en œuvre d'études d'impact patrimonial en France, conformément au guide publié par ICOMOS international en 2011.

. Voir fiches élément constitutif par élément constitutif dans les *Annexes a) France*

The heritage impact of any proposed development involving the French elements of the property inscribed is regularly evaluated in accordance with the management plans and the dedicated indicators. Each project involving the buildings, protected as historical monuments, requires the establishment of a preliminary study, followed by an application for a works permit (for buildings classified as historical monuments) or building permit (for buildings registered as historical monuments). These urban planning authorisations are monitored by the state heritage services (the regional conservation services for historical monuments and the departmental services for architecture and heritage) and the municipal planning services. Impact studies come under the competence of the Ministry for Ecological and Solidary Transition, through the intermediary of site inspectors. In their sovereign mission, the Architects of the Buildings of France deliver their conclusions in the form of authorisations made under the urban planning code in accordance with the new LCAP law (law on the freedom of creation, architecture and heritage). Lastly, projects likely to concern World Heritage properties may be submitted to the National Heritage and Architecture Commission, composed of heritage and environmental experts, as provided for in the new LCAP Law. In addition, in accordance with the guide published by ICOMOS

International in 2011, ICOMOS France is organizing a seminar on impact studies in November 2017 to encourage the implementation of heritage impact studies in France.

. See the individual index cards for each constituent element in the *Appendix a)- France* (in French)

Inde /India

. Voir document dans les *Annexes a)- Inde (en anglais)*

. See the document in the *Appendix a)- India*

Japon / Japan

In order to preserve the OUV of the National Museum of Western Arts (NMWA), all project plans cited in the property area and buffer zone have been carefully examined by the related responsible municipalities, Tokyo Metropolitan and Taito city, as well as the NMWA and the Agency for Cultural Affairs.

When a project is proposed in the property area, the Committee for studying the policy of utilization and publicity of NMWA which consists of academic experts from various fields deliberates whether the project plan contributes to preserving the property and the landscape. Then, as the main building of the NMWA was designated in the Important Cultural Property, notification of the alteration of existing state would be submitted to the Agency of Cultural Affairs based on the Law for the Protection of Cultural Properties. The notification would be approved by the Commissioner for Cultural Affairs after the consultation on the impact assessment of the project in the Council of Cultural Affairs.

When a project is proposed in the buffer zone, all projects are required to comply with the restrictions of every ordinances; Special scenic development zones based on the Landscape Plan, Urban Planning Park based on the City Planning Act, and Scenic Zone based on the City Planning Act. Then the project plan which is formulated under these restrictions is deliberated on the Taito City Landscape Examination Committee when the proposed building is exceed a certain size based on the Taito City Landscape Ordinance and the Landscape Act. The Committee consists of experts of various fields and provides some advice to make it appropriate for the buffer zone of the World Heritage property.

Thus, all projects in the property area and its buffer zone are to be well assessed before implementation and are considering that there is no negative impact on the property based on these assessments.

Suisse / Switwerland

En Suisse, sur la base des art. 10a à 10d de la loi fédérale sur la protection de l'environnement (LPE), les projets d'installations pouvant affecter sensiblement l'environnement, au point que le respect des dispositions en matière d'environnement ne pourra être garanti que par des mesures spécifiques, doivent être précédés d'une *Etude de l'impact sur l'environnement* (EIE). Cette étude doit fournir une vue d'ensemble des impacts environnementaux prévisibles ainsi que des atteintes portées aux patrimoine culturel.

En Suisse, dans le cadre d'une EIE, les questions patrimoniales sont abordées de manière exhaustive, qu'il s'agisse de monuments isolés, de sites archéologiques, de sites construits

ou de biens inscrits sur la Liste du patrimoine mondial. L'EIE doit en effet permettre d'évaluer l'impact prévisible du projet sur les attributs de la VUE de manière systématique et cohérente, pris séparément et dans leur ensemble. Les autorités compétentes pour la sauvegarde du patrimoine jugent l'étude et statuent si des examens approfondis supplémentaires doivent être entrepris. En ce sens, l'EIE fait office d'étude d'impact sur le patrimoine pour les biens du patrimoine mondial culturel. Les conclusions de cette EIE forment l'une des bases pour la prise de décision sur le projet présenté.

Les projets pour lesquels des mesures usuelles suffisent à garantir le respect du patrimoine ne sont, quant à eux, pas soumis à cette EIE. Dans de tels cas, l'impact sur les attributs de la VUE est évalué dans le cadre des procédures d'autorisation en vigueur. Monuments historiques classés, classés au niveau cantonal et mis sous la protection de la Confédération, l'immeuble Clarté et la villa Le Lac bénéficient à ce titre d'un traitement spécifique : tout projet pouvant y porter atteinte fait l'objet d'une évaluation attentive et doit obtenir une autorisation spéciale de la part du service cantonal en charge du patrimoine ainsi que de l'Office fédéral de la culture.

Ces procédures garantissent la conservation de la VUE des composantes suisses du bien inscrit.

In Switzerland, on the basis of art. 10a-10d of the Federal Environmental Protection Act (LPE), proposed installations liable to affect the environment significantly, to the extent that compliance with environmental provisions can be guaranteed only by specific measures, must be preceded by an *Environmental Impact Assessment* (EIE). This study should provide an overview of foreseeable environmental impacts as well as damage to cultural heritage.

In Switzerland, as part of an EIE, heritage issues are comprehensively addressed, whether in the case of isolated monuments, archaeological sites, built sites or properties inscribed on the World Heritage List. In fact, the EIE needs to be able to assess the foreseeable impact of the project on the OUV attributes in a systematic and coherent way, taken separately and as a whole. The authorities responsible for safeguarding the heritage feature assess the study and decide whether further in-depth examinations should be undertaken. In this sense, the EIE serves as a heritage impact assessment tool for World Cultural Heritage properties. The conclusions of this EIE are among the the bases for decision-making on the project presented.

Projects for which standard measures are sufficient to ensure respect for the heritage feature are not subject to this EIE. In such cases, the impact on the attributes of the OUV is assessed in the context of current authorisation procedures. Listed historical monuments, the Immeuble Clarté and the Villa 'Le Lac' benefit from a specific treatment: any project that may affect them is the subject of careful evaluation and must obtain special authorisation from the cantonal service in charge of Heritage.

These procedures ensure the preservation of the OUV of the Swiss components of the inscribed property.

b) Elaborer des indicateurs de suivi pour tous les éléments constitutifs

Des indicateurs de suivi ont été établis par élément constitutif, à partir d'un modèle proposé lors de la réponse à ICOMOS en février 2016.

Les documents concernant les indicateurs de suivi spécifiques à chaque élément se trouvent dans les *Annexes b*), « Indicateurs de suivi », par pays, élément constitutif par élément constitutif.

b) Develop monitoring indicators for all components

Some monitoring indices have been developed for each building or site, based on a model proposed in February 2016.

The monitoring indices tables are in the *Annexes b*), "Monitoring Indicators", by country, and component.

c) Mettre au point des approches et procédures de conservation globales concertées pour la série

CONFERENCE PERMANENTE INTERNATIONALE : PRINCIPES COMMUNS, OBJECTIFS ET STRATÉGIE DE GESTION

(Cf. Article 5.2 du Plan de gestion internationale)

Les Etats parties sont convenus de travailler ensemble à la préservation de la série. Ils ont mis en place une structure de gestion commune, la Conférence permanente, qui regroupe les autorités responsables pour la sauvegarde du bien. Au sein des réunions de la Conférence, les Etats parties ont décidé d'échanger systématiquement sur les projets de restauration à court et moyen terme, de mettre en œuvre des pratiques communes, de favoriser le partage d'expériences, de constituer un vivier d'experts référents et de communiquer sur les résultats des travaux entrepris. La Conférence permanente est présidée par un Etat partie de la série, qui organise une réunion annuelle. Des réunions se sont déjà tenues en avril 2015 à Paris (France), en février 2016 à Chandigarh (Inde), et en novembre 2017 à Tokyo (Japon). En 2018, la présidence incombera à la Suisse.

D'un point de vue concret, les Etats parties ont défini les bases des principes communs et applicables à tous les éléments de la série (Cf. Chapitre 6 du Plan de gestion internationale):

Réaliser des études en amont de toute intervention en restauration ou en conservation permettant d'aboutir à une connaissance approfondie de l'élément à restaurer

Les études historiques et techniques interdisciplinaires doivent intégrer l'analyse des transformations déjà effectuées, des dommages subis et de leurs causes, la recherche des archives ainsi que la documentation sur l'état actuel de l'élément.

Établir un programme d'intervention

Le programme met en valeur les parties sensibles de l'élément et décrit les interventions envisageables. Les conséquences à long terme de leur mise en œuvre ou de l'absence d'intervention doivent être scrupuleusement évaluées. Pendant toute la durée des travaux, le programme doit être constamment contrôlé et documenté.

Préserver la substance historique

La restauration doit viser à modifier aussi peu que possible l'état de l'élément ; les interventions sont destinées à ralentir la détérioration sans altérer fondamentalement la substance. Des altérations matérielles ne peuvent être entreprises que si leur nécessité pour la survie de l'objet à long terme a été démontrée.

La substance doit être restaurée, plutôt que remplacée. La nécessité de remplacer les composants dont la restauration n'est plus possible ne doit pas conduire au remplacement systématique de tous les composants de même nature.

Les interventions doivent être réduites au maximum. Moins l'intervention affecte la substance, plus cette dernière demeure intacte pour les générations à venir.

Documenter/diffuser

La documentation doit indiquer l'état de l'élément avant, pendant et après l'intervention. Elle doit inclure les documents ayant servi à définir les mesures, ainsi que le programme d'intervention. La documentation doit être conservée dans des archives publiques. Tous les résultats des études devront, dans la mesure du possible, faire l'objet d'une publication.

Veiller à la plus grande réversibilité possible

Bien qu'on ne puisse jamais obtenir une réversibilité totale, celle-ci doit cependant constituer un principe directeur. Les interventions de conservation dont les effets sont limités dans le temps, mais qui peuvent être répétés répondent au principe de réversibilité.

Appliquer les normes avec discernement

Les normes de construction ne doivent pas être appliquées aux éléments sans examen minutieux préalable. Chaque cas doit être étudié individuellement. Lorsque le respect des normes peut conduire à une dégradation de la valeur de l'élément, il faut y renoncer ou prendre des mesures compensatoires.

Assurer un suivi régulier après la restauration

Le suivi vise à différer le plus possible la mise en place d'opérations de conservation et de restauration supplémentaires.

Des opérations d'entretien appropriées prolongent la vie de l'élément et contribuent à prévenir ou, du moins, à retarder les travaux de restauration.

MOYENS MIS EN ŒUVRE

1) LA FONDATION LE CORBUSIER (Cf. Article 5.3 du Plan de gestion internationale)

Pour ce qui concerne la mise en application de ces principes et procédures, la Fondation Le Corbusier, dont la mission fondamentale consiste à veiller sur l'œuvre architecturale de Le Corbusier, met à la disposition des Etats parties un certain nombre de moyens qui permettent notamment de coordonner et d'accompagner les interventions mises en œuvre dans les sept pays partenaires. La Fondation dispose aujourd'hui des outils suivants :

Application du droit moral / Veille sur l'intégrité de l'Œuvre

La Fondation, légataire universel de Le Corbusier, est titulaire du droit moral sur son œuvre. Elle dispose de la légitimité et de la compétence reconnues par tous les Etats Parties qui lui permettent d'être associée et d'intervenir dans tout projet de restauration ou de modification d'un élément.

Comité d'experts pour l'Œuvre architecturale

Une commission a été installée auprès de son Conseil d'administration pour éclairer ses décisions relatives aux projets de restauration, de réaffectation ou d'évolution des bâtiments conçus par Le Corbusier. Elle est constituée d'architectes et d'historiens français et étrangers considérés comme les meilleurs spécialistes de l'architecture moderne. Le comité peut alerter le Conseil d'administration de la Fondation sur la situation de certaines œuvres. La Fondation est également systématiquement représentée dans les différents comités

scientifiques qui sont mis en place par les maîtres d'ouvrage pour la conduite des projets de restauration.

Liste des membres du comité :

- Bernard Bauchet, architecte
- Jean-Louis Cohen, architecte, historien, professeur à l'Institute of Fine Arts, New York University
- Marie-Jeanne Dumont, architecte, historienne, professeur à l'école nationale supérieure d'architecture de Paris-Belleville
- Vanessa Fernandez, architecte, professeur à l'école nationale supérieure d'architecture de Paris-Belleville
- Roberto Gargiani, architecte, professeur d'histoire de l'architecture, EPFL, Lausanne
- Pierre-Antoine Gatier, architecte en chef des monuments historiques
- Franz Graf, architecte, professeur associé, section architecture, EPFL, Lausanne
- Rémi Papillault, architecte, professeur à l'école nationale supérieure d'architecture de Toulouse
- Gilles Ragot, historien, professeur à l'université de Bordeaux
- Bruno Reichlin, architecte, professeur émérite de l'Université de Genève
- Maria Salerno, architecte, professeur à l'Ecole nationale supérieure d'architecture, Paris-Malaquais
- Jacques Sbriglio, architecte
- Yannis Tsiomis, architecte, directeur d'études à l'EHESS

Architecte conseil de la Fondation

La Fondation a recruté une architecte – ayant suivi une formation spécialisée sur les questions de restauration – qui est chargée d'une mission de conseil auprès du réseau des propriétaires (travail de recherche sur les sources, mise en relation des différents intervenants, capitalisation des expériences, suivi des études, etc.), du suivi des différents chantiers en cours, en France et à l'étranger, et de la constitution des archives des restaurations.

Au cours des dix dernières années, l'architecte a plus particulièrement suivi les projets ou les réalisations des chantiers de restauration suivants :

- Maison de la Culture, Firminy
- Stade, Firminy
- Péniche Louise-Catherine de l'Armée du Salut, Paris
- Pavillon Suisse à la Cité universitaire internationale, Paris
- Unité d'habitation, Marseille
- Chapelle Notre-Dame du Haut, Ronchamp
- Cité de Refuge de l'Armée du Salut, Paris
- Couvent de la Tourette, Evieux
- Immeuble Clarté, Genève
- Villa Miestchaninoff, Boulogne-Billancourt
- Maisons La Roche et Jeanneret, Paris
- Petite Villa au bord du Lac Léman, Corseaux
- Loge du jardinier de la villa Savoye, Poissy
- Cabanon, Roquebrune-Cap-Martin (Unités de camping et peintures murales du site)

- Usine Duval, Saint-Dié
- Cité Frugès, Pessac
- Appartement-atelier de Le Corbusier, et immeuble Molitor, Boulogne Billancourt
- Musée Sanskar Kendra, Ahmedabad
- Capitole de Chandigarh
- Villa Stein, Vaucluse

Archives de la restauration

Il a été décidé de constituer systématiquement un fonds d'archives des travaux de restauration qui sont conduits en France et dans le monde comportant aussi bien les documents édités à l'occasion d'un chantier ou d'une expertise (plans, descriptifs, etc.) que de la conservation des éléments matériels originaux témoins de la construction initiale (matériaux, etc.).

Documentation

La Fondation dispose aujourd'hui de la totalité des plans et des documents (devis, marchés, correspondances, etc.) concernant les projets et les chantiers menés toute sa vie durant par Le Corbusier et ses collaborateurs. Ces archives sont informatisées et sont mises à la disposition des maîtres d'œuvre et des propriétaires qui souhaitent engager des travaux de restauration et de réhabilitation. La Fondation répond aux demandes d'information concernant toutes les constructions et met en relation les différents experts, spécialistes ou maîtres d'œuvre traitant de problèmes similaires.

Information

La Fondation dispose de différents outils d'information qui permettent de faire régulièrement le point sur la situation de l'œuvre architecturale et de sensibiliser les propriétaires et les maîtres d'œuvre en diffusant des articles sur les réalisations exemplaires. Il est également rendu compte de toutes les recherches, rencontres, séminaires, touchant à l'œuvre construite et à la mise en valeur des réalisations. Le site internet de la Fondation permet de suivre en temps réel les projets de restauration des bâtiments.

En 2015, à Paris, elle a organisé une rencontre internationale sur les problématiques de la restauration de l'œuvre architecturale, à Paris. Les actes du colloque ont ensuite été publiés sous le titre *Le Corbusier - L'œuvre à l'épreuve de sa restauration*.

En 2016, elle a organisé en concertation avec tous les partenaires concernés une journée de débats, à la Maison du Brésil, sur la problématique de la restauration de la villa Savoye.

Réunions des propriétaires et des partenaires

Depuis 2003, la Fondation réunit régulièrement les propriétaires et gestionnaires des bâtiments privés et publics de Le Corbusier dans le monde. Cette initiative répond à la volonté de mieux associer les propriétaires aux actions de la Fondation et de les sensibiliser aux questions de conservation de l'œuvre construite.

2) L'ASSOCIATION DES SITES DE LE CORBUSIER (Article 5.4 du Plan de gestion internationale)

L'association des Sites Le Corbusier, créée en janvier 2010, est une association internationale de droit français dite « loi de 1901 » qui rassemble les collectivités territoriales abritant les différents éléments constitutifs du bien.

L'association est membre associé de la Conférence permanente. Elle permet à chaque collectivité d'être un véritable acteur de la candidature et constitue un soutien dans les problématiques de gestion et de valorisation des éléments constitutifs du bien.

Elle a notamment pour objectif de créer les conditions d'échange et de partage de connaissances et d'expériences dans les domaines de la conservation, la protection, la mise en valeur, l'animation et la gestion du patrimoine Le Corbusier.

Elle constitue une force de proposition et un espace de réflexion dans ces domaines auprès des acteurs du patrimoine en France et à l'international, notamment auprès de l'Unesco et du Comité du patrimoine mondial.

c) Develop concerted global conservation approaches and procedures for the Series

INTERNATIONAL STANDING CONFERENCE: COMMON PRINCIPLES, OBJECTIVES AND MANAGEMENT STRATEGY (See Article 5.2 of the International Management Plan)

The States Parties have agreed to work together to preserve the Series. They have set up a common management structure, the Standing Conference, made up of the authorities responsible for the safeguarding of the properties. In Conference meetings, the States Parties have decided to systematically discuss short and medium-term restoration projects, to implement common practices, to promote the sharing of experiences, to build a pool of experts and to communicate on the results of the work undertaken. A State Party from the series chairs the Standing Conference and organizes an annual meeting. Meetings have already been held in April 2015 in Paris (France), in February 2016 in Chandigarh (India), and in November 2017 in Tokyo (Japan). In 2018, the presidency will fall to Switzerland.

In practical terms, the States Parties have defined the bases of the common principles applicable to all the elements in the Series (see Chapter 6 of the International Management Plan):

Conduct studies with a view to thorough knowledge of the element to be restored, prior to any restoration/conservation measures

Interdisciplinary historical and technical studies must integrate analysis of the transformations already carried out, the damage incurred and its causes, as well as consultation of records and documentation on the current state of the element.

Establish an intervention programme

The programme focuses on problematic aspects of the element and describes possible interventions. The long-term consequences of their implementation, or of non-intervention, must be carefully evaluated. Throughout the duration of the work, the programme must be constantly monitored and documented.

Preserve the historical substance

Restoration must aim to modify the state of the element as little as possible; interventions are meant to slow down deterioration without substantially altering the substance. Material alterations can only be undertaken if their necessity has been demonstrated for the long-term survival of the object.

The substance needs to be restored rather than replaced. The need to replace components whose restoration is no longer possible should not lead to the systematic replacement of all components of the same nature.

Interventions must be reduced to a minimum. The less the intervention affects the substance, the more it remains intact for future generations.

Document/disseminate

Documentation must indicate the state of the element before, during and after the intervention. It must include the documents used to define measures adopted, as well as the intervention programme. Documentation must be kept in public records. All study results should be published as far as possible.

Ensure maximum reversibility

Although total reversibility can never be achieved, it must be a guiding principle. Conservation interventions whose effects are time-limited, but can be repeated, correspond to the principle of reversibility.

Apply standards with discernment

Building standards should not be applied to elements without close prior scrutiny. Each case must be studied individually. When compliance with standards can lead to a deterioration of the value of the element, this must be abandoned or countervailed.

Ensure regular follow-up after restoration

Monitoring aims to defer as much as possible the implementation of additional conservation and restoration operations.

Proper maintenance operations extend the life of the element and help to anticipate restoration work, if not to delay it.

RESOURCES IMPLEMENTED

1) THE LE CORBUSIER FOUNDATION (See Article 5.3 of the International Management Plan)

As regards the application of these principles and procedures, the Le Corbusier Foundation, whose fundamental mission is to safeguard the architectural work of Le Corbusier, provides States Parties with a number of resources to coordinate and support the interventions implemented in the seven partner countries. The Foundation currently makes use of the following tools:

Application of moral rights / supervision of the Work's integrity

The Foundation, Le Corbusier's sole legatee, is the holder of the moral right to his work. It has the legitimacy and the competence recognized by all the States Parties enabling it to be associated and to intervene in any project for restoration or modification of an element.

Committee of Experts for the Architectural Work

A committee has been set up under the Foundation's Board of Directors to inform its decisions concerning projects to restore, reassign or develop buildings designed by Le Corbusier. It is made up of French and foreign architects and historians considered as the best specialists in modern architecture. The committee can alert the Board of Directors of the Foundation on the situation of certain works. The Foundation is also systematically represented in the various scientific committees set up by the project owners for the conduct of restoration projects.

List of committee members:

- Bernard Bauchet, architect
- Jean-Louis Cohen, architect, historian, professor at Institute of Fine Arts, New York University
- Marie-Jeanne Dumont, architect, historian, professor at National School of Architecture, Paris-Belleville
- Vanessa Fernandez, architect, professor at National School of Architecture, Paris-Belleville
- Roberto Gargiani, architect, professor of history of architecture, EPFL, Lausanne
- Pierre-Antoine Gatier, Chief Architect of Historical Monuments
- Franz Graf, architect, associate professor, EPFL architecture section, Lausanne
- Rémi Papillault, architect, professor at National School of Architecture, Toulouse
- Gilles Ragot, historian, professor at University of Bordeaux
- Bruno Reichlin, architect, Emeritus Professor of University of Geneva
- Maria Salerno, architect, Professor at National School of Architecture, Paris-Malaquais
- Jacques Sbriglio, architect
- Yannis Tsiomis, architect, director of studies at EHESS

Consulting Architect to the Foundation

The Foundation has recruited a consulting architect with specialized training on restoration issues. She is responsible for advising the network of owners (including research into sources, connecting stakeholders with each other, capitalizing experience, monitoring studies, etc.), following up of the various projects in progress in France and abroad, and creating records of restorations.

During the last ten years, the consulting architect has particularly monitored the following projects or implementations of restoration projects:

- Maison de la Culture, Firminy
- Stadium, Firminy
- Louise-Catherine barge, Salvation Army, Paris
- Swiss Pavilion, Cité Universitaire Internationale, Paris
- Unité d'Habitation, Marseille
- Chapelle Notre-Dame du Haut, Ronchamp
- Cité de Refuge de l'Armée du Salut, Paris
- Couvent de la Tourette, Evieux
- Immeuble Clarté, Genève
- Villa Miestchaninoff, Boulogne-Billancourt
- Maisons La Roche et Jeanneret, Paris
- Petite Villa, Lac Léman, Corseaux

- Gardener's house, Villa Savoye, Poissy
- Cabanon, Roquebrune-Cap-Martin (camping units and mural paintings on the site)
- Usine Duval, Saint-Dié
- Cité Frugès, Pessac
- Le Corbusier's studio-apartment, and the Molitor building, Boulogne Billancourt
- Sanskar Kendra Museum, Ahmedabad
- Capitol, Chandigarh
- Villa Stein, Vaucresson

Restoration Archives

It has been decided to create systematic archives of restoration work conducted in France and around the world, including both documents published during a project or an expertise (plans, descriptions, etc.) and the conservation of the original material elements as evidence of the initial construction (materials base).

Documentation

The Foundation now holds all the plans and documents (tenders, contracts, correspondence, etc.) concerning projects and building work carried out in his lifetime by Le Corbusier and his collaborators. These archives have been computerized and are placed at the disposal of the project owners and owners who wish to undertake restoration and rehabilitation work. The Foundation responds to requests for information concerning all buildings and puts in contact the various experts, specialists or project managers dealing with similar problems.

Information

The Foundation uses various information tools that make it possible to regularly review the situation of the architectural work and to raise the awareness of owners and project managers by publishing articles on exemplary achievements. All research work, meetings and seminars on the built work and promotion of achievements are likewise reported. The Foundation's website enables real-time monitoring of restoration of the architectural work.

In 2015, it organized an international meeting in Paris on problems encountered in restoring the architectural work. The proceedings of this conference were published under the title *Le Corbusier's Work - the Trials of Restoration*.

In 2016, in consultation with all the partners concerned, it organized a study day at Maison du Brésil on the problems involved in restoring Villa Savoye.

Meetings between owners and partners

Since 2003, the Foundation regularly convenes meetings with the owners and managers of Le Corbusier's private and public buildings around the world. This initiative responds to the desire to better involve owners in the actions of the Foundation and to raise awareness of conservation issues involving the built work.

2) THE ASSOCIATION OF LE CORBUSIER SITES (Article 5.4 of the International

Management Plan)

The Association of Le Corbusier Sites, created in January 2010, is an international association under the French law ('Law of 1901'). It is made up of the local authorities responsible for the various constituent elements of the property.

The association is an associate member of the Standing Conference. It allows each community to be an effective player in the nomination process and provides support in the issues of management and promotion of the components of the Property.

One of its objectives is to create the conditions for the exchange and sharing of knowledge and experience in the fields of conservation, protection, promotion, activities and management of Le Corbusier's heritage.

It constitutes a source of proposals and a meeting place for reflection in these domains with heritage stakeholders in France and internationally, particularly with UNESCO and the World Heritage Committee.

d) Examiner la manière dont le pouvoir de la Conférence permanente pourrait être précisé afin de permettre à tous les Etats parties de comprendre pleinement les propositions d'aménagements majeurs dans tous les éléments constitutifs, par rapport à leur impact potentiel sur la série dans son ensemble

La Conférence permanente internationale est constamment tenue informée de la situation de chacun des éléments :

1. En premier lieu, par les communications provenant des Etats parties lors des réunions de la Conférence. En effet, les participants bénéficient des échanges organisés sur l'état de conservation des éléments du bien, des mesures de leur conservation, et d'éventuelles autres questions ; des projets aux abords des éléments du bien et dans les zones tampon, sont présentés et discutés par l'ensemble des Etats parties lors de la Conférence.

2. En complément, la Conférence permanente internationale recueille des informations par l'intermédiaire de la Fondation Le Corbusier qui en exerce le secrétariat. Grâce à son réseau de correspondants dans le monde, notamment les services du patrimoine en charge de la protection des éléments pour chacun des pays concernés, la Fondation est alertée de tout projet de modification majeure d'un élément constitutif ou de tout événement au sein de sa zone tampon. La Fondation est également informée par les propriétaires qui la saisissent directement au titre de sa mission de conseil.

3. Finalement, le réseau des villes constitue également une source d'information en temps réel de la situation des éléments placés sous la responsabilité des collectivités.

Toutes les informations recueillies par la Fondation et les services patrimoniaux des Etats parties sont transmises à la Conférence permanente pour y être commentées et discutées. La discussion a notamment pour objectif d'évaluer l'impact des projets d'aménagement sur la série dans son ensemble.

Compte tenu de la nature des éléments inscrits qui bénéficient à la fois du plus haut niveau de protection dans leur législation nationale/fédérale, et du statut d'œuvre de Le Corbusier placée sous la vigilance de la Fondation qui porte son nom, la Conférence permanente, pleinement consciente de la solidarité de tous les éléments à l'intérieur de la série, dispose d'importants moyens d'information et d'intervention pour obtenir si nécessaire le respect des engagements pris.

Afin d'éviter toute intervention qui pourrait avoir un impact négatif sur un élément de la série, la Conférence permanente peut notamment :

- intervenir auprès de l'Etat partie en toute connaissance de cause et, si nécessaire, proposer des alternatives dans un cadre à définir entre toutes les parties concernées ;
- mandater la Fondation Le Corbusier ou des experts internationaux, comme p. ex. ICOMOS international ou l'ICCROM, de façon à disposer de toutes les informations et de toute la documentation et des analyses lui permettant de procéder à une l'évaluation du risque la plus fine possible ;
- décider d'informer le Centre du patrimoine mondial, sur la base de l'art. 172 des Orientations, en concertation avec l'Etat partie impliqué, qu'une intervention risque de porter atteinte à la valeur universelle exceptionnelle de la série, et ainsi faire bénéficier

le bien des mécanismes de suivi prévus par la Convention du patrimoine mondial.

d) Examine how the powers of the Standing Conference could be clarified to enable all States Parties to fully understand the proposals for major developments in all the constituent elements, in relation to their potential impact on the Series as a whole

The Permanent International Conference is constantly kept informed of the situation of each of the constituent elements:

(i) – firstly, through information provided by States Parties at meetings of the Conference. Exchanges on the state of conservation of the elements of the property, conservation measures or other issues such as projects in the area, are presented and discussed by all States Parties at these meetings.

(ii) – in addition, through the Le Corbusier Foundation, which serves as the secretariat to the Conference. The Foundation, thanks to its network of correspondents around the world, in particular the heritage services in charge of the protection of the constituent elements for each of the countries concerned, is alerted on any major modification project involving a constituent element or any event within its buffer zone. The Foundation is also informed by owners, who address it directly in its advisory role.

(iii) – lastly, through the worldwide cities network, which is also a source of real-time information on the situation of the constituent elements under the responsibility of local authorities.

All information collected by the Foundation and the heritage services of the States Parties is transmitted to the Standing Conference for comment and discussion. One of the aims of this discussion is to assess the impact of development projects on the Series as a whole.

The constituent elements inscribed benefit both from the highest level of protection in their national/federal legislation and from the status of Le Corbusier's work placed under the protection of the Foundation. Fully aware of the interdependence of all the elements within the Series, the Standing Conference consequently has significant resources of information and intervention for obtaining if necessary the observance of the commitments made.

In order to avoid any intervention liable to have a negative impact on an element in the Series, the Standing Conference may in particular:

- intervene with the State Party in full knowledge of the facts and, if necessary, propose alternatives within a framework to be defined by all the parties concerned;
- mandate the Le Corbusier Foundation or international experts, such as ICOMOS International or ICCROM, to obtain all the information, documentation and analyses needed to conduct the most accurate risk assessment possible;
- decide to inform the World Heritage Centre on the basis of Art. 172 of the Operational Guidelines, in consultation with the State Party involved, that an intervention is liable to undermine the outstanding universal value of the Series, thereby enabling the property to benefit from the monitoring mechanisms provided for by the World Heritage Convention.

e) soumettre le plan de gestion pour Chandigarh

Le plan de gestion du Capitol Complex a été déposé au Centre du Patrimoine mondial en janvier 2015. Des modifications et compléments d'informations ont été apportés en février 2016, suite à la visite de l'expert d'Icomos sur place. Ces éléments se trouvent dans les . Voir les *Annexes e) Inde, Plan de Gestion, janvier 2015 et février 2016* (en anglais)

e) submit the management plan for Chandigarh

The Capitol Complex management plan was submitted to the World Heritage Center in January 2015. Modifications and additional information were provided in February 2016, following the visit of the Icomos expert.

. See the documents in the *Appendices e) India, Management Plan, January 2015 and February 2016*.

f) faire progresser le plan de conservation pour Chandigarh

. Voir les Annexes, Inde (en anglais)

f) advance the conservation plan for Chandigarh

. See the documents in the *Appendix f) India*

g) clarifier la protection de la zone tampon pour la maison Guiette

. Voir les Annexes, Belgique

f) advance the conservation plan for Chandigarh

. See the document in the *Appendix g) Belgium*

h) clarifier les implications de la nouvelle loi sur le patrimoine en France

Dispositions prévues par la loi du 7 juillet 2016 relative à la Liberté de la Création, de l'Architecture et au Patrimoine (LCAP) :

La loi affirme pour la première fois l'engagement de l'Etat et des collectivités territoriales dans la préservation des biens inscrits au patrimoine mondial de l'UNESCO. Elle identifie précisément les notions de zone tampon et de plan de gestion, deux outils essentiels pour assurer le maintien de la valeur universelle exceptionnelle des biens du patrimoine mondial. Elle prévoit en outre que le préfet porte à la connaissance de l'autorité compétente en matière de documents d'urbanisme la zone tampon et les dispositions du plan de gestion du bien afin d'en assurer la protection et la mise en valeur.

« Dispositions relatives aux biens inscrits au patrimoine mondial » Art. L. 612-1.

" L'Etat et ses établissements publics, les collectivités territoriales et leurs groupements assurent, au titre de leurs compétences dans les domaines du patrimoine, de l'environnement et de l'urbanisme, la protection, la conservation et la mise en valeur du bien reconnu en tant que bien du patrimoine mondial en application de la convention concernant la protection du patrimoine mondial, culturel et naturel, adoptée par la Conférence générale de l'Organisation des Nations unies pour l'éducation, la science et la culture, le 16 novembre 1972, lors de sa XVIIe session.

« Pour assurer la protection du bien, une zone, dite "zone tampon", incluant son environnement immédiat, les perspectives visuelles importantes et d'autres aires ou attributs ayant un rôle fonctionnel important en tant que soutien apporté au bien et à sa protection est, sauf s'il est justifié qu'elle n'est pas nécessaire, délimitée autour de celui-ci en concertation avec les collectivités territoriales concernées puis arrêtée par l'autorité administrative.

« Pour assurer la préservation de la valeur universelle exceptionnelle du bien, un plan de gestion comprenant les mesures de protection, de conservation et de mise en valeur à mettre en œuvre est élaboré conjointement par l'Etat et les collectivités territoriales concernées, pour le périmètre de ce bien et, le cas échéant, de sa zone tampon, puis arrêté par l'autorité administrative.

« Lorsque l'autorité compétente en matière de schéma de cohérence territoriale ou de plan local d'urbanisme engage l'élaboration ou la révision d'un schéma de cohérence territoriale ou d'un plan local d'urbanisme, le représentant de l'Etat dans le département porte à sa connaissance les dispositions du plan de gestion du bien afin d'assurer la protection, la conservation et la mise en valeur du bien et la préservation de sa valeur exceptionnelle.

« Un décret en Conseil d'Etat fixe les modalités d'application du présent article.

- Décret d'application du 29 mars 2017, entré en vigueur le 1er avril 2017 :

- Le décret précise les dispositions que l'Etat et les collectivités territoriales doivent appliquer afin de préserver la valeur universelle exceptionnelle des biens inscrits sur la Liste du patrimoine mondial (art R.612-1 du code du patrimoine : "Pour assurer la préservation de la valeur universelle exceptionnelle des biens reconnus en tant que biens du patrimoine mondial, l'Etat et les collectivités territoriales ou leurs groupements protègent ces biens et, le cas échéant, tout ou partie de leur zone tampon par l'application des dispositions du présent livre, du livre III du code de l'environnement ou du livre Ier du code de

l'urbanisme").

- De plus, les biens inscrits sur la liste du patrimoine mondial et leur zone tampon doivent désormais être identifiés dans les annexes graphiques des documents d'urbanisme communaux et des documents de planification à l'échelle territoriale. (art R 141-6 et R.151-53 du code de l'urbanisme).

h) clarify the implications of the new Heritage Law in France

Provisions of the Law of 7 July 2016 on the Freedom of Creation, Architecture and Heritage (LCAP) :

The law affirms for the first time the commitment of the State and local authorities in the preservation of properties inscribed on the UNESCO World Heritage List. It specifically identifies the concepts of buffer zone and management plan, two essential tools for ensuring the maintenance of the Outstanding Universal Value of World Heritage properties. It further provides that the prefect shall inform the authority responsible for urban planning documents of the buffer zone and the provisions of the management plan of the property for the purpose of protecting and developing it.

"Provisions relating to properties inscribed on the World Heritage List, Art. L. 612-1.

"The State and its public institutions, the local authorities and their groupings ensure, in terms of their competences in the domains of heritage, environment and urban planning, the protection, conservation and development of a property recognized as a World Heritage property under the Convention on the protection of the cultural and natural world heritage, adopted by the General Conference of the United Nations for education, science and culture on 16 November 1972, at its seventeenth session.

"To ensure the protection of the property, an area, known as the 'buffer zone', including its immediate environment, the important visual prospects and other areas or attributes that have an important functional role as support for the property and its protection, is, unless it is justified that this is not necessary, demarcated around it in consultation with the local authorities concerned and then enforced by the administrative authority.

"To ensure the preservation of the Outstanding Universal Value of the property, a management plan including protection, conservation and enhancement measures to be implemented for the perimeter of this property and, where appropriate, its buffer zone is developed jointly by the State and the local authorities concerned, and is then enforced by the administrative authority.

"When the competent authority for a territorial coherence scheme or local urban plan initiates the drawing up or the revision of a territorial coherence scheme or a local urban plan, the representative of the State in the department informs it of the provisions of the management plan of the property in order to ensure the protection, conservation and development of the property and the preservation of its exceptional value.

"A State Council decree lays down the procedures for the application of this article.

- Implementing Decree of 29 March 2017, becoming effective on 1 April 2017 :

- The decree specifies the provisions that the State and the local authorities must apply in

order to preserve the exceptional universal value of the properties inscribed on the World Heritage List (art R.612-1 of the Heritage Code: "To ensure the preservation of the Outstanding Universal Value of properties recognized as World Heritage properties, the State and local authorities or their groupings protect these properties and, where appropriate, all or part of their buffer zone through the application of the provisions of this book, of Book III of the environmental code or Book I of the urban planning code ")

- In addition, properties inscribed on the World Heritage List and their buffer zones must now be identified in the graphic annexes of the municipal planning documents and planning documents at the territorial level. (art R.141-6 et R.151-53 du code de l'urbanisme).

i) Soumettre les propositions de la Conférence permanente concernant l'approche pour toute autre extension de la série et sa portée finale

Les critères de sélection des éléments du bien figurent dans le chapitre III, Analyse comparative, du dossier de candidature :

La sélection des œuvres du bien sériel *L'Œuvre architecture de Le Corbusier* repose sur un critère fondamental : l'évaluation de leur contribution à la valeur universelle exceptionnelle de la série telle qu'elle a été définie lors de l'inscription du dossier.

Au-delà de ce critère fondamental, cinq autres critères ont été retenus :

- chaque élément présente un haut niveau d'authenticité et d'intégrité ;
- chaque élément présente un bon niveau de conservation ;
- chaque élément est protégé au titre de la législation nationale du pays dans lequel il se trouve ;
- chaque élément est porté par les propriétaires, les autorités locales, et les autorités compétentes du pays concerné ;
- enfin, lorsqu'il s'agit de séries (type unités d'habitation, musées, etc.) n'a été retenu que le prototype le plus riche en intentions architecturales, ou le premier de la série.

Un tableau récapitulatif (pp 275 à 278 du dossier en français, joint ici dans les Annexes) présente pour chacun des bâtiments construits par Le Corbusier le niveau d'adéquation aux critères de sélection définis ci-dessus au moment du dépôt du dossier de candidature.

Selon les informations dont les États disposaient à ce moment-là, il ressortait que certaines œuvres répondaient au critère fondamental de la contribution à la valeur universelle exceptionnelle de la série *L'œuvre architecturale de Le Corbusier*.

Toutefois, ces œuvres ne figuraient pas dans la proposition finale car elles ne répondaient que partiellement aux cinq autres critères retenus pour la sélection. Dans la mesure où ces œuvres satisfont aux critères d'authenticité, d'intégrité et qu'elles présentent toutes un haut niveau de conservation, elles restent potentiellement éligibles à l'intégration dans la série lorsque toutes les conditions de satisfaction à chacun des critères seront remplies.

La Conférence permanente suivra avec attention les efforts faits par les différents États parties concernés pour faire figurer sur leurs listes indicatives les œuvres candidates à une extension de la série, et reste disponible pour les assister dans leur entreprise.

Conformément au plan de gestion international, la Conférence permanente donnera, le moment venu, son avis sur les propositions d'extension, en examinant à nouveau et de manière approfondie la contribution de l'élément respectif pour la valeur universelle exceptionnelle de la série, et accompagnera le processus d'inscription.

i) submit the Standing Conference's proposals regarding the approach for any further extension of the Series and its final scope

The criteria for the selection of the elements of the Property appear in Chapter III, Comparative Analysis, of the application file:

The selection of the works in the Serial Property *The Architectural Work of Le Corbusier* is based on a fundamental criterion: the evaluation of their contribution to the outstanding universal value of the Series as it was defined at the time of the inscription of the file.

Beyond this fundamental criterion, five other criteria were retained:

- each element displays a high level of authenticity and integrity;
- each element has a good level of conservation;
- each element is protected under the national legislation of the country in which it is situated ;
- each element is promoted by the owners, the local authorities, and the competent authorities of the country concerned;
- finally, under the heading of series (type of housing units, museums, etc.), only the prototype with the richest architectural intentions, or the first in the series, was retained.

A summary table (pages 275 to 278 of the French file, attached in the Annexes) shows, for each of the buildings built by Le Corbusier, the level of compliance with the selection criteria defined above.

According to the information available to the States at the time of the submission of the nomination file, it appeared that some works met the fundamental criterion of the contribution to the Outstanding Universal Value of the Series *The Architectural Work of Le Corbusier*.

However, these works were not included in the final proposal as they only partially met the other five criteria for selection. Insofar as these works meet the criteria of authenticity and integrity and insofar as all of them display a high level of conservation, they remain potentially eligible for inclusion in the Series when all the conditions of the criteria are met.

The Standing Conference will carefully monitor the efforts made by the various States Parties concerned to include on their Tentative Lists works that are candidates for an extension of the Series, and remains available to assist them.

In accordance with the International Management Plan, the Standing Conference will in due course give its opinion on the extension proposals, by re-examining in depth the contribution of the respective element to the Outstanding Universal Value of the Series, and engage in the nomination process.

3. Other current conservation issues identified by the State Parties which may have an impact on the property's Outstanding Universal Value

[See the descriptions in the section 2.](#)

4. Potential major restorations, alterations and/or new construction intended within the property, the buffer zones where such developments may affect the Outstanding Universal Value of the property, including authenticity and integrity

[See the descriptions in the section 2.](#)

5. Public access to the state of conservation report

[Uploading this report for public access on the web site is accepted without reservation.](#)

6. Signature of the Authority

Argentina

Belgium

France

Germany

India

Japan

Switzerland

Contents of the Annex

- a) introduce heritage impact assessment procedures for proposed developments on all components ;
Annex a) - France
Annex a) - India
- b) develop monitoring indicators for all components ;
Annex b) - Germany
Annex b) - Argentine
Annex b) - Belgium
Annex b) - France
Annex b) - India
Annex b) - Japan
Annex b) - Switzerland
- c) develop concerted aggregate conservation approaches and procedures for the Series ;
No Annex
- d) consider how the power of the Standing Conference can be clarified in order to allow all States Parties to fully understand the major development proposals in all the components, with respect to the potential impact of these on the series as a whole ;
No Annex
- e) submit the management plan for Chandigarh ;
Annex e) - 2015
Annex e) - 2016 -Clarifications
Annex e) - 2016 -Inde EXPERT HERITAGE REPORT-CHANDIGARH
Annex e) - 2016 -IndeCONCRETECAPITOL[1]
Annex e) - 2016 -IndeConsitution_of_expert_committee[1]
- f) advance the conservation plan for Chandigarh ;
Annex f)
- g) clarify the protection of the buffer zone for the Maison Guiette ;
Annex g)
- h) clarify the implications of the new heritage law in France ;
No Annex
- i) submit the proposals of the Standing Conference concerning the approach to be adopted for any other extension to the Series and its ultimate scope.
Annex i) - Summary
Annex i) - Table

MAISONS LA ROCHE ET JEANNERET PARIS (75016), 1923



Maisons La Roche-Jeanneret, Paris, France, 1923-1925.
Photo : Olivier Martin Gambier 2016 © FLC/ADAGP, 2017

Présentation du site

Les **Maisons La Roche et Jeanneret** sont la première expression du *Purisme* en architecture. Les Maisons La Roche et Jeanneret sont deux maisons mitoyennes sur lesquelles se referme une impasse verdoyante du XVI^e arrondissement de Paris. Elles ont été conçues comme un ensemble architectural unique mais elles ne relèvent pas du même programme : la Maison La Roche est celle d'un riche collectionneur célibataire, tandis que la Maison Jeanneret répond aux besoins d'un couple avec trois enfants.

Conçues au moment même où Le Corbusier publie *Vers une architecture* et trois ans après la publication du *Manifeste Après le Purisme* (1919), les Maisons La Roche et Jeanneret concrétisent la rencontre entre la peinture puriste et l'architecture moderne naissante.

La Maison La Roche est également un bâtiment précurseur sur le plan de l'innovation spatiale. Le Corbusier y révolutionne l'espace intérieur, développant ce qu'il appelle la "promenade architecturale", présentée aussi comme la quatrième dimension de l'espace : celle de l'espace/temps.

L'usage de la couleur, encore très rare en 1923 en dehors des expériences du mouvement De Stijl aux Pays-Bas, participe aussi de cette nouvelle perception de l'espace. Le Corbusier applique ici une polychromie architecturale issue des théories puristes.

Réunies en un seul et même ensemble architectural de formes géométriques pures dénuées de tout décor, les Maisons La Roche et Jeanneret constituent en 1923 une œuvre d'avant-garde unique en France. Le toit-terrasse accessible et transformé en jardin suspendu accuse encore la radicalité de cette composition. De façon très précoce dans l'histoire de l'architecture, sont mises ici en place les bases de la nouvelle architecture moderne : formes géométriques pures, absence de décor, pilotis, toit-terrasse, fenêtre en longueur. Autant de points que Le Corbusier théoriserait en 1926 dans le *Manifeste des cinq points pour une architecture nouvelle*.

Mise en œuvre du plan de gestion :

Périmètre du bien : Suite à la demande de l'experte d'ICOMOS d'inclure dans le périmètre du bien l'allée conduisant aux deux Maisons, comme partie intégrante de l'élément constitutif du bien, il est prévu d'améliorer son entretien et de renforcer le contrôle des travaux concernant les propriétés voisines (projet notamment d'amélioration de la surface du revêtement du sol, à la place du goudron actuel, demandé par la copropriété).

Zone tampon : Par ailleurs, l'experte ayant fait état de l'aspect très restrictif de la zone tampon qui ne recouvrait que le périmètre de l'îlot incluant les rues du Docteur Blanche, Raffet, Jasmin et Henri Heine, celle-ci a été étendue aux 500 mètres aux abords des édifices protégés au titre des MH. La nouvelle zone tampon est délimitée par le boulevard de Montmorency, la rue de l'Yvette, l'avenue Mozart, la rue de la Source et l'avenue des Tilleuls.

Etat de conservation : L'état des deux Maisons est très satisfaisant à la suite des travaux conduits par Pierre-Antoine Gatier, ACMH, entre 2008 et 2016, qui ont permis de révéler la polychromie d'origine extérieure et intérieure ainsi que l'ouverture à la visite de l'ensemble des espaces de la maison la Roche (espaces de réception du propriétaire, espaces de service et logement du gardien).

Valorisation : A été également demandé lors de cette inspection une présentation des actions conduites par la fondation en direction du grand public et une réflexion concernant la création d'un musée Le Corbusier (Villa Savoye).

La Fondation Le Corbusier a intégré dans son équipe une chargée de développement des publics depuis quelques années. Ont pu être ainsi développées plusieurs actions de médiation tant à l'appartement de Le Corbusier qu'à la Maison La Roche : visites à l'intention du public scolaire, visites guidées pour le grand public, visites thématiques et ateliers pédagogiques.

CITÉ FRUGÈS PESSAC (33), 1924



Cité Frugès, Pessac, France, 1924. Photo : Paul Kozlowski © FLC/ADAGP, 2017

Présentation du site

La **Cité Frugès** est le prototype de cité standardisée dans les années vingt, d'une ambition inégalée à cette époque.

Le Corbusier et Pierre Jeanneret réalisent de 1924 à 1927 un lotissement expérimental de 51 maisons à Pessac. Baptisée *Cité Frugès*, du nom de son commanditaire, elle représente dans l'histoire du logement ouvrier une tentative ambitieuse, inégalée, aux points de vue esthétique, technique, méthodologique et social.

La *Cité Frugès* illustre de manière incomparable cette approche expérimentale propre aux architectes modernes, et la volonté corbuséenne de transgresser les conventions et les savoir-faire routiniers. Esthétiquement, elle est l'une des premières cités de maisons individuelles ouvrières réalisées dans le monde selon les canons de la nouvelle esthétique moderne. Techniquement, elle est un chantier d'expérimentation de la standardisation du bâtiment. Socialement, le projet vise à sortir le logement ouvrier de l'image pittoresque, ou misérabiliste dans lequel il était généralement confiné.

L'innovation est d'abord conceptuelle. Les maisons sont conçues à partir d'un même module technique et spatial carré de 5 mètres de côté, et d'un type architectural de base baptisé B1L composé de deux niveaux d'une travée et demi. Le défi posé est celui de l'économie du projet par le recours à un module standard, sans tomber dans la répétitivité et la monotonie.

L'adjonction d'une ou de plusieurs travées supplémentaires conduit à l'élaboration de cinq types différents, de nombreuses nuances et variations enrichissant ce classement simplifié : les maisons à arcades ; les gratte-ciel ; les maisons en quinconce et maisons zig-zag ; deux maisons jumelles face à face ; une maison isolée dite Maison Vrinat.

L'ambition est encore de lier art et progrès social. Le commanditaire et ses architectes conçoivent l'habitat ouvrier comme une œuvre d'art. Les formes sont celles de l'avant-garde architecturale. Le Corbusier et Pierre Jeanneret usent d'une polychromie variée pour amplifier la conception purement plastique de ces formes primaires géométriques y compris à l'échelle urbaine du lotissement.

Mise en œuvre du plan de gestion

Plusieurs réunions ont déjà eu lieu à la DRAC Nouvelle Aquitaine essentiellement pour évoquer les régimes de protection de la Cité Frugès.

À ce jour, 20 maisons sur les 50 de la Cité Frugès sont protégées au titre des monuments historiques (14 inscrites, 6 classées). La Cité forme par ailleurs le cœur du Site Protégé Remarquable (ZPPAUP) « les quartiers modernes Frugès » dont le contour a été repris pour délimiter sa zone tampon. Suite à l'inscription au patrimoine mondial, la mairie, la DRAC et la FLC ont estimé nécessaire de réaliser un état des lieux des protections existantes et d'envisager leur évolution au regard de son nouveau statut.

Constituée de maisons individuelles, la Cité Frugès est conçue et réalisée comme une œuvre d'art homogène qui appelle un régime de protection cohérent. La protection au titre des monuments historiques des 50 maisons est envisagée au regard de cette spécificité identifiée au titre de la valeur universelle exceptionnelle du bien. La proposition d'extension des protections à l'ensemble de l'élément constitutif du bien devrait être présentée devant délégation permanente de la 1^{ère} section de la commission régionale du patrimoine et de l'architecture au mois de novembre prochain.

En ce qui concerne la zone tampon, dont le régime de protection peut être envisagé indépendamment, elle contient certains éléments qui font sens avec la cité (zone de la place du Monteil à la rue Xavier Arnozan correspondant au tracé réalisé en 1925, ligne de chemin de fers), mais le bâti qu'elle englobe est hétérogène et ne présente pas de qualités architecturales particulières.

Si le régime de Site patrimonial Remarquable (SPR/ZPPAUP) actuel s'avérait obsolète, il conviendrait d'étudier un nouveau SPR de type Plan de Valorisation de l'Architecture et du Patrimoine (PVAP). Comme évoqué avec les services de la métropole, un périmètre délimité des abords des monuments historiques adossé à un zonage et à des orientations d'aménagement et de programmation particuliers du PLU pourrait également être envisagé en remplacement du site patrimonial remarquable.

78 - VILLA SAVOYE ET LOGE DU JARDINIER POISSY (78), 1928



Villa Savoye, Poissy, France, 1928. Photo : Paul Kozlowski © FLC/ADAGP, 2017

Présentation du site :

La Villa Savoye est l'icône absolue du Mouvement moderne, immédiatement reconnue comme telle.

Sur un vaste terrain peu boisé de 7 hectares, libre de toute contrainte, la Villa Savoye se présente sous la forme d'un simple parallélépipède aux quatre faces équivalentes, posé sur pilotis et couvert d'un toit-terrasse d'où se détachent les formes plus souples d'un solarium. Les formes sont pures, immaculées, universelles.

Le dégagement d'une travée entière de pilotis et le retrait du rez-de-chaussée peint en vert sombre pour en effacer la masse dans l'ombre, accuse l'impression d'élévation. La courbe du rez-de-chaussée est calculée selon l'arc de giration minimum d'une voiture. La circulation automobile devient une composante à part entière de la composition architecturale. À l'intérieur, la distribution et la conception spatiale sont définies selon les mouvements des usagers tout au long de la rampe qui du rez-de-chaussée dessert toute la villa jusqu'au solarium.

La Loge du jardinier est l'archétype du logement minimum que Le Corbusier et Pierre Jeanneret ont présenté au premier congrès des CIAM de Francfort en 1929. Elle présente les mêmes principes formels que la villa de maître, illustrant ainsi cette quête d'une architecture qui soit à la fois universelle et sans distinction sociale.

Le plan compact conçu pour 3 à 4 personnes n'offre que 30 m² de surface habitable et 9,50 m² de chaufferie et débarras. Quatre petites pièces accessibles par des portes coulissantes sont flanquées de part et d'autre d'une pièce commune de 12,70 m². Rien de comparable avec les 400 m² au sol de la maison de maître voisine, mais une même communauté de pensée architecturale unit cependant ces deux réalisations.

Mise en œuvre du plan de gestion :

A la suite de la demande de l'experte de l'ICOMOS lors de sa visite en 2015, la **zone tampon** de l'élément constitutif du bien a été étendue dans le but d'inclure les zones historiques adjacentes du nord-est : le site inscrit Rives et Îles de la Seine, le site classé du Prieuré Saint-Louis de Poissy, le Parc Meissonnier et l'enclos de l'Abbaye regroupant les maisons traditionnelles.

Deux actualités concernent le site : le projet d'implantation d'un futur musée Le Corbusier aux abords et dans le périmètre de la zone tampon de l'élément constitutif du bien ainsi que les travaux futurs portant sur la Villa.

Lors de la dernière séance du comité de pilotage du 11 juillet 2017, le projet scientifique, culturel, social et environnemental du « musée Le Corbusier » a été présenté. Mené ces derniers mois par la Fondation Le Corbusier avec l'agence Orénoque en concertation avec les collectivités territoriales – la Ville de Poissy et la Communauté urbaine de Grand Paris Seine & Oise –, et le Centre des monuments nationaux, il constitue l'un des objectifs de la convention signée entre les partenaires le 19 décembre 2016 pour la construction d'un musée Le Corbusier à Poissy. En s'appuyant sur le corpus des œuvres, le concept du musée a été précisé comme devant constituer un équipement s'inscrivant dans le territoire en lien avec les autres édifices inscrits sur la Liste du patrimoine mondial de l'Unesco : maisons Jeanneret-Raaf et La Roche à Paris, et l'appartement Le Corbusier à Boulogne. La muséographie reste à définir : 9 séquences sont axées sur l'œuvre de l'architecte en France et dans le monde, la dernière séquence étant réservée à la réception de l'œuvre de l'architecte-artiste. Une place sera faite également à ses écrits ainsi qu'aux techniques utilisées par l'approche des matériaux. À été en outre présentée la proposition de Pernet Perriand, fille de la designer, de déposer le fonds d'archives de Charlotte Perriand au musée, ce qui laisse entrevoir un potentiel enrichissement du projet autour des collaborateurs de Le Corbusier. Enfin, a été réaffirmée la volonté de fédérer une partie des espaces de ce nouvel équipement pour partager les compétences et les moyens avec la Ville de Poissy, le Centre des monuments nationaux et la Communauté urbaine Grand Paris-Seine & Oise. La mutualisation des réserves permettrait en effet de répondre au problème actuel des réserves des deux musées de France de la ville, qui sont mal adaptées et ne peuvent répondre que de façon temporaire aux besoins.

L'équipement se déploierait sur une superficie de 6600 m², avec comme fonctionnalités des espaces d'exposition temporaire et permanente (musée Le Corbusier), un espace d'accueil (villa Savoye et musée), un quartier de la création axé sur le développement économique (à définir, GPS&O), et des réserves mutualisées avec la ville de Poissy (collections du musée d'art et d'histoire et du musée du Jouet, travaux en cours sur le bâti et la muséographie).

ICOMOS a toutefois demandé qu'une étude d'impact soit lancée avant la fin de l'année 2017.

Concernant le coût de l'opération, il a été précisé que les collectivités devraient pouvoir assurer la maîtrise d'ouvrage d'une étude de faisabilité et de programmation à conduire à l'automne prochain, en vue du tour de table pour le financement du projet. Le délai envisagé pour l'ouverture du musée est de cinq ou six ans environ.

Concernant les travaux de restauration de la villa Savoye, dont l'état sanitaire et architectural pose la question de sa préservation, le CMN a souhaité engager la restauration de l'ensemble que forment la villa et sa loge. Les travaux de cette dernière se sont achevés en février 2016. Ce chantier de restauration a livré des informations inédites concernant la composition des maçonneries originelles. Elles viennent compléter l'étude de diagnostic du clos et couvert de la villa, dont les conclusions sont en cours d'évaluation par le CMN à l'aune de ces découvertes. Enfin, le CMN souhaite également améliorer les outils nécessaires, non seulement aux travaux de restauration, mais également à ceux concernant la conservation et l'entretien de l'ensemble du site. Aussi, la villa et sa loge sont le support d'un projet pilote de maquette numérique en gestion, exploitation et maintenance (BIM-DEM) qui a reçu le soutien du plan de transition du numérique pour le bâtiment.

**IMMEUBLE LOCATIF A LA PORTE MOLITOR
PARIS (75016) / BOULOGNE-BILLANCOURT (92), 1931**



Immeuble locatif à la porte Molitor, Boulogne-Billancourt, France, 1931-1934.
Photo : Olivier Martin-Gambier © FLC/ADAGP, 2017

Présentation du site

L'Immeuble locatif à la Porte Molitor est l'un des premiers immeubles d'habitation au monde à façades entièrement vitrées.

L'immeuble d'habitation est implanté à cheval sur les communes de Boulogne-Billancourt (23, rue de la Tourelle) et du seizième arrondissement de Paris (24, rue Nungesser et Coli).

L'immeuble préfigure les principes de la *Ville radieuse*, au cœur de la métropole, à proximité immédiate de parcs et d'équipements sportifs nombreux (stades, piscine, courts de tennis) qui, alliés aux logements, réalisent cet idéal moderne de l'alliance du collectif et de l'individuel.

La parcelle bénéficie d'une double orientation idéale à l'est et à l'ouest et d'un environnement exceptionnel. L'absence de vis-à-vis permet d'élever des façades entièrement vitrées. À chaque niveau, les logements sont disposés dos à dos, ouverts chacun sur une seule façade.

Le Corbusier se réserve pour son usage personnel le septième et le huitième étage où il réalise l'appartement-atelier qui lui servira de résidence parisienne jusqu'à son décès en 1965. La conception des plans des appartements répond au principe du plan libre, enrichi ici des apports de la flexibilité.

La brique *Nevada* est particulièrement mise à l'honneur en façade rue Nungesser-et-Coli. Du sol au plafond, le soleil pénètre dans les appartements et les inonde de lumière. La rangée de poteaux en béton armé qui, du rez-de-chaussée au sixième étage, soulage les murs mitoyens de leurs charges, autorise la création d'une façade totalement libre marquée de bow-windows en porte à faux.

L'appartement de Le Corbusier

Le Corbusier pose au 7^{ème} et 8^{ème} étages (toit-terrasse), son propre appartement traversant et en duplex. L'architecte adopte une couverture voûtée en berceau qui s'inscrit tangentiellement dans la courbe du gabarit. L'atelier, où Le Corbusier peint le matin face au mur mitoyen en moellons apparents, occupe la moitié est de l'appartement. À l'ouest, face à Boulogne, il installe un séjour, une cuisine et une chambre équipée de toilettes et d'une salle de bains inspirés des aménagements de paquebots.

Périmètre du bien et protections :

Suite à la demande formulée par ICOMOS concernant le classement des parties anciennement inscrites au titre des MH (façades, toiture et hall d'entrée) mais également du sous-sol, des parties communes et de la loge de la gardienne, cette extension de protection, validée par la commission nationale lors de sa séance du 14 novembre 2016, a fait l'objet d'un arrêté de classement signé le 9 juin 2017. Le bien bénéficie également de la protection du site inscrit de Paris.

Zone tampon : Afin d'assurer l'intégrité de l'environnement de l'immeuble "Molitor", le périmètre de la zone tampon comprend les abords immédiats du bien ainsi que tout le quartier dans lequel il se situe. A la suite des observations de l'ICOMOS, la zone tampon a été étendue à l'est, sur la commune de Paris, afin d'inclure tous les bâtiments publics et résidentiels du début du XX^{ème} siècle qui étaient à l'origine en contact visuel direct avec le bien (ex. piscine Molitor) et qui sont situés entre les boulevards d'Auteuil et Murat, la route de la Reine et les rues des Princes et Denfert Rochereau.

Parmi les édifices protégés aux abords de l'immeuble Molitor, situé à la lisière du Bois de Boulogne (entrée 23, rue de la Tourelle à Boulogne-Billancourt) et de Paris (entrée du 24, rue Nungesser et Coli dans le 16^{ème} arrondissement), peuvent être cités notamment :

- **côté Paris** : la piscine Molitor (inscrite au titre des MH par arrêté du 27 mars 1990), l'atelier du ferronnier Brandt, 103 boulevard Murat (inscrit par arrêté du 7 avril 1986), l'Hôtel Guadet, 95 boulevard Murat (façades et toitures inscrites par arrêté du 15 avril 1966);
- **côté Boulogne** : villas Lipchitz-Miestchaninoff, 7, allée de Pins (architecte : Le Corbusier) dont les façades et les couvertures sont inscrites au titre des MH par arrêté du 15 janvier 1975 ; la maison et atelier du sculpteur Joseph Bernard, 24, avenue Robert Schuman (architecte Charles Plumet), inscrits au titre des MH par arrêté du 4 septembre 2000; la bibliothèque Paul Marmottan, 7, place Denfert-Rochereau, partiellement inscrite au titre des MH par arrêté du 21 décembre 1984; la résidence-atelier, 21, rue du Belvédère (architecte: Auguste Perret) dont les façades et les couvertures sont inscrites au titre des MH par arrêté du 15 janvier 1975.

Conservation : Deux campagnes de travaux sont en cours. Elles concernent respectivement :

L'appartement de Le Corbusier : A la suite des études préalables commandées en 2014, François Chatillon, ACMH, a lancé la première phase de restauration concernant les extérieurs de l'appartement de Le Corbusier (calendrier prévisionnel : décembre 2016 –début 2018). Cette phase sera suivie par une seconde phase relative à la restauration des intérieurs.

Les façades : En 2013, la copropriété a confié à Pierre-Antoine Gatier, ACMH, une mission relative à l'établissement d'une étude préalable à la restauration de la façade sur rue de la Tourelle, côté Boulogne-Billancourt Cette étude a été remise en mai 2014 et des travaux sont envisagés dans les mois à venir. Il serait également nécessaire d'établir une étude sur la façade côté Paris 75016, rue Nungesser et Coli.

Valorisation : L'appartement rouvrira à la visite au printemps 2018. Un documentaire a été réalisé tout au long du chantier de restauration par la Fondation Le Corbusier. Il sera prêt pour la réouverture et utilisé aussi comme outil de médiation.

Une réflexion est en cours par la FLC pour la présentation de l'appartement-atelier au public après la restauration à partir d'une « enquête des publics » réalisée avant fermeture. Cela devrait permettre de mieux comprendre le lieu de vie et le lieu de travail de l'architecte et artiste. Les détails (jours et horaires d'ouvertures, outils de médiation, ...) seront définis dans les mois à venir.

UNITÉ D'HABITATION MARSEILLE (13), 1945



Unité d'Habitation, Marseille, France, 1945. Photo : Paul Kozlowski © FLC/ADAGP, 2017

Présentation du site

L'Unité d'habitation de Marseille, œuvre fondatrice du Brutalisme architectural, est l'essai majeur d'un nouveau mode d'habitat fondé sur l'équilibre entre l'individuel et le collectif.

L'édifice se présente sous la forme d'une barre d'habitation de 135 mètres de long, 24 mètres de large et 56 mètres de haut, montée sur pilotis. Trois cent trente appartements, répartis en vingt-trois types différents peuvent accueillir une population de 1 500 à 1700 habitants qui disposent au septième et huitième étages, d'une rue commerçante, d'un hôtel-restaurant, et sur la terrasse d'une école maternelle, et d'équipements sportifs.

Le principe constructif retenu dit « casier à bouteilles », consiste à construire des appartements à l'intérieur d'une ossature indépendante de poteaux et de poutres en béton armé. Les appartements sont constitués d'éléments standards assemblés sur place. Tous les appartements sont traversants à l'exception des logements placés en façade sud. Une loggia brise-soleil, prolonge le séjour à l'extérieur et module l'entrée du soleil. Protégé derrière un double vitrage, l'intérieur des appartements obéit aux lois de l'architecture navale et monacale : rationalisme et simplicité. Le cœur de la « maison », le foyer de la famille, se confond avec le séjour, ouvert sur deux niveaux ; à l'étage la chambre des parents occupe la mezzanine.

La cuisine est équipée comme un laboratoire : cuisinière électrique, armoire frigorifique, vide-ordures et casiers de rangement. Tout l'appartement comprend ainsi de nombreux casiers qui remplacent les meubles traditionnels. L'aération de la cuisine, de la salle de bains et des toilettes est assurée mécaniquement, tandis que l'ensemble de l'appartement est alimenté en air pur par un système d'air conditionné. Autant d'équipements absents des logements collectifs à bon marché dont l'Unité d'habitation dépasse également les normes de surface de 40 à 50 %.

Les dix-sept étages sous-terrasse sont reliés par huit rues intérieures qui, par le jeu des duplex, desservent chacune trois étages. On accède à chaque rue par une batterie de quatre ascenseurs

que complètent un ascenseur de service et trois escaliers de secours. L'ensemble de l'édifice et ses équipements sont dessinés au *Modulor*, l'unité de mesure universelle conçue par Le Corbusier.

Mise en œuvre du plan de gestion

Une commission interdépartementale s'est tenue le 10 mai 2017 présidée par M. le Préfet de région réunissant les acteurs et partenaires des deux sites de la région PACA. Cette réunion a permis de rappeler l'étendu du bien inscrit, d'aborder le contenu des plans de gestion et de proposer une stratégie pour mettre en œuvre des outils pertinents, notamment la mise en place de comités locaux sur chaque site.

Le comité du site de Marseille (co-présidé par le conseil syndical et la mairie) a été constitué et s'est réuni le 14 septembre dernier.

Les points abordés ont notamment repris les fiches actions du plan de gestion :

- Extension de protection du poste de collecte des ordures et du jardin ;
- Financement des travaux, financement des façades, à l'exception de la façade Est, en cours d'achèvement ;
- Sensibilisation du public scolaire ;
- Amélioration de la signalétique intérieure

Les enjeux de la zone tampon ont également été abordés, avec une réflexion urbanistique sur le maintien des cônes de vue sur le bâtiment depuis l'environnement proche et les principaux axes de circulation. Un plan-guide de composition urbaine autour de la cité radieuse a d'ailleurs été lancé par la ville dans le cadre d'aménagement d'une parcelle contigüe au parc de l'UH.

**MANUFACTURE A SAINT DIÉ
SAINT-DIÉ-DES-VOSGES (88), 1946**



Manufacture, Saint-Dié, France, 1946. Photo : Olivier Martin-Gambier © FLC/ADAGP, 2017

Présentation du site

La **Manufacture de Saint-Dié**, issue des standards de la *Ville Radieuse* et de la *Charte d'Athènes*, est le prototype de l'*Usine Verte* qui révolutionne les conditions de travail.

L'industriel Jean-Jacques Duval confie à Le Corbusier, en juillet 1946 la reconstruction de sa bonneterie, fondée en 1908, détruite aux deux tiers en novembre 1944.

L'architecte saisit cette occasion pour réaliser une « usine verte » ce programme standard type qu'il a intégré dans son projet de *Cité linéaire industrielle* publié en 1945 dans *Les trois établissements humains*.

Il réalise une construction entièrement calculée au Modulor, fonctionnelle, 20 % moins cher qu'une construction traditionnelle.

L'édifice, long de 80 mètres et large de 12,50 mètres environ, ressemble à une petite Unité d'habitation montée sur pilotis, haute de trois étages et couverte d'un toit-terrasse autonome. Le bloc d'entrée et de circulation verticale, qui assure également la liaison avec un ancien atelier de confection, s'inscrit dans une aile en retour rejetée en façade arrière. L'organisation interne répond aux contraintes du processus de fabrication. La circulation du tissu et des pièces de confection est indépendante de celle du personnel ; elle s'effectue par des monte-charges et des toboggans supprimés depuis.

Sur le toit-terrasse, Le Corbusier place les bureaux du directeur de l'usine et de l'administration ainsi qu'une salle d'archives et une salle de réunion. Le bureau de Monsieur Duval et les

différentes parties de l'édifice sont équipés d'un mobilier signé Jean Prouvé, Charlotte Perriand et Le Corbusier.

Techniquement et plastiquement, la manufacture réussit l'alliage d'une ossature de béton et de deux murs-pignons aveugles en grès rose de réemploi. Les plafonds sont peints de rectangles de couleurs vives. Le contraste de matériaux et de couleurs, qui en résulte, situe cette œuvre dans la filiation des villas des années trente, qui annonçaient déjà le « brutalisme » des années d'après-guerre. Les ateliers largement vitrés sont protégés par des brise-soleil en béton qui jouent un rôle esthétique autant que fonctionnel. Ce sont les premiers réalisés en France, dans l'œuvre de Le Corbusier, quelques mois seulement avant ceux de la *Cité radieuse de Marseille*.

Mise en œuvre du plan de gestion

Le premier Comité de pilotage s'est tenu en juin 2017, au cours duquel ont été évoquées la délimitation de la zone tampon, la protection du bâtiment ainsi que la suite des travaux de restauration des menuiseries. En effet, l'ancienne usine, partie intégrante de l'élément constitutif du bien, n'est pas protégée au titre des MH. Aujourd'hui le propriétaire demande la démolition d'une partie. Une étude a été réalisée à ce sujet par la DRAC.

Zone tampon : La zone tampon théorique a déjà fait l'objet d'une délimitation (cette zone comprend les abords directs de l'usine, mais aussi les quartiers de la reconstruction, le secteur abbatial et le cimetière de la Grande Guerre). Il convient désormais de donner une assise juridique à cette zone tampon afin que les autorités aient les moyens d'en assurer le réel contrôle. Le seul outil adapté pour gérer cette zone tampon est la mise en place d'un Site Patrimonial Remarquable (SPR). La Ville a confirmé lors du copil de juin dernier que les crédits nécessaires ont été affectés et qu'il y avait une volonté de démarrer en septembre. Dans le cadre de la nouvelle procédure de la loi LCAP, la DRAC a aidé la ville à définir un cahier des charges pour réaliser un premier marché de définition précise du périmètre mais aussi pour formaliser le choix de l'outil le plus adapté, soit PSMV, soit PVAP, soit les deux. La DRAC pense que le seul PVAP est suffisant mais c'est l'étude puis le passage en commission nationale qui le détermineront. Ce premier marché sera lancé avant la fin de l'année. Le deuxième marché, qui permettra la rédaction du règlement, sera lancé fin 2018. La DRAC a confirmé qu'elle avait bloqué des crédits dès cette année pour permettre le cofinancement de cette étude de création d'un SPR.

Conservation et valorisation du bâtiment : Les travaux sur le bâtiment classé font depuis plusieurs années l'objet d'une participation financière importante de l'Etat et de la région pour permettre la restauration des menuiseries. Ces travaux réalisés en plusieurs tranches d'environ 500 000 euros sont subventionnés à hauteur de 40% par la DRAC. Ces travaux se poursuivent sans trop de difficulté. Lors du dernier comité de pilotage, il a été demandé à M Duval de réfléchir à la réactualisation d'une étude sanitaire réalisée il y a plusieurs années, et à la mise en œuvre d'une étude permettant de réfléchir à l'aménagement concerté des abords immédiats de l'usine. M Duval réfléchit la construction d'un espace d'interprétation à proximité de l'usine. Cette étude permettrait de cadrer sa démarche et de s'assurer de la concertation requise au vu des enjeux. Pour mener à bien ce projet, M Duval cherche actuellement activement des partenaires financiers privés.

Animation Culturelle : La Ville a fait état de ses réflexions pour la mise en place de circuits sur le patrimoine du 20^e siècle dans son musée. Elle réfléchit à la mise en œuvre de ce qui pourrait s'apparenter à un espace d'interprétation de ce patrimoine. Elle réfléchit aussi à une candidature de ville et pays d'art et d'histoire.

CHAPELLE NOTRE-DAME-DU-HAUT RONCHAMP (70), 1950



Chapelle Notre Dame du Haut, Ronchamp, France, 1950-1955.
Photo : Paul Kozłowski © FLC/ADAGP, 2017

Présentation du site

La **Chapelle Notre-Dame du Haut de Ronchamp** est l'icône de l'architecture sacrée chrétienne qui révolutionne l'architecture religieuse au XX^{ème} siècle.

La chapelle est située au sommet de la colline de Bourlemont qui domine la trouée de Belfort. Comme la plupart des sommets voisins, la colline de Bourlemont est boisée sauf en son sommet assez ras. Le Corbusier tient compte des premiers rideaux d'arbres, des percées vers les lointains et compose avec l'horizon.

Le parti général de la chapelle est dessiné en quelques jours : un plan dissymétrique, des murs incurvés, surmontés d'un toit en forme de coquille de crabe. Rompant avec la forme symbolique de la croix, le plan dissymétrique composé d'une seule salle, sans collatéraux ni transept, est cependant orienté à l'est.

Les façades sont indépendantes mais se répondent entre elles. Le mur occidental se retourne sur lui-même pour isoler, à chaque extrémité, deux chapelles baignées d'une lumière douce provenant d'un puits de lumière en forme de tour. Une troisième chapelle, prise dans le mur septentrional, répond aux deux précédentes en encadrant une entrée secondaire ainsi magnifiée.

Le Corbusier compose avec la lumière pour différencier des sous-espaces. Il peint lui-même les vitrages, pris dans l'épais mur sud, utilisant une gamme de couleurs commune aux loggias des unités d'habitation et à ses tableaux des années cinquante.

L'ossature de poteaux et de poutres en béton armé, qui supporte le toit, est noyée dans la masse des murs de remplissage, exécutés avec les pierres de récupération de l'ancienne église. Le plan est libre, les façades aussi. Cette distinction, entre la masse des murs et l'ossature, autorise l'architecte à laisser un vide entre le mur et la toiture, reliée aux piliers par de discrètes rotules

métalliques. La coque est conçue techniquement comme une aile d'avion composée de deux membranes de béton de 6 centimètres d'épaisseur, distantes de 2,26 mètres (Modulor). Le mur sud, percé de nombreuses ouvertures, est composé d'une ossature de béton, recouverte d'un treillage métallique sur lequel est projeté du ciment.

À proximité de la chapelle, Le Corbusier construit deux bâtiments bas, la maison du gardien et la maison des pèlerins composée d'un restaurant et de deux dortoirs.

Une pyramide à degrés, dédiée aux victimes des combats de 1944, complète l'ensemble.

Mise en œuvre du plan de gestion

Le site de Ronchamp est pointé dans l'avis de l'ICOMOS et la décision du Centre du patrimoine mondial comme un élément plus fragile que les autres par la perte d'intégrité (bâtiments et aménagements de Renzo Piano) et les problèmes de conservation du site (sécurité et dégradations). La protection et la conservation doivent donc être particulièrement soignées dans les réponses apportées par le plan de gestion.

Plusieurs réunions du comité de pilotage local ont déjà eu lieu. Des groupes de travail ont été créés : 1/ travaux de restauration ; 2/ circulation (accès) ; 3/ mise en valeur touristique.

- Une explicitation de la situation des études de restauration a été faite. Le principe a été arrêté d'une présentation à tous les partenaires du résultat technique et financier des compléments d'étude en cours suite à la tranche d'essai actuellement terminée portant sur la restauration de la façade sud et pour la protection des vitraux. L'architecte en chef des MH, Richard Duplat, devrait être en mesure de présenter ces éléments à l'automne ; sur cette base seulement, il pourra y avoir une discussion financière pour envisager le phasage des travaux de la première tranche à compter de 2018 .

- Le principe de la création d'un SPR intercommunal est posé afin d'assurer la bonne gestion de la zone tampon et de l'environnement paysager et urbain du site. La DRAC doit prendre la main pour en étudier, en concertation avec les collectivités, le périmètre. Ce n'est qu'après le classement par la ministre que la collectivité pourra étudier le règlement (sous la forme d'un PVAP – plan de valorisation de l'architecture et du patrimoine).

-En réponse à la sollicitation de la DRAC, la DREAL a fait part de son intérêt pour la transformation du site inscrit existant en site classé (Code de l'Environnement) car l'inscription actuelle ne correspond plus aux enjeux de gestion du site. La faisabilité d'un classement au titre des sites de la partie boisée de la colline va être expertisée. Une mission d'inspection du ministère chargé des sites pourrait se tenir à l'automne pour en valider le principe. La perspective du classement au titre des sites de la colline permet d'envisager un outil adapté à la gestion forestière et notamment aux enjeux de déboisement et de réouverture paysagère. Sur cette question forestière, le SPR sera un outil de gestion transitoire mais il n'est pas adapté dans la durée. La complémentarité entre les outils est un objectif partagé entre la DRAC et la DREAL pour répondre aux demandes de parcs éoliens autour de la colline. Un AO pour une étude a été lancé relative à l'aire d'influence paysagère autour de Ronchamp.

-La DRAC bourgogne-Franche-Comté attend la remise des prestations de l'architecte pour accompagner le propriétaire à organiser une réunion de concertation. Elle s'inquiète de la manière dont sont abordés les aménagements indispensables pour l'accueil du public. ICOMOS a formulé des recommandations à ce sujet en vue d'un plus large accès à la chapelle (réponse attendue pour novembre 2017).

CABANON DE LE CORBUSIER ROQUEBRUNE-CAP-MARTIN (06), 1951



Cabanon de Le Corbusier, Roquebrune-Cap-Martin, 1951. Photo : Olivier Martin-Gambier © FLC/ADAGP, 2017

Présentation du site :

Le **Cabanon de Le Corbusier** est à la fois œuvre d'art total et archétype de la cellule minimum, fondée sur une approche ergonomique et fonctionnaliste absolue.

Situé sur le sentier du bord de mer, au cœur d'un site exceptionnel où l'on découvre également la villa E1027 dessinée par Eileen Gray et Jean Badovici, c'est une modeste construction en bois, recouverte d'un bardage de croutes de pin et d'un toit à une pente. Tout tient dans une cellule carrée de 3,66 x 3,66 mètres et de 2,26 mètres de hauteur, mesures empruntées au Modulor. L'intérieur, entièrement réalisé en bois est éclairé par deux fenêtres de 70 centimètres de côté. Dans une surface de 15 m², Le Corbusier dispose d'un coin-repos, d'un coin-travail, d'un coin-toilettes et d'un lavabo. Le mobilier se réduit à un couchage, une table, et quelques rangements. Le Corbusier peint le sol en jaune et les panneaux du plafond en vert et en rouge ; en juillet 1956, il agrmente l'entrée d'une peinture murale, seul luxe avec la vue sur la baie de cette « cabine de bateau ».

Le Cabanon représente l'aboutissement d'une recherche sur la notion de celle minimum qui se situe au cœur des préoccupations des architectes modernes du XX^e siècle et renoue avec le mythe de la cabane primitive. Elevé au rang d'œuvre d'art, il fait paradoxalement écho aux initiatives d'auto-construction ou d'habitat vernaculaire qui se multiplient à l'échelle de la planète.

En 1954, Le Corbusier monte à l'extrémité du terrain, à l'angle opposé du Cabanon, une baraque de chantier qu'il baptise « chambre de travail ».

Les espaces extérieurs sont progressivement investis par Le Corbusier – petites plantations, douche extérieure équipée d'un simple tuyau d'arrosage, etc.

Cinq *Unités de camping*, offertes à Thomas Rebutato, propriétaire du terrain du Cabanon, viendront compléter le site en 1957.

Mise en œuvre du plan de gestion :

Le comité de Roquebrune-Cap-Martin est en cours de création. Les questions d'actualité concernent d'une part l'extension de protection des unités de camping (Etoile de mer, baraque-atelier), d'autre part le problème de suivi de conservation des peintures murales notamment, d'E-1027 (zone tampon). Le gestionnaire a mis en place un système pour cacher la *peinture de la toilette complète*. Cette protection pose des problèmes de conservation. En même temps, la copie des années 1970 de la *peinture sous les pilotis* a été supprimée (avec le mur de doublage). La Fondation LC a refusé la demande du gestionnaire de réaliser une nouvelle copie.

Les fiches actions présentées dans le plan de gestion concernant la villa Giori (achat, mise en place d'un gardiennage, lieu d'accueil, etc.) ne sont plus d'actualité. En revanche, ont été réalisés les travaux pour l'espace d'accueil et d'exposition à la gare Cabbè.

Enfin, les Unités de camping ont fait l'objet d'une restauration.

COUVENT SAINTE-MARIE-DE-LA-TOURETTE ÉVEUX (69), 1953



Couvent Sainte-Marie de la Tourette, Eveux-sur-l'Arbresle, France, 1953.
Photo : Olivier Martin-Gambier 2004 © FLC/ADAGP, 2017

Présentation du site

Le **Couvent Sainte-Marie de La Tourette** est une synthèse unique d'acquis du Mouvement Moderne, où se combinent formes puristes, textures brutalistes et solutions révolutionnaires en matière d'habitat.

Construit sur un plan carré en forme de « U » fermé au nord par le vaisseau de l'église, le couvent s'inspire directement des modèles cisterciens. Implanté sur un terrain fortement incliné, il prend, selon l'expression de l'architecte, « son assiette » sur le haut du vallon et compose avec la déclivité grâce aux pilotis. Depuis le chemin qui court sur la crête du vallon, on accède directement au troisième niveau du bâtiment qui en compte cinq. Au-dessus de cet étage d'accueil, consacré à l'étude et aux séminaires (bibliothèque et salles de travail), se trouvent les niveaux 1 et 2 exclusivement réservés aux cellules des moines. Une terrasse accessible, reliée au toit de l'église par une passerelle, est recouverte d'une mince couche de terre isolante. Les niveaux 4 et 5 situés sous l'étage d'accueil sont tronqués par la pente du terrain. Le niveau 4, consacré à la vie collective de la communauté (réfectoire, chapitre, atrium), est desservi par deux larges couloirs qui dessinent une croix au cœur de la cour. Ces espaces de circulation, dénommés « cloître », conduisent également à l'église.

Le niveau le plus bas, le cinquième, directement posé sur le sol, se réduit à deux corps de bâtiment séparés : sous le réfectoire, la cuisine et une salle commune, et sous l'église, les caves. Un escalier hélicoïdal, enveloppé dans une tourelle extérieure, relie directement l'aile des séminaires au réfectoire du niveau 4 et à la cuisine du niveau 5.

L'église constitue l'aile septentrionale indépendante du reste du couvent. Elle se présente sous la forme d'une simple « boîte » de béton brut, couverte d'un toit-terrasse accessible depuis l'aile occidentale par une passerelle. À l'intérieur, règne le plus grand dépouillement. Quelques

marches séparent le chœur des stalles en bois et béton. Trois « canons à lumière » diffusent dans la chapelle nord adjacente dite en « oreille » une lumière colorée par la peinture des murs (bleu-jaune-rouge).

La lumière y est un matériau au service d'une exceptionnelle innovation spatiale. Le Corbusier y déploie toute une palette de dispositifs de contrôle de la lumière naturelle qui sculptent l'espace et les volumes : canon à lumière, mitrailleuse à lumière, rai de lumière, loggia, et les pans ondulatoires, dispositif inventé et utilisé pour la première fois ici, avec Iannis Xénakis.

Mise en œuvre du plan de gestion

Le couvent de la Tourette a fait l'objet d'une restauration importante achevée en 2012. 7,2 M€ ont été investis sur cette opération entre 1993 et 2011, dont 2,71 ME de la DRAC.

Le monument est attentivement suivi par le chef de l'UDAP du Rhône, qui s'est rendu sur place le 27 juin 2017. Des travaux d'entretien sont à prévoir suite à des problèmes d'étanchéité, pour lesquels des crédits de la DRAC sont prévus en 2017 et 2018.

La mise en œuvre du plan de gestion préparé en vue de la candidature UNESCO fera l'objet d'une réunion du comité de suivi le 28 novembre 2017. On peut d'ores et déjà signaler que le cheminement piétonnier a été réalisé, que le travail sur la charte paysagère s'engage, et que la signalétique a été mise en place sur les routes départementales ainsi que sur l'A89.

MAISON DE LA CULTURE DE FIRMINY-VERT FIRMINY (42), 1953-1965



Maison de la Culture, Firminy, France, 1953.
Photo : Olivier Martin-Gambier 2008 © FLC/ADAGP, 2017

Présentation du site

La **Maison de la Culture de Firminy**, programme innovant issu des concepts de la *Ville Radieuse* et de la *Charte d'Athènes*, anticipe les formes sculpturales modernes en architecture.

Une seule solution formelle a prévalu tout au long de la genèse du bâtiment, celle d'un édifice sculptural oblong qui s'étire, du nord au sud, sur 112m. L'originalité du parti se lit particulièrement bien en coupe où les lignes inclinées des façades et l'élégante courbe de la toiture s'inscrivent dans un trapèze inversé. L'élan et le dynamisme exceptionnel qui se dégagent de cet édifice sont amplifiés par son implantation le long de la ligne de crête de la falaise d'une ancienne carrière où par ailleurs est installé un stade.

L'image de l'Acropole d'Athènes si prégnante chez Le Corbusier s'impose ici comme une référence évidente pour la mise en situation de ce temple de la jeunesse et de la culture. Le Corbusier évoque une « composition paysagère ».

Les pans ondulatoires, imaginés et conçus avec Iannis Xenakis, ajoutent à la façade ouest un effet vibratoire qui accentue le dynamisme général des formes de l'architecture et du paysage. La polychromie contribue à donner du rythme à cette façade dessinée et sculptée comme une composition musicale contemporaine ou un tableau de l'abstraction géométrique.

L'espace intérieur largement ouvert sur deux niveaux permet d'apprécier la courbe de la toiture ainsi que l'inclinaison des façades, en particulier à l'ouest où la pente est mise à profit pour installer les gradins de la salle de spectacle et de l'auditorium.

L'ossature est constituée de portiques transversaux en béton armé, distants de sept mètres. L'originalité technique de l'édifice tient pour beaucoup à sa toiture courbe qui lui donne un caractère

sculptural. Mise au point par l'entreprise de gros-œuvre Stribick, c'est une solution hardie utilisant des dalles *Celium* posées, en voûte inversée, sur 132 câbles groupés par deux.

Mise en œuvre du plan de gestion

En mai 2016 a été nommée une nouvelle directrice du site Le Corbusier, Géraldine Dabrigeon. Le poste relève à la fois de l'Office du tourisme (Saint-Etienne Métropole) et de la Ville de Firminy, ce qui en facilite la gestion. En mars 2016, une nouvelle responsable du patrimoine à la Ville a par ailleurs été désignée, Cendrine Sanquer. Ces deux personnes forment une équipe compétente et dynamique, et travaillent en complémentarité.

La restauration de la Maison de la culture, inscrite au patrimoine mondial, achevée très récemment, a mobilisé, de 2009 à 2012, 4,2 M€, dont 1,7 M€ de subvention de la DRAC. *(Pour mémoire, la restauration du stade est en cours, et a mobilisé depuis 2014 3,32 M€, dont 1,35 M€ de la DRAC. Deux tranches supplémentaires sont prévues en 2018 et 2019 pour un coût total de 1,7 M€ dont 0,68 d'aide de la DRAC).*

La mise en oeuvre du plan de gestion préparé en vue de la candidature UNESCO fera l'objet d'une réunion du comité de suivi le 28 novembre 2017. De nombreuses actions ont d'ores et déjà été réalisées, notamment :

- * la transformation de la ZPPAUP en AVAP
- * l'installation d'une signalétique directionnelle, de panneaux autoroutiers et de mobilier d'interprétation
- * la création d'une identité graphique
- * la création d'un nouveau site Internet
- * la mise en place d'une programmation importante en vue de la sensibilisation des habitants et des usagers (subvention DRAC 2017 pour un ensemble d'actions = 10 000 €)
- * création et diffusion d'une carte Ambassadeur.

D'autres projets sont bien engagés, tel le partenariat avec l'Université et un projet de centre d'interprétation. Il convient de signaler enfin que le site de Firminy a obtenu en 2017 de la Région le label Grand site touristique, doté d'une enveloppe financière globale de près de 5 M€.

ASSESSMENT OF IMPACT OF DEVELOPEMENT AND RENEWAL FOR CAPITOL COMPLEX,

ISSUES	REMEDIAL OPTIONS	POSSIBLE POSITIVE IMPACT	POSSIBLE NEGATIVE IMPACT	SUGGESTED RECOMMENDATIONS
1.1.1. EVALUATING EXISTING SITE PROPOSALS AND VISIONS				
CURRENT MANAGEMENT AND USE OF SITE	The current trend of adding on the structures needs to be checked considering the authenticity and nature of OUV of the site, thus, keeping the identity and character intact.	The Site would correspond to the adjacent landscape elements like Hill-line and designed fabric along with retaining the basic campus design by Le Corbusier intact.	Not adhering to the prescribed design language would create chaos and alienated design language which would go against the OUV and hence against the identity of Capitol Complex on whole.	Strict Site development regulations have to be put in place along with prescribed or suggestive design approached for the growing needs.
SITE CIRCULATION	The documented site circulation provides an idea about grown needs of accessibility and approach considering the vehicular and pedestrian accessibility ration. The site needs to place a system into practice where over use of streets by vehicular traffic can be regulated following the original scheme of accessibility.	The increasing load on the existing streets, path and plazas along with vacant landscape would reduce and the system would ensure to combat with overburden onto the accessibility infrastructure.	Not adhering to the situation would require more encroachment of the open spaces and chaotic environment due to increasing vehicles. The vehicular usage would also be promoted due to the very same reason and this would encourage traffic congestion acquisition of landscape area for utility uses.	Segregating the purpose of visits and destinations further more and adding the hierarchal approach to permit vehicular use and provide more public accessibility through adding shuttles and comfortable pedestrian pathways might lead to a positive impact.
SECURITY INFRASTRUCTURE	Including modern generation security infrastructure like CCTV's , Radars, Laser checks, etc would reduce the dependency on human force and thus their required infrastructure for them.	Around 1300 military or paramilitary security personnel are employed on the site with the supporting infrastructure. Shifting the emphasis more on modern technology and equipments would reduce the load and chaos.	More security cabins and overlapping of different security authorities at common spots is creating a chaotic and ambiguous channel of the infrastructure allocation. Moreover, the accommodation issues also acquire a huge area encroaching open space.	Modern system of vigilance and security would reduce spatial and volumetric insertions into the site as these systems are compact. It requires a centralised office area which can be made consolidated at a place or in fragments preventing from spread of multiple spots all over.

PARKING	It is one of the most important requirement and threat to Capitol Complex. Growing uses and functions need more parking spaces in the campus. Proper systems and accessibility infrastructure can support the convenience of the visitors but encroached and over utilised open spaces can't retain the OUV of the site, Hence, making the site immune from further encroachment is required urgently.	It will directly keep the OUV of the site and buffer intact and would reduce the impact footprints on other elements like landscape, crowd management, etc.	The prevention would require a strict system or restriction from the side of administration to prevent accessibility of unwanted vehicles into the premise.	A multi level parking is proposed but should strictly correspond to the development guidelines (or sensitivity towards maintaining OUV). Administration should include better public transport to the site making it easier for the employees to choose public transport over private medium. Parking spots can be identified further away from the buffer and minor transportation from the spots to the site can be arranged in form of ecologically sensitive vehicles.
SPATIAL AND VISUAL INTEGRITY	As the primary requirement, the site requires a spatial and visual integrity. The site Masterplanning and arrangement have been done with predefined principles making it inevitable to do the further development (If require) adhering to it. The factors like Golden Ratio & proportion and importance to the hills in the backdrop are few of such considerations.	It will arrest the damage both to fabric and visually, improve maintenance and enhance the character of the heritage site. The site is a World Heritage Site decided and chosen with some principle which includes keeping the integrity of the site intact. HCC takes care of further developments and infrastructure advancements which should take care of the factor discussed.	Haphazard construction, inappropriate addition and unplanned circulation are very strong threats to the OUV and thus would lead to losing the integrity of the site.	Putting the site regulations and design guidelines. Careful site movement and circulation planning Keeping the material palette intact Setting various structures free from encroachment and retaining the original functions Isolating and making the green zones immune and designating no construction zones.
VISITORS AND TOURIST INFRASTRUCTURE	With growing numbers of Visitors and increase in awareness of people towards visiting Capitol complex as a tourism	It will improve the site conditions and would cater to the needs of the visitors. The similar would also correspond to the better	The introduction needs to be sensitive as not to disturb the architectural and landscape lexicon of the site and should correspond to the	Direct accessibility from the proposed metro and better public roadway system discouraging the use of private vehicles.

	site, the adequate visitor infrastructure has to be given.	disaster management strategies as the visitors are counted into being.	homogeneity.	Universal accessibility and secured pedestrian movement. The site is not used at night, so site illumination need not to be given much importance as compared to other basic infrastructures like water drinking spots and resting places.
NAVIGATION & INFORMATION	Another biggest problem on the site is the absence of signage scheme and navigation. A legit and contextual signage scheme needs to be implemented which would include navigation as well as information about various structures and zones. It would regulate traffic, movement and would help easier awareness among tourists.	It would improve navigation. It would lead to more awareness and information within tourists and visitor leading to less ambiguous circulation. It would make people aware about various structures and other relevant information about them.	No signage scheme would create and does create a chaotic and ambiguous movement pattern. Various signage plates and hoardings are being put with no common lexicon or design leading to an undesirable situation of clumsy campus. There is no information about any structure or the locations present on the site. These structures need introduction and only reference tourists do have are brochures and pamphlets.	Introducing a singular scheme of signage for information and navigation. Regulating the circulation pattern through managed signage scheme and avoiding overlapping of spots.
INCOMPLETE STRUCTURES	The structures like Geometrical Hill, Martyrs Memorial should be competed strictly as per the original design and need to be assigned with informative interface so as to create awareness about them.	Original designs would be implemented adding on to the touristic spots to the site.	Capital investment.	It should be strictly considered to follow the original design and material with NO addition to it other than signage and illumination.
LANDSCAPE AND PLANTATION	The site requires a strict check on inappropriate landscape schemes implemented and encroached spaces.	It would keep the integrity of the site intact and would prevent expansion of service packages as per convenience.	A strict check has to be put and ensured that restrictions have to be followed. With this pace of space consumption, original flora would deplete.	Designating green areas as Green Belts with no construction and botanical alterations without HCC reviewing the impact and proposal.

Indicateurs de suivi - Maisons de la Weissenhof-Siedlung

Elément constitutif du Bien		Valeur universelle exceptionnelle						
		Critère II	Critère VI			Authenticité	Intégrité	Protection et gestion
		Attribut A	Attribut B	Attribut C	Attribut D			
		Susciter un exceptionnel débat d'idées à l'échelle mondiale	Inventer une nouvelle esthétique et un nouveau langage architectural	Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société			
Maisons La Roche et Jeanneret								
Petite villa au bord du lac Léman								
Cité Frugès								
Maison Guiette								
Maisons de la Weissenhof-Siedlung	Manifestation de l'attribut	Images iconiques d'une nouvelle architecture du logement, située dans la Weissenhof-Siedlung de Stuttgart où se cristallise la lutte de la modernité contre la tradition observée dans le monde entier	Illustration particulièrement pure des « Cinq points ». Maison individuelle : application exacte du modèle Citrohan. Maisons jumelées : espaces flexibles selon le modèle de la « maison transformable ».	Application manifeste du schéma Dom-Ino, fabrication rationalisée des éléments du second œuvre.	Les maisons sont deux modèles exceptionnels d'habitat en série pour le plus grand nombre ; elles connaissent un impact planétaire par l'écho international que reçoit la manifestation consacrée au thème du logement.	Authenticité de haut degré après restauration profonde en 1983-84 et élimination des transformations entreprises dès 1933. Maisons jumelées : Proportions originales et rétablissement de la situation originaux (Rathenau-str. 3) après restauration 2002 – 2006 sur la base de recherches approfondies.	Permanence de la fonction d'origine et respect de la configuration d'origine. La maison individuelle est toujours une maison d'habitation.	Composante d'un secteur sauvegardé de grande importance (Sachgesamtheit von besonderer Bedeutung) en vertu du § 12 de la Loi sur la protection des Monuments historiques (Denkmalschutzgesetz Baden-Württemberg – DSchG)
	Objet du suivi (mesurande)	1.) Etat de conservation des maisons de Le Corbusier dans le cadre de la conservation de l'ensemble de la Weissenhof-Siedlung :. 2.) Valorisation du Bien :	Etat de conservation et maintien des proportions des façades et de l'aménagement intérieur	Maintien des éléments de construction, en particulier l'ossature et les placards et meubles encastrés.	Conservation du plan et de la conception spatiale : le modèle Citrohan constitué par séjour à deux niveaux avec mezzanine. Maison jumelées : espace flexible à aménager aux fonctions diurnes et nocturnes.	Etat de conservation des éléments et matériaux originaux..	Maintien de la configuration d'origine	1) Qualité des décisions de conservation sur la base de recherches scientifiques (banque de données etc.) 2.) Protection de la zone tampon
	Indicateur	1.) Photos de l'extérieur et de l'intérieur 2.) Nombre de visiteurs du musée Weissenhof, relevé des activités d'information (débat, brochures, expositions etc)	Photos de l'extérieur et de l'intérieur Minutes of the regularly meetings with the representatives of the monument protection authorities, proprietors and	Photos de l'extérieur et de l'intérieur Minutes of the regularly meetings with the representatives of the monument protection authorities, proprietors and	Photos de l'extérieur et de l'intérieur	Photos de l'extérieur et de l'intérieur	Photos de l'extérieur et de l'intérieur	1.) Nombre de réunions de la Table ronde Weissenhof 2.) Nombre de demandes d'approbation et décisions des autorités locales

			other stakeholders (Round table Weissenhof)	other stakeholders (Round table Weissenhof)				
Villa Savoye et loge du jardinier								
Immeuble Clarté								
Immeuble locatif à la Porte Molitor								
Unité d'habitation à Marseille								
La Manufacture à Saint-Dié								
Maison du Docteur Curutchet								
Chapelle Notre-Dame-du-Haut								
Cabanon de Le Corbusier								
Complexe du Capitole								
Couvent Sainte- Marie-de-la-Tourette								
Musée National des Beaux-Arts de l'Occident								
Maison de la Culture								

Valeur universelle exceptionnelle - MAISON CURUTCHET _ La Plata _ ARGENTINA							
	Critère II	Critère VI	Critère VI	Çritère VI			
	Atribut A	Atribut B	Atribut C	Atribut D	Authenticité	Intégrite	Protection et gestion
Serie	Susciter un exceptionnel debat d'idéas á l"echelle mondiale	Inventer una nouvelle esthé tique et un nouveau langage architectural	Moderniser les techniques architecturales et prendre en comte les défis de la production en série, de la standardisation et de l'industrialisation	Répondre aux besoins sociaux et humains de l'homme moderne á travers la recherche d'un équilibre entre ;individu et la société			
Maison du Docteur Curutchet	Témoigne l'internationalisation de l'architecture moderne	Redéfinition et échéance de 5 points. "Promenade architecturale" crée une perspective visuelle variée et des situatios spatiales dynamiques	Modulor dans les proportions de la maison et des éléments architecturaux. Système innovants d'éclairage. Systé me de ventilation	Exemple représentatif du « mode de vie moderne», qui articule le logement et le lieu de travail (cabinet médical)	il n'y a su aucun changement dans son suthentiché tant dans la conception et dans sa metérialité	Il n'a pas été modifié ou á risque dáltération	Cree Site Comité de la Mansion Dr. Curutchet et sanctionnée par decret municipal extension de la zone de protection, buffer. Objet class e au nivel municipal, provincial, national. Toute intervention est soumise á l'examen des
Indicateurs	Etat de l'aménagement interieur d'habitation. Photos. a. inchange b. altéré en partie c. échangé (indicateur qualitalif)	Matérialisation et forme des facadés. Photos. a. inchangé b. altéré c. remplacé (indicateur qualitatif)	Polychromie intérieure. Photos. a. maintenue b. remplacée c. remplacée (indicateur qualitatif) la fenêtre en longueur photo a. conservée b. alterée	Relación objet-paysage Situation de la maison dans son cadre, la maison et la nature eh harmonie. Photos a. inchangée b. altérée			Pression liée au dé veloppement. Demandes d'approbation des plans trait ées chaque année par les autorités locales, provinciales y nacionales. a. sur l'objet b. dans la zone tampon (indicateur quantitatif,
	Nombre et enregistrement des travaux de réparation et d'enregistrement photographique. -.	Number and records of repair work and photographic recording. - Modification des couleurs et des matériaux d'origine. - Modification et modification dans les 5 points, en particulier en plan ouvert, terrasse jardin et fenêtre de course	Nombre et enregistrement des travaux de réparation et d'enregistrement photographique. -. - a. Dimension des membres basée sur Modulor - b. Extension ou altération du bâtiment c. Contrôle de la ventilation transversale d. Contrôle de l'éclairage naturel	Nombre et enregistrement des travaux de réparation et d'enregistrement photographique. -. Surveillance par rapport aux utilisations initiales de la consultation du logement. Des domaines d'interpré tation fonctionnelle seront mis en place. En dé veloppement.	Number and records of repair work and photographic recording. Ils seront pris en compte dans le plan de gestion intégrale. En développement.	Suivi du développement inapproprié dans la zone tampon. Mise à jour de la zone tampon du code d'ordonnance urbaine en tant que zone de protection spé ciale. En développement.	Surveillance de la pression touristique. a. Le nombre de visiteurs (exposition permanente, exposition spéciale, individuel, groupe, général, collégien, universités) b. Dommages accompagnant une augmentation de la diminution des visiteurs Suivi des dégats par catastrophe naturelle (inondation) Contrôle et autorisation de l'intervention dans le Maison Curutchet comme en la zone

Critère – Attribut	Manifestation de l’attribut	Objet du suivi	Indicateurs
II – A Susciter un exceptionnel débat d’idées à l’échelle mondiale.	Témoignage de l’internationalisation de l’architecture moderne.	Valorisation du Bien à niveau national et international	• Relevé quantitatif et qualitatif des visiteurs de la Casa Curutchet. • Relevé des activités qu’y se déroulent (débats, expositions etc.). • Relevé de la promotion du Bien faite à niveau national et international.
VI – B Inventer une nouvelle esthétique et un nouveau langage architectural.	Redéfinition et échéance des « Cinq points ». 1. Pilotis 2. Toit-terrasse 3. Plan libre 4. Fenêtre en bandeau 5. Façade libre	État de conservation et maintien de la structure, des formes et des proportions, des façades et de l’aménagement intérieur.	• Photos de l’extérieur et de l’intérieur.
	"Promenade architecturale" crée une perspective visuelle variée et des situations spatiales dynamiques.		
VI – C Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l’industrialisation.	Utilisation du Modulor dans les proportions de la maison et des éléments architecturaux.	État de conservation et maintien de la structure, des formes et des proportions, des façades et de l’aménagement intérieur.	
	Système innovant d’éclairage : fenêtre en longueur.	État de conservation et maintien de la structure, des formes et des proportions.	
	Polychromie intérieure.	Maintien des couleurs.	
VI – D Répondre aux besoins sociaux et humains de l’homme moderne à travers la recherche d’un équilibre entre l’individu et la société.			
Protection et gestion.	Comité de Site Casa Curutchet, conformé par : la Commission Nationale de Monuments, Biens et Lieux Historiques ; la Direction Régionale de Musées et Conservation du Patrimoine ; la mairie de la ville de La Plata ; ICOMOS Argentine ; le Centre International pour la Conservation du Patrimoine (CICOP) Argentine ; la Faculté d’Architecture de l’Université de La Plata ; le Conseil Supérieur de l’Ordre d’Architectes de la Région de Buenos Aires.	Qualité des décisions de conservation sur la base de recherches scientifiques (banque de données etc.)	Rapports périodiques du Comité de Site casa Curutchet.
	La zone tampon a été élargie.	Protection de la zone tampon.	Demandes d’approbation des plans dans la zone tampon et décisions des autorités locales.

Le suivi précédent permettra évaluer le degré de :

Authenticité	Aucune modification de structure, formes, proportions, couleurs ou matériaux originaux a eu lieu.
Intégrité	Les attributs et caractéristiques possédant une valeur universelle sont complets et conservés en bon état.

Développement d'indicateurs et calendrier de mise en œuvre

Les indicateurs sont censés mesurer le maintien de la valeur universelle exceptionnelle du bien. Celle-ci s'établit en corrélation avec les critères, en répondant aux conditions d'authenticité et d'intégrité, ainsi qu'en disposant des structures et processus de protection et de gestion adéquats.

Dans le tableau ci-dessous, les éléments constitutifs de la série sont présentés avec leur contribution individuelle à la VUE de la série dans son ensemble, sur la base des attributs qui comportent la valeur, et les éléments par lesquels se traduisent les attributs dans chaque élément constitutif. Ce sont ces éléments qui nécessitent un suivi, ce qui permet de « mesurer » une éventuelle dégradation de la VUE de manière clairement définie. Toutefois, une telle dégradation (altération d'éléments de construction, problèmes d'état de conservation dans son ensemble, impacts négatifs dans la zone tampon, voire le contexte de l'élément constitutif), ne devraient en principe pas se produire, compte tenu de la protection légale et du suivi administratif et qualitatif dont bénéficient tous les éléments. Afin de pouvoir mesurer également une éventuelle pression dans ce sens, par exemple de transformation de l'élément lui-même, ou de développements dans ses abords ou de sa situation, un indicateur est proposé qui mesurera les demandes d'approbation de plans sur l'objet/dans sa zone tampon.

Les indicateurs proposés sont nombreux. Il est prévu de mettre en œuvre tous les indicateurs dans le courant de 2016, afin de disposer d'une base commune pour le bien sériel dans son ensemble.

MAISON GUIETTE	Valeur universelle exceptionnelle de la série « L'œuvre architecturale de Le Corbusier – une contribution exceptionnelle au Mouvement moderne »							
	Critère I	Critère II	Critère VI	Critère VI				
	L'œuvre architecturale de Le Corbusier représente une création majeure du génie humain qui, grâce à l'ensemble des dix-sept sites, apporte une réponse exceptionnelle à certains enjeux fondamentaux de l'architecture et de la société au XXe siècle.	Attribut A Susciter un exceptionnel débat d'idées à l'échelle mondiale	Attribut B Inventer une nouvelle esthétique et un nouveau langage architectural	Attribut C Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Attribut D Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société	Authenticité	Intégrité	Protection et gestion
Manifestation de l'attribut		La Maison Guiette représente les idées du Pavillon de l'Esprit Nouveau. L'aménagement intérieur de la maison-atelier a été préservé en majorité. Elle comprend des espaces habitables trois niveaux, un atelier situé sur le nord, et un toit-terrasse.	Une application avancée du purisme, la Maison Guiette présente une approche sculpturale de l'espace ainsi qu'une polychromie étudiée. Malgré les dimensions plutôt modestes de cette maison jumelée, elle est caractérisé par la promenade architecturale (escalier central reliant les étages, éléments architecturaux sculpturales, fenêtres en longueur, ...).	La Maison Guiette est une maison individuelle inspirée des principes de la machine à habiter du modèle Citrohan. Elle représente également la typologie de la maison-atelier, ouverte sur plusieurs niveaux. Conçu suivant les principes des cinq points d'une architecture nouvelle, le projet réalisé a connu quelques adaptations (système de construction hybride maçonnerie/béton, élimination des pilotis pour avoir un séjour avec accès directe au jardin, ...)		L'authenticité de la maison Guiette est de haut niveau. Les interventions mineures se situent aux niveaux suivants : - des problèmes au niveau de l'étanchéité de la façade font que celle-ci est recouverte d'un revêtement d'ardoises. Celui-ci n'est enlevé qu'au moment de la restauration de la Maison Guiette en 1987. A ce moment-là, un crépi isolant de couleur blanche est posé. - Au cours de cette restauration, les châssis métalliques complètement	Permanence de la fonction d'origine et respect de la configuration d'origine. La maison Guiette est toujours une maison privée avec un atelier d'artiste.	Monument classé au niveau régional, ce qui fait que toute intervention est soumise à l'accord de l'agence du patrimoine de Flandre.

						dégradés ont été remplacés. - La polychromie intérieure a été reconstruite au cours des années 2000		
Objet de suivi		1. Etat de conservation des façades et de l'aménagement intérieur de la maison	2. Matérialisation et forme des façades	3. Polychromie intérieure 4. La fenêtre en longueur			5) Maintien de la fonction d'origine	6. Pression liée au développement :
Indicateurs		1) Photos de l'extérieur et de l'intérieur. a. inchangé b. altéré en partie c. échangé (indicateur qualitatif)	2) Photos de l'extérieur et de l'intérieur. a. inchangé b. altéré c. remplacé (indicateur qualitatif).	Voir 1) 3) Photos de l'intérieur. a. maintenue b. altérée c. remplacée (indicateur qualitatif) 4) Photos de l'extérieur a. conservée b. altérée c. remplacée (indicateur qualitatif)	Voir 1)	Voir 1), 2), 3), 4)	5) évaluation de la fonction d'origine a. inchangé (habitation + atelier) b. changé – disparition d'une des deux fonctions d'origine (habitation ou atelier) c. changé – disparition complète de la fonction d'origine (indicateur qualitatif)	6) Demandes de permis de construire et d'approbations dans la zone tampon (indicateur quantitatif)

Critère II

"Comment la série prise dans son ensemble a une influence exceptionnelle"

Attribut A : susciter un exceptionnel débat d'idée à l'échelle mondiale

Pour l'usine Duval : prototype de la ville verte

proposition d'indicateur de suivi par la DRAC : intégrer dans le SPR en cours de constitution des prescriptions spécifiques sur l'environnement urbain et paysager, en particulier sur les cones de vue.

Attribut B : inventer une nouvelle esthétique et un nouveau langage architectural

Pour l'usine Duval : un des tous premiers exemples d'architecture brutaliste

proposition d'indicateurs de suivi par la DRAC :

- état de l'aménagement de la dalle en grès rose sous pilotis (photos en 2017 et 2025 : inchangé, modifié, échangé)

- relevé sommaire des peintures sur plafond et des revêtements de sol (réalisé en 2017 et mis à jour en 2025 : inchangé, modifié, échangé)

Critère VI

"Comment les réalisations reflètent ces idées"

Attribut C : moderniser les techniques architecturales

Pour l'usine Duval : 1ère application du brise soleil.

Proposition d'indicateur par la DRAC : état des façades par relevé photo en 2017 et 2025 (inchangé, modifié, échangé)

Attribut D : répondre aux besoins sociaux

Pour l'usine Duval : modèle d'usine verte améliorant les conditions de travail

proposition d'indicateur de suivi par la DRAC :

réalisation en 2017 d'un schéma fonctionnel de l'organisation interne de

l'usine, mis à jour en 2025 (inchangé,
modifié, échangé)

Cité Frugès Patrimoine Mondial

Indicateurs de mesure de préservation de la VUE

le 16 octobre 2017

ATTRIBUT A : SUSCITER UN EXCEPTIONNEL DEBAT D'IDEES (critère ii)

Attribut A1: Maisons ouvrières conçues comme des œuvres d'art:

- 1 - Suivi de l'évolution du quartier (évaluation à l'échelle urbaine) :
 - Observatoire photographique du quartier en vue aérienne et en 3D: campagne de photos aériennes. Fréquence: tous les 4 ans (BORDEAUX MÉTROPOLE).
 - Observatoire photographique du paysage urbain: campagne photos des principales perspectives urbaines. Fréquence: tous 3 ans (VILLE DE PESSAC).
 - Reportage photographique des chantiers de restauration des immeubles protégés au titre des monuments historiques (DRAC).
- 2 - Suivi statistique des travaux (évaluation à l'échelle de l'unité architecturale) :
 - Observatoire photographique: campagne photos des 50 immeubles. Fréquence: tous 3 ans (VILLE DE PESSAC).
 - Statistiques des autorisations d'urbanisme. Fréquence annuelle (DRAC, tableau GESTAURAN).
 - Statistiques des travaux sur monuments historiques. Fréquence: annuelle (DRAC, tableau AGREGE).
 - Statistiques des travaux de voirie. Fréquence: annuelle (BORDEAUX MÉTROPOLE).
- 3 - Suivi des usages (évaluation sociologique, authenticité de l'occupation d'origine) :
 - Statistiques des types d'occupation du sol (résidence principale, location touristique, location, bailleur social). Fréquence annuelle (VILLE DE PESSAC).
 - Statistique des actions de valorisation et de recherches liées aux usages (études architecturales et urbaines, expositions, conférences...). Fréquence annuelle (VILLE DE PESSAC).
 - Statistiques de fréquentation. Fréquence annuelle (VILLE DE PESSAC).

Attribut A2: Tentative de taylorisme et d'industrialisation:

- 4 - Évolution des connaissances:
 - Etat des lieux des éléments de second œuvre des 50 immeubles (DRAC)
 - Bilan des recherches sur l'expérimentation des techniques d'industrialisation. Fréquence annuelle (VILLE DE PESSAC + DRAC).
 - Identification des ressources industrielles : banques de détails, fabricants, rééditions (VILLE DE PESSAC/DRAC/Fondation Le Corbusier).
- 5 - Suivi de l'état de conservation des éléments industrialisés (menuiserie, second œuvre...) (évaluation à l'échelle du détail) :
 - Reportage photographique des chantiers de restauration des immeubles protégés au titre des monuments historiques. Fréquence: annuelle (DRAC).
 - DDOE des chantiers de restauration des éléments industrialisés. Fréquence: annuelle (DRAC).

ATTRIBUT B : INVENTER UNE NOUVELLE ESTHETIQUE (critère vi)

Attribut B1: Application de la polychromie puriste à l'échelle urbaine:

- 6 - Observation de l'application de la polychromie puriste à l'intérieur et à l'extérieur des immeubles:
 - Reportage photographique des chantiers de restauration des immeubles protégés au titre des monuments historiques. Fréquence: annuelle (DRAC).
 - DDOE des chantiers de restauration des surfaces colorées (enduits de façades, cloisons intérieures...). Fréquence: annuelle (DRAC).
 - Identification des ressources industrielles : enduits et peintures (VILLE DE PESSAC/DRAC/Fondation Le Corbusier).).
- 7 - Évolution des connaissances:
 - Bilan des recherches sur l'utilisation de la polychromie puriste intérieure et extérieure. Fréquence

annuelle (VILLE DE PESSAC + DRAC).

Attribut B2: Innovation spatiale des surfaces minimum:

8 - Suivi de l'état de conservation des intérieurs:

- Reportage photographique des espaces intérieurs des chantiers de restauration des immeubles protégés au titre des monuments historiques. Fréquence: annuelle (DRAC).
- DDOE des chantiers de restauration des intérieurs MH. Fréquence: annuelle (DRAC).

9 - Évolution des connaissances et des usages:

- Bilan des recherches sur les aménagements intérieurs. Fréquence annuelle (VILLE DE PESSAC + DRAC).
- Observation de l'évolution des usages (ENSAPB?)

ATTRIBUT C : MODERNISER LES TECHNIQUES ARCHITECTURALES ET PRENDRE EN COMPTE LES DEFIS DE LA PRODUCTION EN SERIE, DE LA STRANDARDISATION ET DE L'INDUSTRIALISATIONS (critère vi)

Attribut C: Façade libre, standardisation du second œuvre, canon à ciment:

5 - Suivi de l'état de conservation des éléments industrialisés (menuiserie, second œuvre...) (évaluation à l'échelle du détail) :

- Reportage photographique des chantiers de restauration des immeubles protégés au titre des monuments historiques. Fréquence: annuelle (DRAC).
- DDOE des chantiers de restauration des éléments industrialisés. Fréquence: annuelle (DRAC).

10 - Évolution des connaissances:

- Bilan des recherches sur l'expérimentation des techniques d'industrialisation. Fréquence annuelle (VILLE DE PESSAC + DRAC).

ATTRIBUT D : REpondre aux besoins sociaux et humains de l'homme moderne A TRAVERS LA RECHERCHE D'UN EQUILIBRE ENTRE L'INDIVIDU ET LA SOCIETE (critère vi)

Attribut D1: Prototype de cité standardisée dans les années 20:

5 - Suivi de l'état de conservation des éléments industrialisés (menuiserie, second œuvre...) (évaluation à l'échelle du détail) :

- Reportage photographique des chantiers de restauration des immeubles protégés au titre des monuments historiques. Fréquence: annuelle (DRAC).
- DDOE des chantiers de restauration des éléments industrialisés. Fréquence: annuelle (DRAC).

11 - Évolution des connaissances:

- Bilan des recherches sur l'expérimentation des techniques d'industrialisation. Fréquence annuelle (VILLE DE PESSAC + DRAC).

Attribut D2: Variations typologiques sur la base d'un module:

12 - Suivi de l'état de conservation des typologies (plans et façades) :

- Reportage photographique des espaces intérieurs des chantiers de restauration des immeubles protégés au titre des monuments historiques. Fréquence: annuelle (DRAC).
- DDOE des chantiers de restauration des intérieurs MH. Fréquence: annuelle (DRAC).

13 - Évolution des connaissances:

- Bilan des recherches sur les typologies modulaires. Fréquence annuelle (VILLE DE PESSAC + DRAC).

Attribut D3: Recherche pour un habitat minimum à grande échelle:

9 - Évolution des connaissances et des usages:

- Bilan des recherches sur les aménagements intérieurs. Fréquence annuelle (VILLE DE PESSAC + DRAC).
- Observation de l'évolution des usages (ENSAPB?)

L'Oeuvre architecturale de Le Corbusier

Candidature à l'inscription sur la liste du Patrimoine mondial
(France, Allemagne, Argentine, Belgique, Inde, Japon, Suisse)

Développement d'indicateurs et calendrier de mise en œuvre

Les indicateurs sont censés mesurer le maintien de la valeur universelle exceptionnelle du bien. Celle-ci s'établit en corrélation avec les critères, en répondant aux conditions d'authenticité et d'intégrité, ainsi qu'en disposant des structures et processus de protection et de gestion adéquats.

Dans le tableau ci-dessous, les éléments constitutifs de la série sont présentés avec leur contribution individuelle à la VUE de la série dans son ensemble, sur la base des attributs qui comportent la valeur, et les éléments par lesquels se traduisent les attributs dans chaque élément constitutif. Ce sont ces éléments qui nécessitent un suivi, ce qui permet de « mesurer » une éventuelle dégradation de la VUE de manière clairement définie. Toutefois, une telle dégradation (altération d'éléments de construction, problèmes d'état de conservation dans son ensemble, impacts négatifs dans la zone tampon, voire le contexte de l'élément constitutif), ne devraient en principe pas se produire, compte tenu de la protection légale et du suivi administratif et qualitatif dont bénéficient tous les éléments. Afin de pouvoir mesurer également une éventuelle pression dans ce sens, par exemple de transformation de l'élément lui-même, ou de développements dans ses abords ou de sa situation, un indicateur est proposé qui mesurera les demandes d'approbation de plans sur l'objet/dans sa zone tampon.

Les indicateurs proposés sont nombreux. Il est prévu de mettre en œuvre tous les indicateurs dans le courant de 2016, afin de disposer d'une base commune pour le bien sériel dans son ensemble.

Couvent Sainte-Marie-de-la-Tourette	Le Couvent Sainte-Marie-de-la-Tourette est une synthèse unique d'acquis du mouvement moderne, où se combinent formes puristes, textures brutalistes et solutions	Couvent Sainte-Marie-de-la-Tourette est une réinterprétation des cinq points pour une architecture nouvelle travers palette et formes primaires	Le couvent Sainte-Marie-de-la-Tourette est une utilisation en architecture à de la technique du béton précontraint, technique	Relever le défi de l'innovation passe ici par la première utilisation en architecture de la technique	Le site où le couvent de la Tourette n'a pas subi d'altération majeure depuis sa construction. L'architecte des bâtiments de	Le bâtiment et le site n'ont pas subi d'altération majeure, les moines qui résident dans le couvent depuis l'origine ont eu à coeur de préserver cette œuvre tant	Le couvent de la Tourette a conservé l'ensemble de ses dispositions originelles, tant pour la structure que pour les aménagements intérieurs.	Le couvent de la Tourette a fait l'objet d'une restauration importante achevée en 2016. Le coût de l'opération a été de 7,2 M€. Le suivi de l'entretien est assuré par l'architecte des bâtiments de France du Rhône
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révolutionnaires traitées en matière de manière d'habitat. Il brutaliste. représente également une contribution essentielle aux idées du mouvement moderne dans sa capacité à cristalliser l'une des idées majeures affirmée par les CIAM, celle de l'équilibre entre l'individuel et le collectif, idée que Le Corbusier avait également empruntée à la chartreuse d'Ema à Galluzzo, près de Florence, lors de sa visite en 1907.

de nouvelle jusqu'ici réservée aux ouvrages d'art.

France du Rhône (UDAP) veille au maintien de la qualité des abords du bien.

dans sa structure que ses aménagements.

Indicateurs annuels de suivi :
- réunion annuelle du comité technique de suivi du plan de gestion, précédée d'une visite du monument avec prise de clichés photographiques
- nombre de RV de suivi des services de l'Etat.
- nature et coût des travaux réalisés dans l'année.

Maison de la Culture de Firminy	La Maison de la Culture de Firminy est le prototype d'un équipement culturel que Le Corbusier conçoit aux pieds des immeubles de logement dans tous ses projets d'urbanisme et dans la charte d'Athènes. Au plan national, il est également le prototype de la	La maison de la culture offre une contribution exceptionnelle au renouvellement des formes et des conceptions spatiales de l'architecture moderne. Conçue au début des années soixante, en pleine orthodoxie moderne fondée sur une géométrie primaire rigoureuse, elle réoriente l'architecture moderne, par	La couverture de la Maison de la culture permet à Le Corbusier de tester une solution technique nouvelle, celle d'une toiture courbe posée sur des câbles tendus entre deux façades. Il est, avec Eero Saarinen, l'un des premiers à expérimenter cette solution génératrice	Le site où sont implantés les bâtiments conçus par Le Corbusier n'a pas subi d'altération majeure depuis l'origine. Les services de l'architecte des bâtiments de France (UDAP) veillent à un contrôle strict de tous les	La maison de la Culture a fait l'objet d'un accompagnement important de la part de la DRAC pour assurer sa conservation et le maintien de son authenticité.	La maison de la culture a conservé l'ensemble de ses dispositions originelles tant pour sa structure que ses aménagements intérieurs.	La maison de la culture est protégée au titre des monuments historiques depuis 1984. L'ensemble des interventions sont contrôlées par les services du ministère de la culture tant pour les travaux sur le bien lui-même (CRMH) que pour les travaux situés en abords (UDAP). Outre l'achèvement de l'église, la DRAC intervient sur l'ensemble des bâtiments du site qui, bien que ne faisant pas partie du bien inscrit, sont néanmoins protégés au titre des monuments
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maison de ses façades de nouvelles projets
la culture, inclinées et son formes. situés à
concept toit courbe, proximité.
inventé par vers un registre
le ministre formel
français et nouveau : celui
écrivain de d'une
renommée architecture
André sculpture. Ces
Malraux. formes
inusitées
induisent une
conception
spatiale
nouvelle
accentuée par
le fait que Le
Corbusier se
sert, à
l'intérieur, de
l'inclinaison
des parois et
de la courbe de
la toiture qu'il
laisse
apparente.

historiques et
bénéficient de
l'assistance de la
conservation des
monuments
historiques sur les
plans technique et
financier. De 2009 à
2012, la
restauration de la
maison de la culture
a représenté un
investissement de
4,2 M€, aidé par la
DRAC à hauteur de
1,7 M€.

**Indicateurs
annuels de
suivi :**
- réunion
annuelle du
comité
technique de
suivi du plan de
gestion,
précédée d'une
visite du
monument avec
prise de clichés
photographiques
- nombre de RV
de suivi des
services de
l'Etat.
- nature et coût
des travaux
réalisés dans
l'année.

indicateurs

		Valeur universelle exceptionnelle						
	Critère II	Critère VI	Critère VI					
	Attribut A	Attribut B	Attribut C	Attribut D		Authenticité	Intégrité	Protection et gestion
	Susciter un exceptionnel débat d'idées à l'échelle mondiale	Inventer une nouvelle esthétique et un nouveau langage architectural	Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société				
Unité d'habitation à Marseille	L'Unité d'habitation œuvre fondatrice du Brutalisme architectural est l'essai majeur d'un nouveau mode d'habitat fondé sur l'équilibre entre l'individuel et le collectif	Formalisation d'un courant esthétique majeur du XX°° siècle	Le Corbusier relève de nombreux défis en matière de standardisation et d'industrialisation du bâtiment.	L'UH est une réponse exceptionnelle aux besoins sociaux et humains de l'homme moderne. Elle propose un nouveau mode de vie, véritable alternative aux immeubles traditionnels de logement locatif.				
Manifestation des attributs	Elle est un chef d'œuvre d'une influence exceptionnelle sur l'histoire de l'architecture du XX° et du XXI° siècles. Elle cristallise 25 années de recherches en matière d'architecture et d'urbanisme, autant sur le plan technique, que sur le plan formel, distributif et spatial ou social, en particulier l'alliance du collectif et de l'individuel. L'Unité d'habitation est baptisée « cité radieuse », nom qui évoque à lui seul l'utopie sociale du Mouvement Moderne.	Innovation formelle mais également innovation spatiale avec la conception, pour la première fois, d'appartements en duplex traversants, emboîtés deux à deux au dessus et au-dessous d'une rue intérieure. Le Corbusier allie économie, rationalité et fonctionnalité du plan, à la générosité spatiale qui manque ordinairement dans le logement collectif.	Il s'agit d'un grand programme standard, où le type de logement est un morceau de la « Ville radieuse ». Les appartements sont des prototypes, dont chaque élément est standardisé. Ils sont indépendants de l'ossature béton. Application du Modulor	L'édifice propose de multiples équipements partagés par les habitants : rue commerçante, hôtel intégré dans l'immeuble, locaux pour des clubs, toit terrasse accessible, école maternelle, gymnase, piste de course, scène de théâtre en plein air.		- Les projets de restauration qui sont en cours ou déjà réalisés sont précédés de recherches historiques, iconographiques et stratigraphiques visant à respecter la conception de l'architecte et à retrouver l'état d'origine. - Les travaux d'entretien doivent également respecter la conception de l'architecte et l'état d'origine.	Evolution des usages, ne remettant pas en cause l'architecture des lieux. On peut noter - le gymnase transformé en centre d'art, - l'appartement n° 643 ouvert à la visite (gestion office du tourisme de la Ville de Marseille) -modifications des activités liées à certains commerces.	1 / Protection monument historique : - Les façades ; la terrasse et ses aménagements ; l'ensemble du portique et l'espace qu'il abrite ; à l'intérieur, les parties communes suivantes : le hall d'entrée, les espaces de circulation avec équipements (ascenseurs exceptés), l'appartement destiné à la visite (n°643) (cad. C4), classement par arrêté du 20 juin 1986 - Appartement 50 en totalité, y compris l'ensemble des éléments conçus pour la cuisine : classement par arrêté du 12 octobre 1995 2 / La gestion de

								l'immeuble est assurée par la copropriété. Les visites par l'office du tourisme de Marseille
Indicateurs	1 / Suivi des publications et des campagnes de communications (DRAC PACA, Ville de Marseille, conseil syndical, Fondation Le Corbusier) ; 2 / Actions de valorisation et de recherches : expositions, conférences, tournages documentaires (DRAC PACA, Ville de Marseille, Conseil syndical, Fondation Le Corbusier) ; 3 / Médiation culturelle grâce aux opérations de mise en valeur du bien, destinées, notamment, au jeune public. Travail éducatif à l'attention des scolaires dans la zone tampon (DRAC PACA, Office de Tourisme et des congrès, Ville de Marseille, conseil syndical, Fondation Le Corbusier et CAUE 13). Fréquence : annuelle.	Conservation des dispositions architecturales d'origine des bâtiments (intérieurs et extérieurs), unité d'habitation, poste de collecte, jardin, sols, notamment. Photographies générales et détails Vues aérienne si possible tous les 5 ans Fréquence : annuelle.	1 / Conservation des dispositifs techniques (chauffage, principe de collecte des ordures ménagères, traitement de l'acoustique, notamment) ; 2 / Conservation du mobilier d'origine Photos détails sur travaux (DOE), propositions et étude en cours par la DRAC et Syndic Fréquence : annuelle.	Respect de la configuration d'origine en particulier le lien avec les pratiques des espaces extérieurs et intérieurs. Photos détails sur tous travaux en cours (DOE) Par la DRAC et Syndic Fréquence : annuelle.		1 / Suivi de l'état de conservation générale de l'élément constituant le Bien, (DRAC PACA, Ville de Marseille, conseil syndical, Fondation Le Corbusier) ; 2 / Suivi des autorisations d'urbanisme dans la zone tampon (Ville de Marseille, DRAC PACA,) ; 3 / implication financière des partenaires. Fréquence : annuelle.	Evaluation des usages d'origine, concernant les parties habitations, locaux collectifs et commerciaux, associatifs, école : 1 - inchangé 2 - changé en partie 3 - disparition Fréquence : annuelle	1 / Extension de protection au titre des monuments historiques du jardin et du poste de collecte (DRAC PACA, Ville de Marseille, conseil syndical) ; 2 / Statistiques de fréquentation (Conseil syndical, office de Tourisme de Marseille) ; 3 / Valorisation et animation : - organisation - nature de l'évènement - public ciblé (interne UH, externe UH) - fréquentation (Conseil syndical, office de Tourisme de Marseille) Fréquence : annuelle.

	Critère II	Critère VI	Critère VI					
	Attribut A	Attribut B	Attribut C	Attribut D		Authenticité	Intégrité	Protection et gestion
	Susciter un exceptionnel débat d'idées à l'échelle mondiale	Inventer une nouvelle esthétique et un nouveau langage architectural	Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société				
Cabanon Le Corbusier	Le Cabanon est à la fois oeuvre d'art total et archétype de la cellule vitale minimum, fondée sur une approche ergonomique et fonctionnaliste absolue. Il se présente comme un invariant universel qui cristallise une idée qui a un impact dans le monde entier. Malgré ou précisément en raison de sa modestie, le Cabanon est une icône de l'architecture moderne	L'innovation spatiale est issue d'une réflexion extrême sur le fonctionnalisme et l'ergonomie. Le Cabanon réalise l'idéal de synthèse des arts majeurs chers à Le Corbusier.)	Le Cabanon a aujourd'hui acquis le statut d'oeuvre d'art.	Le Cabanon offre une réflexion sur les nouveaux modes de vie de l'homme moderne. Il donne ainsi une réponse exceptionnelle aux questions posées par l'habitat de l'homme moderne.				
Manifestation des attributs	Le Cabanon représente l'aboutissement d'une recherche sur la notion de cellule minimale qui se situe au coeur des préoccupations des architectes modernes du XX ^e siècle. Au-delà de sa modernité, il renoue pleinement avec le mythe de la cabane primitive et fait écho dans le monde entier aux initiatives d'auto-construction ou d'habitat vernaculaire.	Chaque centimètre-carré répond à une fonction. Chaque meuble, fixe ou mobile, est dessiné pour s'adapter au mode de vie qu'exige un espace vital minimum. Simultanément, grâce au traitement du bois, au dessin du mobilier, au dosage de la lumière, à la polychromie du sol et du plafond, et à la peinture murale de Le Corbusier, cet espace minimum est riche d'une multitude de sous espaces aux qualités	Le Cabanon est une oeuvre unique, mais chaque élément - ossature, parois de bois, mobilier -, est conçu dans la perspective d'une possible standardisation. Le Cabanon lui-même est dans sa globalité une cellule, un standard.	Le Cabanon est dessiné selon le Modulor, nouveau système de mesure se voulant universel fondé par Le Corbusier à l'échelle du corps humain.		- Les projets de restauration qui sont en cours ou déjà réalisés sont précédés de recherches historiques, iconographiques et stratigraphiques visant à respecter la conception de l'architecte et à retrouver l'état d'origine. - Les travaux d'entretien doivent également respecter la conception de l'architecte et l'état d'origine.	Le cabanon fait partie d'un ensemble dit site corbuséen, comprenant la Villa E 1027 dessinée par Eileen Gray et Jean Badovici, l'ancienne guinguette l'Etoile de mer, la baraque atelier, les unités de camping et les terrains dépendant du site. L'intégrité n'a pas été modifiée.	L'immeuble est classé au titre des monuments historiques depuis le 3 septembre 1996. Par ailleurs, le site Corbuséen, propriété du Conservatoire du Littoral, est classé au titre des Sites (loi 1930). La Villa E 1027 et ses jardins sont classés MH par arrêté du 27 mars 1999. L'Etoile de mer, les Unités de camping, la baraque atelier et les parcelles sont inscrits par arrêté du 25 mars 1994.

Indicateurs	1 / Suivi des publications et des campagnes de communications (Conservatoire du Littoral, DRAC PACA, association Cap Moderne, et association « Eileen Gray. Etoile de mer.Le Corbusier » (EG/EM/LC), Fondation Le Corbusier) ; 2 / Actions de valorisation et de recherches : expositions, conférences, tournages documentaires (Conservatoire du Littoral, DRAC PACA, association Cap Moderne, association EG/EM/LC, Fondation Le Corbusier) ; 3 / Médiation culturelle grâce aux opérations de mise en valeur du bien, destinées, notamment, au jeune public. Travail éducatif à l'attention des scolaires dans la zone tampon (Conservatoire du Littoral, DRAC PACA, association Cap Moderne, association EG/EM/LC, Fondation Le Corbusier, Ville de Roquebrune Cap Martin) Fréquence : annuelle.	Conservation des dispositions architecturales d'origine du bâtiment. Photographies générales et détails Rapport de l'état de conservation des peintures murales (par restauratrice) Fréquence : annuelle.	1 / Conservation des dispositifs techniques 2 / Conservation du mobilier d'origine Photos détails sur travaux en cours (DOE) Fréquence : annuelle.	Respect de la configuration d'origine en particulier le lien avec les pratiques des espaces extérieurs et intérieurs. Rapport de restauration (DOE), études, et propositions d'étude sur le site Fréquence : annuelle.		1 / Suivi de l'état de conservation générale de l'élément constituant le Bien, (Conservatoire du Littoral, DRAC PACA, association Cap Moderne, Fondation Le Corbusier) ; 2 / Suivi des autorisations d'urbanisme dans la zone tampon (Ville Roquebrune Cap Martin, DRAC PACA,) ; 3 / implication financière des partenaires. Fréquence : annuelle.	1 / Evaluation des usages d'origine, concernant le Cabanon : a - inchangé b - changé en partie c - disparition 2 / Evaluation des usages d'origine, concernant la Villa E 1027, l'ancienne guinguette l'Etoile de mer, la baraque atelier, les unités de camping : a - inchangé b - changé en partie c - disparition Fréquence : annuelle	1 / Extension de protection : classement monuments historiques Etoile de mer, Unités de camping, baraque atelier et les parcelles déjà inscrites. (DRAC PACA, Conservatoire du Littoral) ; 2 / Statistiques de fréquentation (association Cap Moderne) ; 3 / Valorisation et animation : - organisation - nature de l'évènement - public ciblé - fréquentation (association Cap Moderne et association « Eileen Gray. Etoile de mer.Le Corbusier ». Fréquence : annuelle.

L’Œuvre architecturale de Le Corbusier
Candidature à l’inscription sur la liste du Patrimoine mondial
(France, Allemagne, Argentine, Belgique, Inde, Japon, Suisse)

Développement d’indicateurs et calendrier de mise en œuvre

Les indicateurs sont censés mesurer le maintien de la valeur universelle exceptionnelle du bien. Celle-ci s’établit en corrélation avec les critères, en répondant aux conditions d’authenticité et d’intégrité, ainsi qu’en disposant des structures et processus de protection et de gestion adéquats.

Dans le tableau ci-dessous, les éléments constitutifs de la série sont présentés avec leur contribution individuelle à la VUE de la série dans son ensemble, sur la base des attributs qui comportent la valeur, et les éléments par lesquels se traduisent les attributs dans chaque élément constitutif. Ce sont ces éléments qui nécessitent un suivi, ce qui permet de « mesurer » une éventuelle dégradation de la VUE de manière clairement définie. Toutefois, une telle dégradation (altération d’éléments de construction, problèmes d’état de conservation dans son ensemble, impacts négatifs dans la zone tampon, voire le contexte de l’élément constitutif), ne devraient en principe pas se produire, compte tenu de la protection légale et du suivi administratif et qualitatif dont bénéficient tous les éléments. Afin de pouvoir mesurer également une éventuelle pression dans ce sens, par exemple de transformation de l’élément lui-même, ou de développements dans ses abords ou de sa situation, un indicateur est proposé qui mesurera les demandes d’approbation de plans sur l’objet/dans sa zone tampon.

Les indicateurs proposés sont nombreux. Il est prévu de mettre en œuvre tous les indicateurs dans le courant de 2016, afin de disposer d’une base commune pour le bien sériel dans son ensemble.

Development of indicators - Timetable for their implementation

The indicators are intended to measure the conservation of the OUV of the property. They will be developed in correlation with the criteria, answering to the conditions of authenticity and integrity, while also disposing of protective structures and processes and adequate management.

In the table below, the component parts of the series are presented with their individual contribution to the OUV of the series as a whole, based on the attributes that carry the value, and the elements in which the attributes of each component part are translated. These elements require monitoring, in order to “measure” in a clearly defined way an eventual decline of OUV. Nevertheless, a decline of this kind (alteration of construction elements, global state of conservation issues, negative impacts in the buffer zone or the context of the component part) should not occur, taking into account the legal protection and the administrative and qualitative follow-up from which all component parts benefit.
Also, in order to measure a possible pressure in this regard, e.g. transformation of the element itself, or of development in its surroundings or its situation, an indicator will be proposed to measure the permits granted for plans related to the component part or to its buffer zone.

The number of indicators to be proposed is likely to be large. The plan is to implement all indicators in the course of 2016, in order to dispose of a common basis for the whole serial property.

		Valeur universelle exceptionnelle						
	Critère II	Critère VI	Critère VI					
	Attribut A	Attribut B	Attribut C	Attribut D		Authenticité	Intégrité	Protection et gestion
	Susciter un exceptionnel débat d'idées à l'échelle mondiale	Inventer une nouvelle esthétique et un nouveau langage architectural	Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société				

Maisons La Roche et Jeanneret	Les Maisons La Roche et Jeanneret sont la première expression du Purisme en architecture.	La première expression du Purisme architectural, elles offrent la première application d'une polychromie puriste. Dès 1923, les Villas La Roche et Jeanneret sont les précurseurs des cinq points. La réalisation du concept de la «promenade architecturale».	L'utilisation des techniques architecturales innovantes.	Maison d'un homme moderne, d'un collectionneur d'art.				
Manifestation des attributs	Grâce aux publications, elles ont de l'influence à l'échelle mondiale.	La polychromie puriste réalisée à l'intérieur et à l'extérieur. L'expression des cinq points d'architecture (pilotis, toit-terrasse, plan libre, fenêtres en bandeau et façade libre). C'est à propos des Maisons La Roche et Jeanneret que Le Corbusier parle pour la première fois de «promenade architecturale». Des pilotis jusqu'au toit terrasse, les déplacements sont mis en scène comme dans un plan séquence cinématographique unique : les points de vue se multiplient autour d'un même espace central vide et ouvert sur trois niveaux. Le vide devient un matériau de l'architecture.	Système poteaux-poutres en béton, recherches pour un mobilier standart.	L'espace ouvert et libre qui correspond aux exigences modernes d'un collectionneur d'art.		Les deux maisons et le square du docteur Blanche n'ont subi aucune destruction par rapport à l'état d'achèvement des travaux en 1925. En outre, la polychromie de l'état historique de 1925 a été restituée (retour à l'authenticité), sous contrôle scientifique et technique des services patrimoniaux de l'État, Ministère de la Culture et de la Communication.	L'usage de la Maison La Roche – ouverte à la visite – et celui de la Maison Jeanneret – dédiée à la Fondation Le Corbusier, lieu d'étude et de mémoire – garantit leur haut niveau d'intégrité.	La Fondation Le Corbusier est le propriétaire des deux maisons et assure la maîtrise d'ouvrage des travaux d'entretien et de restauration sous contrôle des services de l'Etat (DRAC IDF) et de la Ville de Paris.
Indicateurs	1.Suivi des publications et des campagnes de communications (DRAC IDF, La Fondation Le Corbusier); Fréquence : annuelle. 2.Actions de valorisation et de recherches : expositions, conférences, (DRAC IDF, LRMH, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle. 3. Médiation culturelle grâce aux opérations de mise en valeur du bien restauré (destinées, notamment, au jeune public). Travail éducatif à l'attention des scolaires dans la zone tampon (DRAC IDF, La Fondation Le Corbusier) ; Fréquence : annuelle.	1.Suivi des études préalables (DRAC IDF, LRMH, La Fondation Le Corbusier); Fréquence : après l'établissement de chaque étude. 2.Suivi des autorisations de l'urbanisme (DRAC IDF, la Ville de Paris, La Fondation Le Corbusier); Fréquence : annuelle. 3.Bilan des recherches sur l'utilisation de la polychromie puriste intérieure et extérieure (les maîtres d'œuvre; DRAC IDF, LRMH, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle.	1.Suivi des études préalables (DRAC IDF, LRMH, La Fondation Le Corbusier); Fréquence : après l'établissement de chaque étude. 2.Reportages photographiques des chantiers de restauration (les maîtres d'œuvre; DRAC IDF, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : à la suite des chantiers réalisés. 3.Suivi des dossiers des ouvrages exécutés (DRAC IDF, LRMH, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : à la suite des chantiers de restauration.	1.Suivi de l'état de conservation des intérieurs et des extérieurs (les maîtres d'œuvre; DRAC IDF, LRMH, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle. 2.Evolution des connaissances (études, publications, expositions) – (DRAC IDF, LRMH, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle. 3.Echanges avec les gestionnaires des autres biens de la série et le futur musée (DRAC IDF, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle.		Suivi de l'état de conservation générale – bilan sanitaire (DRAC IDF, LRMH, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle.	Suivi des autorisations de l'urbanisme dans la zone tampon (DRAC IDF, Ville de Paris, La Fondation Le Corbusier) ; Fréquence : annuelle.	1.Statistiques de fréquentation (La Fondation Le Corbusier) ; Fréquence : annuelle ; 2. Programmation et contrôle des financements alloués aux projets de restaurations (subventions de l'État et de la Ville de Paris, mécénat) ; Fréquence : annuelle ;
Petite villa au bord du lac Léman	Archétype de la Maison minimum		Fenêtre en longueur Expérimentation du standard de la Maison minimum à une travée	Maison unifamiliale à une travée Intégration du paysage à travers la fenêtre en longueur Recherche d'un espace maximal dans une surface minimale				
Manifestation des attributs	Aménagement intérieur, en grande partie original, est toujours celui d'une petite maison d'habitation. Elle cristallise des idées ayant une influence exceptionnelle autour de la question fondamentale de l'habitat	L'émergence d'un nouveau langage architectural, celui du Purisme, dont elle adopte dès 1923 la géométrie rigoureuse, et surtout la polychromie primaire qui participe de la construction de cette nouvelle conception spatiale dans un espace réduit. La fenêtre en longueur, une des premières de l'histoire de l'architecture, relève de l'expérimentation technique, et offre une nouvelle approche du cadrage sur le paysage et de la relation au site.		La Petite villa au bord du Lac Léman relève de l'analyse ergonomique et fonctionnaliste de l'habitat dans une surface minimale et offrant un maximum de confort et d'espace. Cette analyse ergonomique et fonctionnaliste, exceptionnelle		Depuis les petites transformations opérées par Le Corbusier lui-même dès 1931 à la suite de l'aménagement de la route en bordure de la maison, celle-ci n'a pas connu de modifications. C'est par rapport à l'état de 1931 que le haut degré	La maison n'est plus habitée aujourd'hui, mais son aménagement intérieur, en grande partie original, est toujours celui d'une petite maison d'habitation.	Objet classé au niveau cantonal et fédéral. Toute intervention est soumise à l'examen des autorités patrimoniales.

	minimum et de l'habitat pour le plus grand nombre.		en 1923, vise à la recherche d'un standard typologique, repris, depuis, dans le monde entier : celui de la maison étroite à travée unique.		d'authenticité peut être apprécié, tant dans ses formes, ses matériaux que dans sa distribution. En 2014 est restitué le jardin dans ses dispositions d'origine.			
Indicateurs	1. Etat de l'aménagement intérieur d'habitation Photos. a. inchangé b. altéré en partie c. échangé (indicateur qualitatif)	2. Matérialisation et forme des façades Photos. a. inchangé b. altéré c. remplacé (indicateur qualitatif).	3. Polychromie intérieure Photos. a. maintenue b. altérée c. remplacée (indicateur qualitatif) 3. la fenêtre en longueur photo a. conservée b. altérée (indicateur qualitatif)	4. Relation objet-paysage : Situation de la maison dans son cadre : perception de « la petite boîte au bord du lac », la maison et la nature en harmonie. Photos a. inchangée b. altérée	Voir 1., 2., 3., 4.	Voir 1.	5. Pression liée au développement : Demandes d'approbation des plans traitées chaque année par les autorités cantonales : a. sur l'objet b. dans la zone tampon (indicateur quantitatif, mesurant la).	
Maison Guiette								
Maisons de la Weissenhof-Siedlung								
Villa Savoye et loge du jardinier	L'Icône du Mouvement moderne.	La Villa Savoye est le manifeste des cinq points d'architecture (pilotis, toit-terrasse, plan libre, fenêtres en bandeau et façade libre), l'exemple de l'innovation spatiale. C'est l'un des chefs d'oeuvre du purisme, l'exemple de la polychromie puriste (révélé pour la loge du jardinier et en cours d'étude pour la Villa).	L'utilisation des techniques architecturales innovantes. Le concept du logement minimum.	Un nouvel art de vivre, le plan libre. L'exacte et unique application de la proposition de Le Corbusier et Pierre Jeanneret au congrès des CIAM de Francfort.		Un effondrement du toit à la suite des problèmes structurels a nécessité des modifications visant à la conservation de sa forme globale.	L'intégrité est en partie fragilisée par la proximité d'un lycée et des terrains de sport, en partie en co-visibilité. Il existe un projet de construction d'un musée dédié à Le Corbusier à proximité de la loge du jardinier.	Gérée par le CMN, le CST est assuré par les services patrimoniaux de l'Etat français.
Manifestation des attributs	Elle cristallise la pureté et la perfection des formes de géométrie rigoureuse (un parfait parallélépipède au toit terrasse couronné d'un solarium aux extrémités arrondis, qui crée l'illusion d'une légèreté proche d'une lévitation grâce à la finesse des pilotis fins et à l'effacement du rez-de-chaussée – pour la villa et un parallélépipède aux côtés inégales sur pilotis fins au-dessus du rez-de-chaussée de surface réduite – pour la loge du jardinier) . Grâce aux publications, elle est mondialement connue.	La polychromie puriste participe à la dématérialisation de ces édifices. Les pilotis, le toit-terrasse, le plan libre, fenêtres en bandeau et façade libre participent à l'image de cette Villa en rapport avec les éléments fondamentaux naturels comme le sol, le soleil, la vue, le ciel. Et offrent un nouveau cadrage sur le paysage. La conception sculpturale du toit terrasse la classe parmi les chefs d'oeuvres du purisme. L'innovation spatiale se manifeste par les rampes, la promenade architecturale et le toit terrasse-solarium.	L'indépendance de l'ossature, façade libre, usage de modules standardisés, béton précontraint, etc. L'illustration du concept du logement minimum, avec le plan standard du logement minimum pour la loge du jardinier.	A l'intérieur comme à l'extérieur, la distribution spatiale est conçue en fonction des besoins de ses occupants (une rampe assure la circulation du rez-de-chaussée au toit-terrasse, l'utilisation d'une automobile est optimisée grâce à la forme d'une courbe au rez-de-chaussée). La loge du jardinier est l'archétype du logement minimum présenté par Le Corbusier et Pierre Jeanneret au premier congrès des CIAM en 1929. Le rapport entre la Villa et la loge du jardinier est conçu par Le Corbusier comme une expression d'un certain lien commun entre le logement du maître et celui des services.		Les projets de restauration qui sont en cours de conception (villa) ou déjà réalisés (loge du jardinier), précédés de recherches historiques, iconographiques et stratigraphiques visent à respecter la conception de Le Corbusier et à se rapprocher au maximum à l'état d'origine.	Les arbres élagués ont permis de retrouver une perspective sur la Seine. La zone tampon a été agrandie. Le projet d'un musée dédié à Le Corbusier sera conçu en concertation avec des services patrimoniaux compétents.	Edifices classés au titre des monuments historiques (extérieurs et intérieurs), y compris le jardin attenant. Par ailleurs, les parcelles en face de la Seine sont protégées au titre des sites. Par conséquent, toute intervention est soumise à l'autorisation des services patrimoniaux.

Indicateurs	1.Suivi des publications et des campagnes de communications (CMN, DRAC IDF, La Fondation Le Corbusier); Fréquence : annuelle. 2.Actions de valorisation et de recherches :expositions, conférences, (CMN, DRAC IDF, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle. 3.Travail éducatif à l'attention des scolaires dans la zone tampon (CMN, DRAC IDF, la Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle.	1.Suivi des études-diagnostic préalables en cours d'exécution (CMN, DRAC IDF, LRMH, La Fondation Le Corbusier); Fréquence : après l'établissement de chaque étude. 2.Suivi des autorisations de l'urbanisme (CMN, DRAC IDF, LRMH, la Ville de Poissy, La Fondation Le Corbusier); Fréquence : annuelle. 3.Bilan des recherches sur l'utilisation de la polychromie puriste intérieure et extérieure (les maîtres d'oeuvre; CMN, DRAC IDF, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle.	1.Suivi des études préalables en cours d'exécution (CMN, DRAC IDF, LRMH, La Fondation Le Corbusier); Fréquence : après l'établissement de chaque étude. 2.Reportages photographiques des chantiers de restauration (les maîtres d'oeuvre; DRAC IDF, LRMH, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : à la suite des chantiers réalisés. 3.Suivi des dossiers des ouvrages exécutés (CMN, DRAC IDF, LRMH, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : à la suite des chantiers de restauration.	1.Suivi de l'état de conservation des intérieurs et des extérieurs (les maîtres d'œuvre; DRAC IDF, LRMH, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle. 2.Evolution des connaissances (études, publications) – (CMN, DRAC IDF, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle. 3.Echanges avec les gestionnaires des autres biens de la série (CMN, DRAC IDF, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle.		Suivi de l'état de conservation générale (CMN, DRAC IDF, LRMH, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle.	Suivi des autorisations de l'urbanisme dans la zone tampon (DRAC IDF, Ville de Poissy, La Fondation Le Corbusier) ; Fréquence : annuelle.	1.Statistiques de fréquentation (CMN) ; Fréquence : annuelle. 2. Bilan financier (CMN) ; Fréquence : annuelle. 3. Programmation et contrôle des financements alloués aux projets de restaurations (subventions de l'État et de la Ville de Poissy, mécénat) ; Fréquence : annuelle.
Immeuble Clarté	Issu de l'Immeuble-villas, prototype de la préfabrication du logement moderne de standing	Appartements traversants en Duplex Ossature métallique assemblée par soudure à l'arc	Typologie de l'Immeuble-villas	Appartements en duplex dans un immeuble collectif. Modèle d'immeuble pour classe moyenne bénéficiant de services communs.				
Manifestation des attributs	L'Immeuble Clarté est l'archétype de la préfabrication, de la standardisation et de l'industrialisation appliqué au bâtiment.	L'Immeuble Clarté présente un haut niveau d'innovation spatiale, exceptionnel à l'époque, dans le domaine de l'habitat, y compris dans l'habitat de standing dont il fait partie. Les appartements sont en duplex traversant , et d'une grande fluidité spatiale grâce à un effort de décroisonnement et à l'emploi d'une ossature ponctuelle de poteaux en acier. La mise en forme architecturale épurée, et l'ensoleillement optimal qu'offrent les façades vitrées , accentuent le caractère innovant de la conception spatiale.	L'innovation technique porte notamment sur : > la procédure de montage à sec – sans intervention de liants hydrauliques longs à sécher – permettant une accélération du processus de fabrication et une économie financière ; > la soudure à l'arc de la structure en acier , première application mondiale à un immeuble de logement ; > la préfabrication légère de tous les éléments de l'ossature et de la façade de pans de verre ; > les fenêtres coulissantes sur billes , innovantes à l'époque, devenues, depuis, un standard de la production industrielle contemporaine.	Permanence de l' usage, celle d'un immeuble d'habitation de standing				
Indicateurs	1. maintien de la structure spatiale d'origine : Nombre appartements 2015 : x Nombre d'appartements 2025 : x (indicateur quantitatif) 2. perception de Clarté comme un immeuble		3. maintien des éléments constructif originels : - structure en acier d'origine : a. maintenue b. altérée (indicateur qualitatif) - caractère à construction légère et préfabriquée des éléments d'ossature et	4. appartements utilisés en tant qu'habitation Pourcentage du total en 2015 : x Pourcentage du total en 2025 : x (indicateur quantitatif)	Voir 1., 2, 3. 4.		Voir 4.	5. pression de développement sur l'objet Demandes d'approbation des plans traitées par les autorités cantonales a. sur l'objet b. dans la zone tampon (indicateur quantitatif)

« en verre », conservation de la façade vitrée sans interventions balcons/stores etc. Photos façades 2015 Photos façades 2025 (indicateur qualitatif) des pans de verres État 2015 en pourcent a. maintenu b. altérée (indicateur quantitatif) - fenêtres coulissantes sur billes. Nombre existant en 2015 : x Nombre existant en 2025 : X (indicateur quantitatif)								
Immeuble locatif à la Porte Molitor	L'immeuble d'habitation en verre trouve son prototype dans l'Immeuble Molitor.	L'Immeuble Molitor marque l'application des principes des cinq points à un immeuble d'habitation.	L'expérimentation des matériaux et des procédés techniques. La prise en compte des défis de la produciton en série.	L'immeuble d'habitation de type de la Ville Radieuse ou de la charte d'Athènes. Le plaisir et le confort d'habiter dans l'immeuble.				
Manifestation des attributs	C'est l'un des premiers immeubles d'habitation au monde à façades entièrement vitrées.	Le plan libre réalisé dans un immeuble de logements collectifs.	La façade libre ou mur rideau, paroi de verre, usage de modules standardisés, second œuvre industrialisé, béton précontraint. A l'échelle mondiale, l'immeuble s'inscrit dans une série des immeubles d'habitation à façades entièrement vitrées.	Il est au coeur de la métropole, à proximité immédiate de parcs et d'équipements sportifs nombreux (stades, piscine, courts de tennis) qui, liés aux logements, réalisent cet idéal moderne de l'alliance du collectif et de l'individuel. Ce nouveau concept d'immeuble à façade de verre offre à ses habitants de l'air, la lumière, le soleil et la vue (« les joies essentielles »). L'ascenseur facilite l'accès aux étages.		Les projets de restauration sont suivi par le comité de pilotage international et les services de l'Etat.	L'immeuble est classé en totalité au titre des MH.	La gestion de l'immeuble est assurée par la copropriété. La Fondation Le Corbusier assure la gestion de l'appartement-atelier de Le Corbusier.
Indicateurs	1.Suivi des publications et des campagnes de communications (DRAC IDF, LRMH, La Fondation Le Corbusier); Fréquence : annuelle. 2.Actions de valorisation et de recherches : expositions, conférences, tournages documentaires (DRAC IDF, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle. 3. Médiation culturelle grâce aux opérations de mise en valeur du bien restauré (destinées, notamment, au jeune public). Travail éducatif à l'attention des scolaires dans la zone tampon (DRAC IDF, La Fondation Le Corbusier); Fréquence : annuelle.	1.Suivi des études préalables (DRAC IDF, La Fondation Le Corbusier); Fréquence : après l'établissement de chaque étude. 2.Suivi des autorisations de l'urbanisme (DRAC IDF, LRMH, la Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle. 3.Bilan des recherches sur l'utilisation de la polychromie puriste intérieure et extérieure (les maîtres d'œuvre; DRAC IDF, LRMH, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle.	1.Suivi des études préalables (DRAC IDF, La Fondation Le Corbusier); Fréquence : après l'établissement de chaque étude. 2.Reportages photographiques des chantiers de restauration (les maîtres d'œuvre; DRAC IDF, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : à la suite des chantiers réalisés. 3.Suivi des dossiers des ouvrages exécutés (DRAC IDF, LRMH, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : à la suite des chantiers de restauration.	1.Suivi de l'état de conservation des intérieurs et des extérieurs (les maîtres d'œuvre; DRAC IDF, Ville de Paris, La Fondation Le Corbusier); Fréquence : annuelle. 2.Evolution des connaissances (études, publications) – (DRAC IDF, LRMH, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle. 3.Echanges avec les gestionnaires des autres biens de la série et le futur musée dédié à Le Corbusier (DRAC IDF, LRMH, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle.		Suivi de l'état de conservation générale (DRAC IDF, LRMH, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle.	Suivi des autorisations de l'urbanisme dans la zone tampon (DRAC IDF, Ville de Paris, Ville de Boulogne-Billancourt, La Fondation Le Corbusier); Fréquence : annuelle.	1.Statistiques de fréquentation (La Fondation Le Corbusier); Fréquence : annuelle; 2. Programmation et contrôle des financements alloués aux projets de restaurations (subventions de l'État et de la Ville de Paris, Ville de Boulogne-Billancourt, mécénat); Fréquence : annuelle.
Unité d'habitation à Marseille								
La Manufacture à Saint-Dié								
Maison du Docteur Curutchet								

Chapelle Notre-Dame-du-Haut								
Cabanon de Le Corbusier								
Complexe du Capitole								
Couvent Sainte- Marie-de-la-Tourette								
Musée National des Beaux-Arts de l'Occident								
Maison de la Culture								

RONCHAMP - CHAPELLE NOTRE-DAME-DU-HAUT

Contribution principale de l'élément à la justification du Bien

La Chapelle Notre-Dame-du-Haut de Ronchamp (Ronchamp, France, 1950) est l'icône de l'architecture sacrée chrétienne qui révolutionne l'architecture religieuse au XXe siècle. (Critère ii, attribut A)

Contribution principaleAttribut secondaireAutres attributs

L'ensemble du bien	Critère	CRITÈRE ii « Comment la série, prise dans son ensemble, a une			CRITÈRE vi « Comment les réalisations reflètent ces idées » Intellectuellement ou matériellement, le travail de Le Corbusier est intimement lié aux idées du Mouvement Moderne.										Authenticité	Intégrité	Protection et gestion
	Attribut	Attribut A			Attribut B			Attribut C			Attribut D						
		Susciter un exceptionnel débat d'idées à l'échelle mondiale			Inventer une nouvelle esthétique et un nouveau langage architectural			Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation			Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société						
	Déclinaison de l'attribut	Exceptionnelle influence en tant que « chef d'œuvre	Relation et influence forte avec une région du monde	Cristallisation d'idées qui ont eu un impact exceptionnel : prototype	Invention plastique	Cinq points pour une architecture nouvelle	Innovation spatiale	Expérimentations techniques et quête de l'industrialisation	Recherche de typologies standard	Modulor	Nouveau modes de vie	Habitat minimum	Logements à grande échelle	Charte d'Athènes			
Chapelle ND-du-Haut	Contribution principale de l'élément	Icône de l'architecture sacrée chrétienne	sans objet	sans objet	Module d'architecture-sculpture	sans objet	sans objet	Couverture légère à double coque en béton	sans objet	sans objet	Les formes et la conception spatiale de la chapelle induisent une nouvelle liturgie et une nouvelle relation du corps à l'espace sacré non seulement à l'intérieur, mais également à l'extérieur de la chapelle accessible par un chemin dont Le Corbusier mesure et maîtrise toutes les séquences. À ce titre, elle induit une nouvelle relation de l'homme face au sacré, en d'autres termes un nouveau mode de vie.	sans objet	sans objet	sans objet			
	Manifestation détaillée	Elle remet en cause tous les codes du plan et des formes de l'architecture chrétienne. Dans le domaine de l'architecture sacrée, il y a un « avant » et un « après » Ronchamp.	sans objet	sans objet	contribution exceptionnelle dans l'invention d'un nouveau langage architectural, vers une architecture-sculpture. Elle révolutionne la conception spatiale de l'architecture sacrée en rompant totalement avec toute référence à un plan en croix et par ses effets de dilatation et de contraction de l'espace accentué par un dosage savant de la lumière.	sans objet	sans objet		sans objet	sans objet		sans objet	sans objet	sans objet			
	INDICATEURS SPECIFIQUES A L'ELEMENT	1.) Etat de conservation de la chapelle 2.) Valorisation des spécificités architecturales	sans objet	sans objet	Conservation des dispositions architecturales d'origine pour tous les bâtiments intégrés à l'élément du bien	sans objet	sans objet	Conservation des dispositions architecturales et techniques d'origine de la toiture	sans objet	sans objet	Respect de la configuration d'origine, en particulier le lien avec le paysage des quatre horizons et les séquences d'accès	sans objet	sans objet	sans objet	Atténuation de l'impact des aménagements récents du site	1.) Maintien de la fonction d'origine 2.) Atténuation de l'impact des aménagements récents du site	1.) Qualité des décisions de conservation 2.) Renforcer les outils de gestion de la zone-tampon et des zones de vigilance
	mesures de l'indicateur : à chaque rapport périodique ou tous les 5 ans, selon ce qui est retenu pour l'ensemble de la coordination du bien. Sauf pour boisement : 10 ans	1.) Photos de l'extérieur et de l'intérieur 2.) Nombre de visiteurs, relevé des activités d'information (débats, brochures, expositions etc)	sans objet	sans objet	1.) Photos de l'intérieur et de l'extérieur 2.) Liste de la documentation technique disponible auprès du service en charge des MH (projets de restauration et Document des ouvrages exécutés)	sans objet	sans objet	1.) Photos de l'intérieur et de l'extérieur 2.) Liste de la documentation technique disponible auprès du service en charge des MH (projets de restauration et Document des ouvrages exécutés)	sans objet	sans objet	1.) Photos de l'intérieur et de l'extérieur 2.) Evolution décennale du boisement à l'échelle du bien (2,73 ha) sur la base de l'état de référence du document 12a de l'insription	sans objet	sans objet	sans objet	Photos de l'extérieur	1.) Nombre d'offices religieux et de pèlerinages organisés, par an 2.) Photos de l'extérieur et de l'intérieur 3.) Nature de l'occupation et de la destination de l'abri du pèlerin	1.) Nombre de réunions du comité de pilotage 2.) Niveau de protection patrimonial mis en œuvre selon la législation française 3.) Nombre de demandes d'autorisation préalable de travaux

validation du présent document envoyé le 20/10/17	réponses 21-23 octobre 2017 par courriel	commentaire
AONDH (président)	OK	propose de mentionner Modulor comme Attribut de NDH. Réponse : Ce n'est pas dans le dossier d'insription (même si c'est contestable sur le fond compte tenu de l'pplication structe du Modulor à Ronchamp), donc on ne propose pas d'indicateur sur ce point. Par ailleurs, la conservation de l'intégrité du monument induit la préservation de son système de proportion et de perception.
Porterie (directrice)	OK	
ABF	OK	
Comcom		
CD70		

tableau simplifié des indicateurs spécifiques				responsabilité de production la mesure					
attribut et déclinaison	indicateur	mesures de l'indicateur	fréquence de la mesure	AONDH	Porterie	DRAC	Collectivité (Commune / EPCI)	code de la mesure de l'indicateur	A FAIRE EN 2018
Attribut A Susciter un exceptionnel débat d'idées à l'échelle mondiale "Icône de l'architecture sacrée chrétienne"	A1.) Etat de conservation de la chapelle	A1.) Photos de l'extérieur et de l'intérieur	rapport périodique ou env. 5 ans	X				A1	liste de référence des points de vue et objets à photographier + campagne de référence 2018
	A2.) Valorisation des spécificités architecturales	A2.) Nombre de visiteurs, relevé des activités d'information (débat, brochures, expositions etc)	rapport périodique ou env. 5 ans		X			A2	liste des items à fixer + données de référence 2017
Attribut B Inventer une nouvelle esthétique et un nouveau langage architectural "Module d'architecture-sculpture"	B.Conservation des dispositions architecturales d'origine pour tous les bâtiments intégrés à l'élément du bien	B1.) Photos de l'intérieur et de l'extérieur	rapport périodique ou env. 5 ans	X				B1	liste de référence des points de vue et objets à photographier + campagne de référence 2018
		B2.) Liste de la documentation technique disponible auprès du service en charge des MH (projets de restauration et Document des ouvrages exécutés)	rapport périodique ou env. 5 ans			X (CRMH)		B2	établir fiche -type et état de référence 2018
Attribut C Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation "Couverture légère à double coque en béton"	C.Conservation des dispositions architecturales et techniques d'origine de la toiture	C1.) Photos de l'intérieur et de l'extérieur	rapport périodique ou env. 5 ans	X				C1	liste de référence des points de vue et objets à photographier + campagne de référence 2018
		C2.) Liste de la documentation technique disponible auprès du service en charge des MH (projets de restauration et Document des ouvrages exécutés)	rapport périodique ou env. 5 ans			X (CRMH)		C2	établir fiche -type et état de référence 2018
Attribut D Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société	D.Respect de la configuration d'origine, en particulier le lien avec le paysage des quatre horizons et les séquences d'accès	D1.) Photos de l'intérieur et de l'extérieur	rapport périodique ou env. 5 ans	X				D1	liste de référence des points de vue et objets à photographier + campagne de référence 2018
		D2.) Evolution décennale du boisement à l'échelle du bien (2,73 ha) sur la base de l'état de référence du document 12a de l'insription	10 ans	X			X	D2	
Authenticité	Atténuation de l'impact des aménagements récents du site	Auth).Photos de l'extérieur	rapport périodique ou env. 5 ans	X				Auth	liste de référence des points de vue et objets à photographier + campagne de référence 2018
Intégrité	I1.) Maintien de la fonction d'origine	I1.) Nombre d'offices religieux et de pèlerinages organisés	collecte annuelle - restitution avec les autres	X				I1	liste des items à fixer + données de référence 2017
	I2.) Atténuation de l'impact des aménagements récents du site	I2.) Photos de l'extérieur et de l'intérieur	rapport périodique ou env. 5 ans	X				I2	liste de référence des points de vue et objets à photographier + campagne de référence 2018
		I3.) Nature de l'occupation et de la destination de l'abri du pèlerin	rapport périodique ou env. 5 ans	X				I3	établir fiche -type et état de référence 2018
Protection et gestion	PG1.) Qualité des décisions de conservation	PG1.) Nombre de réunions du comité de pilotage	collecte annuelle - restitution avec les autres			X UDAP - esp pro	X	PG1	établir fiche -type et état de référence 2018
	PG2.) Renforcer les outils de gestion de la zone-tampon et des zones de vigilance	PG2.) Niveau de protection patrimonial mis en œuvre selon la législation française	rapport périodique ou env. 5 ans			X UDAP - esp pro		PG2	établir fiche -type et état de référence 2018
		PG3.) Nombre de demandes d'autorisation préalable de travaux	collecte annuelle - restitution avec les autres			X UDAP - esp pro		PG3	liste des items à fixer + données de référence 2017

Monitoring: Key indicators for measuring state of conservation
Capitol Complex, Chandigarh, INDIA

OUV related aspect to be monitored	Monitoring Indicators	Frequency of Monitoring	Authority Responsible/ Location of records	Revised Monitoring Indicators by the state party
PLANNING AND POLICY	Notification and implementation of proposals of Chandigarh Master Plan	Once with regular monitoring of implementation	Chandigarh Administration, Interstate development, registrar of high court, department of tourism	The Chandigarh Master Plan -2031 has been notified by Chandigarh Administration on April 23, 2015 and further progress and monitoring shall be undertaken on its basis.
	Recommendations of expert heritage committee	As required	CHCC	The recommendations of Expert Heritage Committee too have been notified as part of Chandigarh Master Plan 2031 and CHCC is monitoring the progress thereof.
ACCESS AND VISITATION	Update of increase in number of visitors	Annually and as per need	Department of tourism	Compared to January-June 2016 there was an increase of approximately 2,000 visitors from July-December 2016 after the inscription of the Capitol Complex in July 2016 Jan 2016 to Dec 2016 Total tourist - 13,356 January 2017 to 18 April 2017 Total tourist - 3,900
	Review of facilities of visitors	Annually	Department of tourism	A holistic scheme is being proposed for the Capitol complex which shall define the need for better visitor facilities including signage, interpretation etc. shall be completed as part of the management plan and the same shall be a part of the tender to be executed on site in the 3 year period i.e. completion in feb 2020
	Procedure for security checking	Annually and as per need	Department of tourism and security agencies	Visitors need to produce proof of identification (passport for Foreign visitors) to register for the tour. The luggage is checked at the Information Centre itself. The guide along with the specially deputed Tourism police escort visitors along a pre-decided route. The guides and Tourism police were both trained

				to handle visitors and ease the security protocol-especially at the Secretariat building. Access to the interiors of the buildings is limited due to security concerns and when the Assembly is in session special permission (from Director Tourism) is required for photography and video of the interiors.
CONSERVATION	State of exposed concrete of the buildings and the monuments	Annually	CBRI, Chief Engineer, UT	Restoration works are in progress shall be completed before monsoon 2017. The restoration of outer RCC façade is in progress and likely to completed by 30-11-2017
	Structural stability of the buildings	Once for all and later annually	CBRI, Chief Engineer, UT	Structural analysis of the secretariat has already been carried out by CBRI and as part of the management plan the same shall be evaluated by a Structural Engineer- This shall be submitted by June 2017. The CBRI report has been given to conservation architect M/s Abha Narain Lambah for analyzing the same.
	State of Bronze of the Open Hand and foundation plaques	Once with annual monitoring	Heritage Cell	The same is part of the restoration and conservation of the Capitol complex and shall be completed within the time frame i.e before December, 2017
	Documentation of later additions and alterations with pictures and data	Once with regular monitoring	Department of Urban Planning, Engineering Department, CCA/ Heritage Cell	As a part of the management plan the documentation of later additions and interventions is being mapped both on drawings and as photo inventory which shall be submitted to the CHCC by May 2017. LIDAR survey of outer façade has been carried out and LIDAR survey for internal changes to be done by Conservation Architect. Likely to be done by 31-10-2017
	Removal of present violations, ensuring sensitive interventions in future	As per progress of works.	CHCC, Engineering Department, Department of Urban Planning / Heritage Cell.	As a part of the management plan the removal of later additions and interventions is being proposed along with sensitive future interventions which shall be submitted to the

				CHCC by May 2017. Violations / encroachment are yet to be restored to original position. Likely to be completed by February, 2020.
FURNITURE AND FIXTURES	Inventory and Stock taking of heritage furniture both built in and mobile ,tapestries, art work, light fixtures, enamel door etc.	Once with Annual monitoring.	Department of Urban Planning, Engineering Department, CCA/ Heritage Cell.	As a part of the management plan the inventory of all furniture and fixtures shall be submitted along with a restoration scheme for the same shall be a part of the tender to be executed on site in the 3 year period i.e. completion in feb 2020
	Repair and maintenance	Complete stock Once and later as needed	Interstate Development Committee, Heritage Identification committee.	As a part of the management plan the inventory of all furniture and fixtures shall be submitted along with a restoration scheme for the same shall be a part of the tender to be executed on site in the 3 year period i.e. completion in feb 2020
MANAGEMENT OF BUFFER	Change in landuse if any within the defined buffer zone and of areas impacting the OUV	As per request from stakeholders and foreseen threats	CHCC, Chandigarh administration	The buffer which falls in jurisdiction of Chandigarh Administration is being monitored through capital of Punjab (Development and Regulation) Act, 1952 and building rules framed there under.
FINANCIAL RESOURCES	Funds for maintenance and upkeep	monthly	Department of finance, chief engineer , UT	The funds will be provided under budgetary head 4217.
LANDSCAPING AND PLANTATION	Completing the pathways and connections.	Once	Department of Urban Planning, Horticulture wing of Department of Engineering.	As a part of the management plan the original landscape scheme shall be implemented and the works shall be a part of the tender to be executed on site in the 3 year period i.e. completion in feb 2020. The work will be executed as per the planning to be provided from conservation architect.To be completed by December 2020.
	Pruning of trees and removing unwanted growth to maintain vistas.	As per need	Department of Urban Planning, Horticulture wing of Department of Engineering.	
	Maintenance and upkeep of plantation and greens.	Daily and As per need	Horticulture wing of Department of Engineering.	
PEDESTRIAN PLAZA	State of concrete finish	annually	Chief engineers office	As part of the management plan works shall proposed as part of the works to be executed on site in the 3 year period i.e. feb 2020 and maintenance strategy for

				the same shall be implemented. However, Routine maintenance of the concrete surface in the plaza being undertaken as per site requirement
	Accessibility across plaza	Once Annually	Security agencies-ITBP	As part of the management plan the accessibility across the plaza and removal of parking on the plaza is being recommended in agreement with the Management plan suggestion in the Dossier.
	Water bodies in front of Assembly and High Court building	Once with maintenance as per need	Department of Engineering.	As part of the management plan a system to ensure the efficient functioning of the tanks is being proposed as part of the works to be executed on site in the 3 year period i.e. feb 2020 Proposal to be given by Conservation architect. Likely to completed by December 2020
	Removal of Parking on plaza	Once	Chandigarh Police , Chandigarh Administration, Registrar, Punjab and Haryana High Court	As part of the management plan the accessibility across the plaza and removal of parking on the plaza is being recommended in agreement with the Management plan suggestion in the Dossier.
RISK MANAGEMENT	Records of accidents threats in and around site	Monthly	Department of Engineering, Department of Traffic ,Department of Home, ITBP, Chandigarh Police , CRPF Deputy Commissioner Chandigarh Administration with National Disaster Management Authority, New Delhi, ITBP, Chandigarh Police , CRPF, etc	As part of the management plan risk assessment for the structures and other site elements is being worked upon, also the fire audit reports provided by the site managers shall be reviewed. All strategies shall be outlined in the risk management plan to be submitted to the CHCC by November 2017
	Checking risk preparedness/mock drills	As per disaster managmnet plan		
	Reviewing security and emergency plans	Annually		
	Retrofitting of risk management and seismic threats	Implemented and monitored as per need		
RESEARCH AND CAPACITY BUILDING	Review of research projects and publications on the nominated property	Ongoing and continuous	Heritage cell, CBRI, CCA,NITTTTR	Architecture College organizes various seminars, workshops, talks by eminent architects etc., from time to time.

L'Oeuvre architecturale de Le Corbusier

Candidature à l'inscription sur la liste du Patrimoine mondial(Japon)

Development of indicators - Timetable for their implementation

The indicators are intended to measure the conservation of the OUV of the property. They will be developed in correlation with the criteria, answering to the conditions of authenticity and integrity, while also disposing of protective structures and processes and adequate management.

In the table below, the component parts of the series are presented with their individual contribution to the OUV of the series as a whole, based on the attributes that carry the value, and the elements in which the attributes of each component part are translated. These elements require monitoring, in order to “measure” in a clearly defined way an eventual decline of OUV. Nevertheless, a decline of this kind (alteration of construction elements, global state of conservation issues, negative impacts in the buffer zone or the context of the component part) should not occur, taking into account the legal protection and the administrative and qualitative follow-up from which all component parts benefit. Also, in order to measure a possible pressure in this regard, e.g. transformation of the element itself, or of development in its surroundings or its situation, an indicator will be proposed to measure the permits granted for plans related to the component part or to its buffer zone.

The number of indicators to be proposed is likely to be large. The plan is to implement all indicators in the course of 2016, in order to dispose of a common basis for the whole serial property.

	Valeur universelle exceptionnelle						
	Critère II	Critère VI	Critère VI				
	Attribut A Susciter un exceptionnel débat d'idées à l'échelle mondiale	Attribut B Inventer une nouvelle esthétique et un nouveau langage architectural	Attribut C Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Attribut D Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société	Authenticité	Intégrité	Protection et gestion
National Museum of Western Arts	1. Number and records of repair work and photographic recording. a. Modification of the 5 points of modern architectures (excluding horizontal continuous window) b. Modification of factors of the unlimited growth museum (traffic line and exhibition space) 2. Monitoring the activities of publicity and dissemination a. The contents and number of research meetings (for specialists) and the number of participants b. The contents and number of symposiums (for the general public) and the number of participants. The contents and number of guides by specialists or guides and the number of participants c. The kind and number of brochure and other printed matter. A list of equipment for visitors, such as guide devices. The number of website updates and accesses. The number of appearances in various media. d. The contents and number of local revitalization projects	3. Number and records of repair work and photographic recording. a. Modification of original colors and materials b. Modification of forecourt	4. Number and records of repair work and photographic recording. a. Member dimensions based on Modulor b. Extension or alteration of building c. Modification of forecourt	5. Number and records of repair work and photographic recording. a. Modification of forecourt 6. Monitoring the development pressure around the property a. Installation of structure or advertising object around the property b. Change to trees or vegetation around the property	See items 1,3,4,5. 7. Number and records of repair works (Repairs corresponding to Criteria 1 to 4 of <i>the Preservation and Management Plan for Significant Cultural Property</i> created in Japan)	See items 1,3,4,5,7. 8. Monitoring the inappropriate pdevelopment in the Buffer Zone	See items 7,8. 9. Monitoring the sightseeing pressure a. The number of visitors (permanent exhibition, special exhibition, individual, group, general, college student) b. Damage accompanying an increase or decrease of visitors 10. Monitoring the damage by natural disaster (earthquake, typhoon, etc)

L'Oeuvre architecturale de Le Corbusier
Candidature à l'inscription sur la liste du Patrimoine mondial
(France, Allemagne, Argentine, Belgique, Inde, Japon, Suisse)

Développement d'indicateurs et calendrier de mise en œuvre

Les indicateurs sont censés mesurer le maintien de la valeur universelle exceptionnelle du bien. Celle-ci s'établit en corrélation avec les critères, en répondant aux conditions d'authenticité et d'intégrité, ainsi qu'en disposant des structures et processus de protection et de gestion adéquats.

Dans le tableau ci-dessous, les éléments constitutifs de la série sont présentés avec leur contribution individuelle à la VUE de la série dans son ensemble, sur la base des attributs qui comportent la valeur, et les éléments par lesquels se traduisent les attributs dans chaque élément constitutif. Ce sont ces éléments qui nécessitent un suivi, ce qui permet de « mesurer » une éventuelle dégradation de la VUE de manière clairement définie. Toutefois, une telle dégradation (altération d'éléments de construction, problèmes d'état de conservation dans son ensemble, impacts négatifs dans la zone tampon, voire le contexte de l'élément constitutif), ne devraient en principe pas se produire, compte tenu de la protection légale et du suivi administratif et qualitatif dont bénéficient tous les éléments. Afin de pouvoir mesurer également une éventuelle pression dans ce sens, par exemple de transformation de l'élément lui-même, ou de développements dans ses abords ou de sa situation, un indicateur est proposé qui mesurera les demandes d'approbation de plans sur l'objet/dans sa zone tampon.

Les indicateurs proposés sont nombreux. Il est prévu de mettre en œuvre tous les indicateurs dans le courant de 2016, afin de disposer d'une base commune pour le bien sériel dans son ensemble.

Development of indicators - Timetable for their implementation

The indicators are intended to measure the conservation of the OUV of the property. They will be developed in correlation with the criteria, answering to the conditions of authenticity and integrity, while also disposing of protective structures and processes and adequate management.

In the table below, the component parts of the series are presented with their individual contribution to the OUV of the series as a whole, based on the attributes that carry the value, and the elements in which the attributes of each component part are translated. These elements require monitoring, in order to “measure” in a clearly defined way an eventual decline of OUV. Nevertheless, a decline of this kind (alteration of construction elements, global state of conservation issues, negative impacts in the buffer zone or the context of the component part) should not occur, taking into account the legal protection and the administrative and qualitative follow-up from which all component parts benefit.
Also, in order to measure a possible pressure in this regard, e.g. transformation of the element itself, or of development in its surroundings or its situation, an indicator will be proposed to measure the permits granted for plans related to the component part or to its buffer zone.

The number of indicators to be proposed is likely to be large. The plan is to implement all indicators in the course of 2016, in order to dispose of a common basis for the whole serial property.

	Valeur universelle exceptionnelle						
	Critère II	Critère VI	Critère VI				
	Attribut A Susciter un exceptionnel débat d'idées à l'échelle mondiale	Attribut B Inventer une nouvelle esthétique et un nouveau langage architectural	Attribut C Moderniser les techniques architecturales et prendre en compte les défis de la production en série, de la standardisation et de l'industrialisation	Attribut D Répondre aux besoins sociaux et humains de l'homme moderne à travers la recherche d'un équilibre entre l'individu et la société	Authenticité	Intégrité	Protection et gestion
Maisons La Roche et Jeanneret							

Petite villa au bord du lac Léman	Archétype de la Maison minimum		Fenêtre en longueur Expérimentation du standard de la Maison minimum à une travée	Maison unifamiliale à une travée Intégration du paysage à travers la fenêtre en longueur Recherche d'un espace maximal dans une surface minimale			
Manifestation des attributs	Aménagement intérieur, en grande partie original, est toujours celui d'une petite maison d'habitation. Elle cristallise des idées ayant une influence exceptionnelle autour de la question fondamentale de l'habitat minimum et de l'habitat pour le plus grand nombre.	L'émergence d'un nouveau langage architectural, celui du Purisme, dont elle adopte dès 1923 la géométrie rigoureuse, et surtout la polychromie primaire qui participe de la construction de cette nouvelle conception spatiale dans un espace réduit. La fenêtre en longueur, une des premières de l'histoire de l'architecture, relève de l'expérimentation technique, et offre une nouvelle approche du cadrage sur le paysage et de la relation au site.		La Petite villa au bord du Lac Léman relève de l'analyse ergonomique et fonctionnaliste de l'habitat dans une surface minimale et offrant un maximum de confort et d'espace. Cette analyse ergonomique et fonctionnaliste, exceptionnelle en 1923, vise à la recherche d'un standard typologique, repris, depuis, dans le monde entier : celui de la maison étroite à travée unique.	Depuis les petites transformations opérées par Le Corbusier lui-même dès 1931 à la suite de l'aménagement de la route en bordure de la maison, celle-ci n'a pas connu de modifications. C'est par rapport à l'état de 1931 que le haut degré d'authenticité peut être apprécié, tant dans ses formes, ses matériaux que dans sa distribution. En 2014 est restitué le jardin dans ses dispositions d'origine.	La maison n'est plus habitée aujourd'hui, mais son aménagement intérieur, en grande partie original, est toujours celui d'une petite maison d'habitation.	Objet classé au niveau cantonal et fédéral. Toute intervention est soumise à l'examen des autorités patrimoniales.
Indicateurs	1. Etat de l'aménagement intérieur d'habitation Photos. a. inchangé b. altéré en partie c. échangé (indicateur qualitatif)	2. Matérialisation et forme des façades Photos. a. inchangé b. altéré c. remplacé (indicateur qualitatif).	3. Polychromie intérieure Photos. a. maintenue b. altérée c. remplacée (indicateur qualitatif) 3. la fenêtre en longueur photo a. conservée b. altérée (indicateur qualitatif)	4. Relation objet-paysage : Situation de la maison dans son cadre : perception de « la petite boîte au bord du lac », la maison et la nature en harmonie. Photos a. inchangée b. altérée	Voir 1., 2., 3., 4.	Voir 1.	5. Pression liée au développement : Demandes d'approbation des plans traitées chaque année par les autorités cantonales : a. sur l'objet b. dans la zone tampon (indicateur quantitatif, mesurant la).
Maison Guiette							
Maisons de la Weissenhof-Siedlung							
Villa Savoye et loge du jardinier							
Immeuble Clarté	Issu de l'Immeuble-villas, prototype de la préfabrication du logement moderne de standing	Appartements traversants en Duplex Ossature métallique assemblée par soudure à l'arc	Typologie de l'Immeuble-villas	Appartements en duplex dans un immeuble collectif. Modèle d'immeuble pour classe moyenne bénéficiant de services communs.			
Manifestation des attributs	L'Immeuble Clarté est l'archétype de la préfabrication, de la standardisation et de l'industrialisation appliqué au bâtiment.	L'Immeuble Clarté présente un haut niveau d'innovation spatiale, exceptionnel à l'époque, dans le domaine de l'habitat, y compris dans l'habitat de standing dont il fait partie. Les appartements sont en duplex traversant , et d'une grande fluidité spatiale	L'innovation technique porte notamment sur : > la procédure de montage à sec – sans intervention de liants hydrauliques longs à sécher – permettant une accélération du processus de fabrication et une économie	Permanence de l' usage, celle d'un immeuble d'habitation de standing			

		grâce à un effort de décloisonnement et à l'emploi d'une ossature ponctuelle de poteaux en acier. La mise en forme architecturale épurée, et l'ensoleillement optimal qu'offrent les façades vitrées , accentuent le caractère innovant de la conception spatiale.	financière ; > la soudure à l'arc de la structure en acier , première application mondiale à un immeuble de logement ; > la préfabrication légère de tous les éléments de l'ossature et de la façade de pans de verre ; > les fenêtres coulissantes sur billes , innovantes à l'époque, devenues, depuis, un standard de la production industrielle contemporaine.				
Indicateurs		1. maintien de la structure spatiale d'origine : Nombre appartements 2015 : x Nombre d'appartements 2025 : x (indicateur quantitatif) 2. perception de Clarté comme un immeuble « en verre » , conservation de la façade vitrée sans interventions balcons/stores etc. Photos façades 2015 Photos façades 2025 (indicateur qualitatif)	3. maintien des éléments constructif originels : - structure en acier d'origine : a. maintenue b. altérée (indicateur qualitatif) - caractère à construction légère et préfabriquée des éléments d'ossature et des pans de verres État 2015 en pourcent a. maintenu b. altérée (indicateur quantitatif) - fenêtres coulissantes sur billes. Nombre existant en 2015 : x Nombre existant en 2025 : X (indicateur quantitatif)	4. appartements utilisés en tant qu'habitation Pourcentage du total en 2015 : x Pourcentage du total en 2025 : x (indicateur quantitatif)	Voir 1., 2, 3. 4.	Voir 4.	5. pression de développement sur l'objet Demandes d'approbation des plans traitées par les autorités cantonales a. sur l'objet b. dans la zone tampon (indicateur quantitatif)
Immeuble locatif à la Porte Molitor							
Unité d'habitation à Marseille							
La Manufacture à Saint-Dié							
Maison du Docteur Curutchet	Témoigne de l'internationalisation de l'architecture moderne	Redéfinition et échéance de 5 points "Promenade architecturale" crée une perspective visuelle variée et des situations spatiales dynamiques	Systèmes innovants d'éclairage, de ventilation Modulor dans les proportions de la maison et des éléments architecturaux				Créé Site Comité de la Mansion Dr. Curutchet et sanctionnée par décret municipal extension de la zone de protection et les réglementations nationales, provinciales et locales de sécurité..
Chapelle Notre-Dame-du-Haut							
Cabanon de Le Corbusier							

Complexe du Capitole							
Couvent Sainte- Marie-de-la-Tourette							
Musée National des Beaux-Arts de l'Occident							
Maison de la Culture							

L'Œuvre architecturale de Le Corbusier

UNE CONTRIBUTION EXCEPTIONNELLE
AU MOUVEMENT MODERNE

[14] Complexe du Capitole

CHANDIGARH / INDE

Proposition d'inscription sur
la Liste du patrimoine mondial,
présentée par l'Allemagne,
l'Argentine, la Belgique, la France,
l'Inde, le Japon et la Suisse.

CAPITOL COMPLEX CHANDIGARH



NOMINATION DOSSIER

TRANS BORDER SERIAL INSCRIPTION
ON THE WORLD HERITAGE LIST

ARCHITECTURAL WORKS OF
LE CORBUSIER



Architectural and Urban Works of Le Corbusier- The Capitol Complex, Chandigarh

THE MANAGEMENT PLAN



Vision statement for the management plan

'The vision of the Management Plan is to conserve, protect and enhance the Outstanding Universal Value of the Capitol Complex Chandigarh as a living repository of the largest and greatest urban composition of Le Corbusier, sustainably managing the balance between preservation and use. The Complex shall continue to be a celebration of democracy and an embodiment of the spirit of modern architecture inspiring present and future and generations of architects and planners across the world, highlighting the architectural contribution of the city of Chandigarh.'

OVERVIEW

Current management and use of the site

The nominated property is a 'living heritage site', housing the Assembly, the High Court and the Secretariat buildings and being extensively used as the administrative head of the city by the states of Punjab and Haryana.

The site is facing challenges of hosting multiple stake holders, an increasing pressure on space usage, escalating need for parking and the conservation of the exposed concrete of the edifices, monuments and plaza. Concerns of security have lead to limited accessibility, introduction of grills on openings and bifurcation of the pedestrian plaza. The backdrop of the Shivalik range is vital to the integrity of the layout.

A detailed assessment of the present condition of the site and its components forms the basis for this management plan. The areas of study are the current usage and management of the site, its stake holders, present means of protection and legislation, visitor management, risk preparedness measures, and financial layout for implementation of the management plan.

Stakeholders

The protection and upkeep of the nominated property is the responsibility of the Chandigarh Administration. The Secretariat and Assembly buildings are shared by **the states of Punjab and Haryana** making them interested state parties. The largest section of stake holders comprises of the nearly 12,000 **employees /staff** working in all the three buildings¹. The Chief Ministers of Punjab and Haryana and other senior officers also have their offices in this building. There are a large number of **visitors** who come for purely official work to the Secretariat building while around 5,000 **litigants and advocates** visit the High Court daily besides the **judges**. The Assembly building has the lowest number of employees and visitors. National and International **Tourists, researchers and historians** have an interest in exploring the entire property.

Due to the sensitive functions of all the buildings the Complex requires high security for which various security agencies like Chandigarh Police, ITBP and CISF² have close to 1,300

¹ **High Court** – Employees- 3,920 and 68 Judges.,Daily Visitors: 5,000;**Secretariat**: Total Employees- 7,500,Daily Visitors: 2,700; **Assembly** : Employees- 337 (Punjab) +322(Haryana)=657Daily Visitors: 35

² ITBP- Indo Tibet Border Police-700 personnel ,CISF-Central Industrial security Force-500 personnel

security personnel deputed in and around the nominated property. Since they are responsible for round the clock security of the Complex their accommodation and allied services need to be catered to.

Ownership of property and buffer

The entire **nominated property** including all its components- movable and immovable are under the jurisdiction of the Chandigarh Administration, Government of India. The buildings are jointly used by the states of Haryana and Punjab but the ownership is with Chandigarh Administration.

A major part of the land in **the buffer** is also under the Chandigarh Administration. Towards the west, the Rajindra Park houses a helipad, the Chandigarh Club which is on lease and temporary hutments of security personnel. The Eastern buffer defined by the existing road leading to Kaimbwala village comprises of largely forested area in which is located Nek Chand's famous Rock Garden³ the land being owned by the Chandigarh Administration. Towards the south the proposed buffer includes the Uttar Marg and the low rise- low density residential Sectors 2, 3, 4 and 5. The privately owned residences are either freehold plots or on lease⁴. However all the developments of these Sectors are regulated by the Punjab New Capital (Development and Regulations) Act 1952.

1.1 Objective of the Management Plan

The Management Plan is the principle mechanism to conserve, safeguard and promote the Outstanding Universal Value of the Nominated Property. It is formulated with a view to address the following aspects:

- a) **Ensure** sustainable development as one of the important mandates of the World Heritage properties.
- b) **Provide** a cycle of planning, implementation, monitoring, evaluation and feedback;
- c) **Present** an accountable, transparent description of how the management system functions;
- d) **Substantiate** / spell out the allocation of necessary resources

³ The Rock Garden has been absorbed in the Chandigarh Master Plan 2031 and future expansion has not been permitted with a view to control its sprawl.

⁴ All residential plots sold before 1973 were freehold after which the option of converting the lease to freehold with a conversion fee was allowed.

- e) **Enable** sensitisation and understanding of the property by all stakeholders
- f) **Equip** personnel for capacity-building to manage the site responsibly.

1.2 Structure of the Management Plan - The Management mechanism proposed for the nominated property ensures sustenance of the Outstanding Universal Value, and the attributes of the property with respect to the Criteria ii and vi under which the property is proposed for inscription to the World Heritage List. The aspects covered under the Management Plan have been derived from the attributes of the Nominated property, the unique conditions of authenticity and integrity as well as the broader urban setting upon which the OUV relies. The plan works as a two way mechanism;

- i) To safeguard and provide adequate protection to the OUV of the nominated property as a long term commitment and to conserve the authenticity and integrity of the property. Since the property also serves as a living heritage with development pressures, the management plan works as a tool to sensitively balance change with preservation within the property and its buffer,
- ii) Valorise its significance to the user, tourist and architectural research community as it is a resource of education and knowledge by the attributes of its architectural and urban vocabulary, construction systems and techniques.

The key aspects of the Management Plan are:

2.0 Policies and Framework of Legislations

3.0 Conservation Plan

4.0 Maintenance and Management

5.0 Development Plan for Buffer Zone

6.0 User, Tourist, Visitor Management

7.0 Risk management

8.0 Interpretation, Research & Outreach

9.0 Financial Management

2.0 POLICIES AND FRAMEWORK OF LEGISLATIONS:

The nominated property is under the ownership of the Chandigarh Administration and hence enjoys a strong legal and regulatory protection. Given the status of Chandigarh as a Union

Territory, it is under the direct administrative and financial control of the Central Government. Among the key stakeholders of the nominated property are the state governments of Panjab and Haryana, and the Registrar Panjab and Haryana High Court.

At the city level, all urban development is guided by Le Corbusier's Master Plan of 1964⁵. Corbusier's "Edict of Chandigarh" in which the Capitol Complex is designated a special area, though not a legislative Act also continues to act as a guiding force⁶. Presently, the management of the Nominated Property and the Buffer is taken care by the existing legislative framework i.e. The **Capital of Panjab (Development & Regulations Act), 1952**.

The entire Capitol Complex has been approved as a **Grade I Heritage precinct** by the Government of India on the recommendation of the Expert Heritage Committee⁷. It falls within Heritage Zone 1⁸. This protection is also extended to include the entire nominated property, the edifices, piazza, monuments, hillocks and associated landscape elements. Each of the three edifices and the four monuments has also individually been accorded Grade 1 status as part of Chandigarh's Enlisted Heritage⁹. The boundaries of the buffer lie within the Heritage Zone 1 and are governed by an extensive set of regulations specifying the heights, building lines etc. Detailed guidelines are in place for the buildings along the principal V2s and V3s of the city which form the southern and western edges of the nominated property.

The Chandigarh Administration is in the process of finalising the Draft Chandigarh Master Plan 2031 which has given due emphasis to the protection of Chandigarh's enlisted heritage and the recommendations of the Expert Heritage Committee. The Draft Heritage Conservation Regulations are also being prepared. Any further intervention/development within the Nominated Property and the Buffer will be regulated through the overall supervision of the notified Chandigarh Heritage Conservation Committee- CHCC (2011).

The Nominated Property shall form part of the Eco-sensitive Zone around the Sukhna Wildlife Sanctuary on the north of the Capitol Complex through a proposal submitted to the Government of India for approval and shall accord additional protection to the property and its buffer.

5 The layout and planning of all the areas is in compliance with the original layout of Corbusier.

6 "Edict of Chandigarh", 1952, Le Corbusier, Chandigarh.

7 The Expert Heritage Committee for the city of Chandigarh was constituted on 23.12.2011 to designate heritage status and thereby protect, conserve and enhance the modern heritage value of the ensembles, precincts and properties.

8 Under the Chandigarh Master plan 2031, development has been regulated by the designation of various Heritage Zones and the Capitol Complex lies in Zone 1.

9 Enlisted Heritage of Chandigarh was prepared in 2010 to accord heritage status to various buildings and ensembles in the city as Heritage Grade 1, 2 and 3. The Capitol Edifices and Monuments fall in Grade 1 which enjoys the highest level of protection of heritage zones and precincts.

Besides these measures other regulations which accord protection to the Nominated property include: The Chandigarh Tree Preservation Order, 1952, The Chandigarh Advertisement control Order, 1954, Central Air Prevention and Control of Pollution) Act, 1988, declaring Chandigarh as an “Air Pollution Control Area” and a Notification declaring the nominated property in the silent zone. A portion of the nominated property also falls within the Sukhna Catchment area.

The future legislative tools to ensure Management of the site while protecting its attributes shall include a proposed Conservation Plan and Architectural Regulations.

Issue 1: *Framing Heritage Regulations for the Nominated Property and Buffer Zone respecting the OUV and the broader setting as well as the authenticity and integrity and the values of the property by the formulation of a Conservation Plan and Architectural Regulations.*

Policy 1(a): The proposed policies of the Management Plan should be formally incorporated within the local development framework and within other statutory plans as Architectural Regulations for the formal protection of the site and the buffer zone areas.

Policy 1(b): The review and updating of statutory protection should be continued through national and state level designations and policies.

3.0 CONSERVATION PLAN

The nominated property is presently in active use and in a good state of conservation and the authenticity and integrity of the original works is largely maintained. The form, structure and articulation of the facades are well conserved as no vertical or horizontal extension is permitted¹⁰. The exposed concrete structures do not show signs of severe structural damage or deterioration although there are signs of weathering of the concrete at some places. Some balconies of the north western facade of the Secretariat have been partially enclosed for demand for additional office space, attached toilets and restrooms. Internal changes such as erection of partitions, addition of utilities and ducts for air conditioning have been made to address needs of human comfort. Many of these changes are reversible and are to be dealt in a sensitive way to resolve the user needs. All the originally conceived structures are intact and periodic maintenance has been done.

¹⁰ The Expert Heritage Committee has recommended that there shall be no further horizontal or vertical extension on the **campus** in view of its Heritage Grade I Status. To cope with the growing footfall, safety factors and holding capacity of the site, fire, and medical emergencies, alternate sites in the city are recommended for use.

In 2010 an extensive visual survey was conducted by a Sub-Committee of the Expert Heritage Committee¹¹ w.r.t. Restoration and Preservation of Building materials- concrete and brick masonry buildings which included assessment of the condition and state of concrete in the Secretariat, Assembly, and High Court buildings.

An overarching Conservation Plan based on the detailed condition assessment of the three edifices and the smaller but equally important elements of the Nominated Property is proposed to be drawn up. Besides being a tool for Periodic Reporting and Monitoring the state of the Property, the Conservation Plan will serve to protect, safeguard and conserve the Nominated Property at three levels:

a) **Overall Geometrical Composition and layout** (derived from the modular and golden section) of the nominated property keeping the OUV intact and maintain the spatial and visual integrity of the site within the boundaries of the site itself. Maintenance of the spatial relationship with the city as its symbolic and geographic head, and, maintaining its visual links to the Shivalik Hills further north is vital. To complete the overall composition as planned by Le Corbusier the unbuilt edifice of the Museum of Knowledge shall be constructed in its predefined location falling within the Northern Buffer Zone.

b) **The Built Fabric** comprises of the form, structure, materials and finishes of the three Edifices and the four Monuments. The external and internal components such as brise soliel, gargoyles, enamel door to the Assembly, motifs in wet concrete and shuttering patterns, lighting fixtures, tapestries, etc also form an integral part of the built fabric. The incomplete Martyr's Memorial and the Geometric Hill shall be completed as per the original design.

c) **Landscape** includes the Plaza and the associated urban landscape elements i.e. plantation, indigenous groves, mounds, water bodies, lighting fixtures, pedestrian pathways. Some insensitive plantations and maintenance works, security barricades obscuring the views of the edifices and affecting the OUV are being addressed as per the original scheme. Execution of the missing pathways and forecourts is also being undertaken. To reinforce the pedestrian priority and continuity along the plaza a dedicated parking space for the judiciary has been planned in the Buffer zone which would address the present ingress/movement of vehicles on the plaza towards the High Court.

3.1 Within the Conservation plan, areas which are intrinsic to the OUV and authenticity and integrity of the property and which pose challenges to its management are being specifically addressed. These are:

3.1.1 Concrete Conservation: The Nominated Property represents the first ever large scale use of exposed reinforced concrete in India which heralded a unique architectural and urban vocabulary of building types and forms. Together, the edifices and monuments represent the plastic inventiveness of their creator as well as display the varied qualities of concrete as a material for construction, sculpture and art. The edifices and the monuments are in fairly good state but require a Conservation and Management plan for their upkeep and long-term preservation. The Chandigarh Administration based on the visual Condition Assessment report of the Subcommittee of the Expert Heritage Committee has signed a Memorandum Of Understanding with CBRI, Roorkee (Central Building & Research Institute) to carry out a detailed condition assessment for all the three edifices and give recommendations regarding the measures and retrofitting needed for the preservation and conservation of concrete and to address high seismic risk to the property. The Secretariat building is being assessed first to be followed by the other two edifices.

Best international practices with other participating countries of the Trans National Dossier will be utilised to guide the conservation process.

A Concrete Conservation and Preservation Plan should be worked out with the help of experts to guide all future interventions and retrofitting.

3.1.1.2 Conservation of Other Elements: The Open Hand Monument in Bronze shall be conserved using state of the art methods and practices. The tapestries, the movable and immovable furniture, up lighters, etc shall also be restored and maintained.

3.1.2 Architectural Regulations- In the absence of **any** stipulated regulations current piecemeal interventions within the existing built fabric (external facades, interior floors, walls and ceilings) to address needs of human comfort and safety in work areas (air conditioning, fire detection and mitigation systems), and demand for additional office space by way of enclosing balconies are beginning to impact the values of the property. The Government of India has approved the broad framework of development guidelines including scope of changes permitted in the Heritage Grade 1 for Chandigarh's Enlisted Heritage¹². However, to monitor and regulate development in the Nominated Property and as a tool to manage change in a living site, the Conservation Plan would extend itself to the preparation of detailed Architectural Regulations with the approval of the CHCC. These would include:

a) 'No construction' zones shall be specified
b) Regulations for essential addition /alteration to ensure harmonious interventions and no adverse impact to the OUV, integrity and authenticity of the nominated property. All proposals shall be approved by the CHCC.

¹² Approved Report of the Expert Heritage Committee, 23 December, 2011.

Issue 2: *Conservation of built fabric of the edifices, monuments and plaza should be of primary importance for protecting the OUV of the property. Concrete Conservation should be taken up in collaboration with scientific organisations incorporating Best Practices.*

Issue 3: *Original composition and landscape design of the site needs to be completed, conserved and restored to fulfil conditions of authenticity and integrity as well as to preserve the views and vistas. Pedestrian continuity has to be restored as per the original layout.*

Issue 4: *The smaller elements need special attention and expertise for their care, management and conservation since they contribute to the integrity of the property.*

Issue 2: The conservation of built fabric of the edifices, monuments and plaza

Policy 2(a): A detailed condition assessment – both visual and structural of the entire property should be undertaken for the entire site and its components to arrive at the interventions needed and further long term plan of action. Digital images and documentations shall be compiled as part of a continuous process of assessment, updating of data and recording of maintenance and conservation works being carried out.

Policy 2(b): The exposed concrete of the edifices, monuments, plaza and smaller elements like the brise soleil, is one of the most important OUV of the property hence its conservation should be ensured through regular maintenance and sensitive interventions based on the observations of the condition assessment report.

Policy 2(c): Authenticity and integrity of the original and existing fabric should be ensured while carrying out maintenance and repair works adopting international best practices with respect to materials and techniques. The approval of CHCC should be taken before undertaking any such works.

Policy 2(d): Where the original materials and finishes within the site have been compromised through non-authentic materials, inappropriate additions and alterations and incongruous detailing, historic character and detail will be reintroduced wherever and whenever possible. The changes and alterations should be categorised as reversible or irreversible and appropriate measures taken.

Policy 2(e): All interventions to restore the original materials and finishes shall be done under the guidance of technical experts and should be identifiable on close inspection and/or through rigorous documentation.

Policy 2(f): Regular assessment of efficiency and adequacy of services such as water supply, drainage, electricity etc needs to be done keeping in mind the growing requirements of users, visitors and tourists.

Policy2(g): Since the site is and shall continue to be extensively used, incorporation of modern day services like computer networking, increased electrical load, air conditioning, lighting and illumination, modern means of security and surveillance etc need to be incorporated sensitively to maintain the functionality of the complex with minimum damage to the built fabric.

Policy 2(h): In the monument of the Open Hand, the concrete should be sensitively repaired where needed and the bronze Hand should be restored. The Martyrs' Memorial should be completed as per the original drawings and details. The Tower of Shadows should be properly maintained and the ramp connecting it to the Geometric Hill should be cleared of vegetation and repaired sensitively. The Geometric Hill should be completed along with the sun dial as per the original drawings.

Policy 2(i): Guidelines specifying monthly, quarterly, half yearly and annual tasks of maintenance works and the agency responsible for the same should be prepared clearly outlining areas of overlap and shared responsibility. The means and methods of assessing the completion and success of tasks should be clearly defined by each agency.

Issue 3: Conservation and restoration of original composition and landscape design of the site

Policy 3 (a): No addition -temporary or permanent should be allowed in the site which is not as per the original concept. Additions and alterations needed to restore the composition should be duly approved by the CHCC and carried out in the original spirit of the complex.

Policy 3 (b): Additions and alterations to the original landscape concept should be removed and the incomplete connections established to confirm to the original scheme of vehicular and pedestrian access.

Policy 3 (c): The primary purpose of the pedestrian plaza should be restored by restricting vehicular access and parking while removing barricades and check posts.

Policy 3 (d): All new works should be in consonance with the management plan to conserve the values of the site.

Policy 3(e): Vistas and views should be maintained and reinforced by clearance of unsolicited vegetation and previous unplanned plantation. Removal of excess vegetation should be carried out regularly.

Policy 3 (f): A comprehensive drainage plan for the entire site should be prepared. The floor level of the plaza and abutting roads relative to the buildings should be maintained in all exercises of future re carpeting.

Issue 4: Management and conservation of the smaller elements

Policy 4(a): A detailed inventory of heritage furniture and original light fixtures should be prepared recording their present condition and location.

Policy 4(b): The present condition of the tapestries in the High Court and in the Assembly should be assessed by an expert and measures to be taken to restore them should be outlined.

Policy 4(c): The lighting along the plaza should be restored as per original scheme.

4.0 MAINTENANCE & MANAGEMENT

For the living heritage of Capitol Complex where user and visitor footfall is growing, it is vital to have a comprehensive maintenance and management plan which ensures not only the functional efficiency but also enhances the OUV and values of the site. Presently there is no regular system of maintenance and management of various components of the property such as maintenance of the edifices, the plaza, the monuments, landscape elements, pedestrian vehicular movement lines, solid waste management etc. The staffing levels for maintenance are also insufficient and at times insensitive while carrying out regular maintenance. Some piecemeal and adhoc maintenance works including laying of concrete in a patchwork fashion, repair and restoration which do not conform to the original forms, material and design etc. have adversely affected the aesthetics and forms. Concrete surfaces which are not periodically maintained show blackening, and algae growth. Insensitive plantation and unruly undergrowth attacking the concrete at places on the plaza is also due to lack of proper maintenance. Sheds for storage of building material though temporary but continue to be sited on the plaza, thereby intruding into the overall spatial composition. The Maintenance and Management Plan would address these issues for the entire property as a comprehensive plan under the responsibility of the Chief Engineer UT.

4.1 A **Comprehensive Maintenance plan** for the entire property with stakeholders who are responsible co-partners and participate in the smooth implementation of the Management Plan shall be prepared with the approval of the CHCC.

4.2 Maintenance and Management of the Edifices – The Chandigarh Administration with the prior approval of the CHCC will undertake the management of the edifices after ascertaining the requirements from the governments of Punjab and Haryana and the Registrar Punjab and Haryana High Court. However, the daily maintenance and repair works would be carried out by a competent authority as per Architectural guidelines approved by the CHCC.

4.3 Parking and Circulation - As a comprehensive exercise the management of pedestrian and vehicular circulation is dealt under *the section on Traffic and Parking Management*.

4.4 Landscape and Plantation – While the Conservation Plan would oversee the landscape and plantation, implementation of the day to day maintenance would be the responsibility of the Horticulture Wing under the Chief Engineer, UT, Chandigarh. The maintenance of landscape and green areas, water bodies, plaza and monuments which is presently undertaken by different divisions of Horticulture Wing of Department of Engineering will be addressed in a holistic manner in the Conservation Plan.

4.5 User Management and Sensitisation - The users (workers, employees to the High Court, Assembly and Secretariat) to the property need to be sensitised towards the values of the property to instill a sense of pride so that they feel responsible towards the management of their property.

With increased visitation, staffing levels (maintenance and tourist facilitation staff) will be augmented and sensitised towards the OUV, attributes and values of the nominated property. Sensitisation drives, and activities to promote the property by the Tourism Department, is being dovetailed into the annual activity calendar of the nominated property in conjunction with the activities of the Tourist Information Centre recently opened near the entrance to the property. This Centre is an infrastructure management tool to facilitate the visitors and researchers towards the guided interpretation of the nominated property.

Issue 5: A Comprehensive Maintenance Plan for the entire property needs to be prepared for the all the components of the nominated property. Sensitisation of users and maintenance staff should be ensured.

Issue 5: Preparation of Maintenance Plan

Policy 5(a): A regular system of maintenance and management of various components of the property such as the edifices, the plaza, the monuments, landscape elements, pedestrian vehicular movement lines, solid waste management etc should be prepared.

Policy 5(b): Augmentation and sensitisation of staff to carry out regular maintenance while preserving the property.

5.0 DEVELOPMENT PLAN OF THE BUFFER ZONE

The Buffer extends all around the nominated property with an intention to protect, safeguard and enhance the OUV, integrity, setting and appreciation of the site. The boundaries of the Buffer are easily identifiable. The northern buffer is defined by the existing mango groves, the Southern comprises the residential Sectors 2, 3, 4, and 5 which are three storied low-rise developments of government and private properties. This part of the buffer further connects the nominated property to the city along the ceremonial avenue - the V2 Jan Marg. The eastern buffer includes the High Court extension and the Rock Garden while the Rajindra Park defines the western buffer.

Together the northern, eastern, and western buffers comprise the Capitol Parc and form part of the Heritage Zone 1 approved by the Government of India on the recommendations of the Expert Heritage Committee. The entire buffer zone has been given title of the Corbusian Chandigarh¹³. Since the Buffer lies within the boundary of the Union Territory of Chandigarh, its management is regulated through the existing legislative framework i.e. The Capital of Panjab (Development & Regulations Act), 1952. The Expert Heritage Committee has recommended Heritage Status to some government and private properties within the Southern Buffer some of which face the Uttar Marg running parallel to the nominated property and are visible from the nominated property. Concept approval from CHCC has also been recommended for properties flanking other V2 and V3 roads of the Sectors to preserve the nominated site's urban imageability. The green belts along the sectors are also being preserved. Further, all development within the Buffer will be regulated under the overall supervision of the Chandigarh Heritage Conservation Committee (2011). The Draft Master Plan 2031 has sensitively integrated the Expert Heritage Committee recommendations for the Buffer which will provide statutory backing upon notification.

5.1 The Development Plan of the Buffer would address the following:

5.1.1 The Buffer zone shall be sensitively and carefully handled to ensure the protection of the visual and spatial setting of the nominated property by ensuring that no high-rise/incongruous development is allowed to pose a threat to the planned vistas, the serenity

¹³ *Corbusian Chandigarh* which comprises sectors 1-30 of the Phase 1 of the city, should continue to retain its lowrise character and no private building be allowed to rise higher than three floors as already permitted. Recommendations of the Expert Heritage Committee approved by the Government of India.

of the property and the backdrop of the mountains. Detailed Heritage Regulations for the Buffer Zone vis a vis views, scale, height, mass, materials and physical distance are to be taken into consideration while considering the appropriateness of any future intervention in this Buffer Zone.

5.1.2 The green open and spacious ambience of the nominated property and the buffer zone shall be protected through the Draft Chandigarh Master Plan-2031 which stipulates all green areas as inviolable landuse thus ensuring the preservation of the eastern, northern and western buffer zones comprising natural greens, the Rock Garden and part of the city green- the Leisure Valley.

5.1.3 The requirement of additional space to accommodate the functions of the High Court shall be met within the eastern buffer for which holistic planning has been undertaken with the involvement of the Members of the CHCC to ensure harmonious development. To reduce pressure on the nominated property and the immediate buffer some functions of the High Court, Secretariat are also been planned elsewhere the City.

5.1.4 The ongoing promotion of the Nominated Property by the Chandigarh Administration and further its World Heritage Status is bound to bring in increased visitation. The augmentation of the tourists' facilities shall be sensitively addressed in the southern buffer. Further given the multiplicity of its users, sensitisation of the various stakeholders to develop a deeper understanding of shared value of the nominated property is needed.

5.1.5 Traffic Management within the buffer is presently in order, since the area falling within the Buffer is largely residential with state owned government housing pockets as well as privately owned large villas. The rise in traffic and parking needs due to increased tourists and visitors in future needs the creation of additional parking lots within the buffer, especially along the V2 Jan Marg. This would require careful and sensitive intervention for selection of parking sites. Likewise, there would be a need for monitoring traffic along tourist circuits linking other tourist spots within the buffer to the Nominated Property.

Issue 6: *The development and management of buffer zone areas should be integrated with site planning and development to preserve spatial and visual setting of the site. Regulations under the CHCC for developments within the Buffer are essential.*

ISSUE 6: Integration of buffer zone areas with site planning and development

Policy 6(a): Developments in the buffer zone should ease the development pressure on the site without compromising on the character and OUV of the nominated property.

Policy 6(b): All additions and alterations in the buffer zone should follow the prescribed development norms and further be approved by the CHCC.

Policy 6(c): Buildings of Heritage Value in the buffer zone like the Pierre Jeanerette House should be integrated into the tourist circuit of the site and its surroundings.

Policy 6(d): An Interstate Coordination plan should be developed with Punjab to ensure low rise- low density development in the area beyond the northern buffer till the foothills of the Shivalik Hills.

6.0. USER, VISITOR AND TOURIST MANAGEMENT

The dual aim of the user and tourist management plan is to cater to the large number of users of the site (office goers, litigants and visitors to the High Court) as well as the tourist influx expected due to its recognition as an Architectural and Urban icon of Modern Heritage. The three edifices, though in varying degrees, reflect stress induced by the increasing user pressure¹⁴-especially in the High Court, (even though an extension serving extended judicial functions besides courtrooms has been added in the Buffer Zone).

The main areas of concern regarding user, visitor and tourist management are:

- 6.1 Requirement of additional work space.
- 6.2 Infrastructural needs
- 6.3 Pedestrian & vehicular accessibility to and within the site.
- 6.4 Parking for users and visitors.

6.1 REQUIREMENT OF ADDITIONAL WORK SPACE

The three edifices are under pressure for augmenting work space and service areas as they are serving the growing population of the city and the region with the maximum pressure being felt in the High Court. The requirement of additional space to accommodate the functions of the High Court shall be met within the eastern buffer for which holistic planning has been undertaken with the involvement of the Members of the CHCC to ensure

¹⁴ This has been partially addressed by relocating extended functions of the High Court, and Secretariat elsewhere in the city.

harmonious development. To reduce pressure on the nominated property and the immediate buffer some functions of the High Court, Secretariat are also been planned elsewhere the City.

6.2 INFRASTRUCTURAL NEEDS

Due to manifold increase of users and visitors the **infrastructure needs** for water supply, drainage, electricity etc. are under stress effecting the smooth functioning of the activities within the edifices.

Provisions for fire fighting and **risk preparedness** and disaster management require dedicated and additional resources which need to be factored in while augmenting the essential services.

Interventions for **human comfort and work efficiency** with adoption of modern technology like computer networking, power back up etc. are necessitating alterations and additions to the built fabric.

Modern means of surveillance and security should be explored to replace the check posts and barricades while reducing the manpower needed. Adequate infrastructure for the security personnel responsible for round the clock security of the campus and allied services should be accommodated without compromising on the aesthetics of the site.

Additional **public conveniences** are needed for visitors and tourists. The infrastructure facilities for tourists include the recent Tourist Information Centre.

Issue 7: Infrastructural augmentation of the property should be undertaken to address developmental pressures and increased visitation while ensuring the preservation of the authenticity and integrity of the site and its components.

Issue 7: Infrastructural augmentation of the property

Policy 7(a): Augmentation of physical infrastructure for water supply, drainage, electricity, disaster management and risk preparedness, landscaping, maintenance of the plaza, garbage collection etc should be commensurate to the future requirements and sensitively incorporated into the built fabric with the approval of the CHCC.

Policy 7(b): The increasing space requirements of the High Court and Secretariat should be sensitively accommodated in the buffer and preferably be planned elsewhere the City.

Policy 7(c): Modern means of surveillance and security should be explored.

6.3 PEDESTRIAN & VEHICULAR ACCESSIBILITY TO THE PROPERTY

The nominated property is **easily accessible** via the ceremonial Jan Marg that connects it to the City Centre, Sector 17 as well. Public transport is easily available along the Uttar Marg which links the site to the rest of the city via the vertical roads that terminate on it. The Uttar Marg also connects the site to the highly visited Sukhna Lake and Rock Garden. Special buses are run to and from the ISBT¹⁵, Sector 43 and the local Bus stand at Sector 17 to cater to the large number of staff and visitors from the neighbouring states of Punjab and Haryana. All modes of transport like the cycle rickshaw, auto rickshaw and buses are available. The Hop on Hop off bus conducts trips to the nominated property as part of the tourist circuit of the city.

Except for the stretch of the road in front of Sukhna Lake that sees a huge rush and congestion of traffic on weekends, the roads leading to the site are not under traffic pressure. Directional signage is prominently positioned across the city at all the important nodes of circulation and activity.

Battery operated carts from the Sukhna Lake have recently been introduced to make the travel on the Uttar Marg easier and sustainable. Pedestrian and bicycle connectivity from the main nodes is possible and being facilitated further by strengthening the existing pathways along the major arteries.

Permissions to access the Complex the buildings are granted at the Tourist Information Centre.

b) Accessibility within the Site

Presently **pedestrian continuity** on the 450m long plaza linking the edifices and the monuments has been disrupted by undesirable vegetation, barricading and security checks. Some of the pedestrian connections and forecourts to monuments which have not been executed need to be constructed to complete the pedestrian connectivity envisaged in the original plan of Corbusier. **Vehicular circulation** leading to the separate parking lots for all three edifices is under stress due to heavy traffic.

¹⁵ Inter State Bus Terminus

Issue 8: The approach to the nominated property from the city should be strengthened to ensure easy access to the large number of staff, official visitors, and litigants and tourists.

Issue 9: Pedestrian circulation within the site should be restored by completing the pathways and stopping vehicular ingress and parking on the plaza.

Issue 8: Facilitating easy access to the site.

Policy 8(a) Connectivity to the major nodes like the City Centre, inter state and local bus stand and railway station should be strengthened by augmenting public transport to facilitate the office goers and visitors.

Policy 8(b) The nominated site should be integrated into a tourist circuit including the Sukhna Lake, Rock garden and Leisure valley and connected by means of public transport.

Policy 8(c) Public transport like auto rickshaws and taxis should be provided with dedicated parking.

Policy 8(d) The connectivity to the proposed Metro Rail Station¹⁶ originating near the Nominated site should be factored in while making the comprehensive accessibility plan for the site.

Issue 9: Restoring pedestrian circulation within the site

Policy 9(a) The originally perceived circulation pattern as distinctly separate vehicular and pedestrian movement should be restored by removal of barricading and check posts and disallowing vehicular access and parking on the plaza.

Policy 9(a) The pedestrian connections should be completed as per the original plan and cleared of vegetation to facilitate complete access and connectivity within the site.

¹⁶ Covering a distance of 12.49 kms, the first corridor of Metro rail will stretch from Chandigarh's Capitol Complex to SAS Nagar's Sector 70. The project's second corridor will start from Mullanpur and end at the grain market in Panchkula's Sector 20 - 25.7 km in length. The first corridor is expected to be operational by 2018.

6.4 PARKING FOR USERS AND VISITORS

The parking demands of the users and visitors to the three edifices are growing with that of the High Court being the maximum¹⁷. Presently the parking of Judges' cars in front of the High Court is causing pedestrian- vehicular conflict on the plaza. Dedicated parking for Judges has been created in the Buffer Zone to discourage parking of cars on the plaza.

Additional parking for users and visitors is being accommodated in the Buffer areas but is still falling short.

Parking for tourists is being met through dedicated parking provided alongside the Tourist Information Centre, the nearby parking spaces along the Uttar Marg (Rock garden, Sukhna Lake) and Jan Marg. Public transport, taxi, auto and battery operated tourist carts are also available and parked at designated points for the convenience of the tourist.

Issue 10: The increasing pressure on parking for the High Court and Secretariat buildings should be addressed without compromising on the layout of the site.

Issue 11: With additional traffic generated by increased tourist visitation to the Nominated Property, parking needs will have to be addressed and resolved using areas in the buffer zone.

Issue 10: Additional Parking for the High Court and Secretariat

Policy 10(a): To decrease the pressure on parking within the limited space available, public transport between the nominated site and important nodes in the city should be strengthened in terms of numbers, options and frequency to discourage use of private vehicles. The launch of the Metro Project will ease the pressure on parking in the future.

Policy 10(b): Multi -level parking in the buffer zone should be considered- for the High Court and Secretariat building after approval of the CHCC to ascertain that it does conflict with the views and vistas of the nominated site.

¹⁷ The High Court has been provided with a multilevel subterranean parking in addition to the existing surface parking . For the High Court alone, as per figures approximately 2, 90,000 sq.ft of area has been projected to park 3500-4000 four wheelers and 25000-3000 two wheelers. Source- Chandigarh Masterplan 2031.

Issue 11: Parking needs due to increased tourist visitation

Policy 11(a): The existing parking lots of the adjoining Rock Garden, Sukhna Lake and parking lots along the Uttar Marg should be managed in a holistic manner to cater to increased visitation to the site. Battery operated carts from these parking lots should be increased to facilitate access to the property.

Policy 11(b): Parking near the Tourist Information Centre should be limited to the present planned area. Larger tourist transport should be parked in adjacent lots listed above.

7.0. RISK MANAGEMENT

Being extensively used as the administrative head of the city and falling in the highly sensitive seismic zone IV, the nominated property faces many risks and threats which become more critical due to the high density of users and the sensitive nature of use. The edifices planned and constructed almost 60 years back do not comply with present day norms of fire safety and emergency evacuation.

The main issues to be addressed in holistic risk management plan for the entire site and its components are;

7.1 Fire Safety: The multi storied Secretariat building and the High Court have a high density of staff, and visitors with large amount of inflammable paper work. Present Fire fighting systems have been incorporated in an incongruous manner affecting the aesthetics of the interiors and exteriors. Fire audit reports of the three edifices have been prepared by the Fire Department outlining measures to be taken for fire safety and evacuation. The implementation of these measures shall be undertaken by the Engineering Department in consultation with the Department of Urban Planning and the subsequent approval of the CHCC.

Mock fire drills have been conducted to verify the efficacy of the evacuation in the High Court. The nearest fire station is close by and easy access to the site is possible. However, unhindered internal circulation for fire tenders within the property needs to be planned out.

7.2 Seismic activity: Acknowledging the location of the property in the high risk seismic Zone 4, detailed condition assessment of the edifices is being carried out by Central Building Research Institute, Roorkee (CBRI) to check the structural stability of the over 60 year old

edifices. The buildings do not show any adverse affects of previous earthquakes in the region.

7.3 Man made threats: Being the Administrative head of the city the Complex is vulnerable to arson and terrorist attacks. Security concerns have lead to the deputation of over 1300 security personnel all over the site. The hutments and barricades are compromising the aesthetics of the property. Evacuation and relief plan in case of emergency needs to be worked out for all eventualities.

Issue 12: A Risk Management Plan to counter all possible hazards such as fire, disaster and emergency situations in and around the Nominated Property should be formulated and implemented for the improved safety and visitation to the property.

Issue 12: Formulation and implementation of Risk Management plan

Policy 12(a): The preparation of a holistic risk management plan for the entire site and also the independent edifices should be initiated under the guidance of experts. The plan should cover measures to minimise and efficiently handle threats of fire, natural calamities, weathering of materials and man made threats.

Policy 125(b): The risk management plan should be dovetailed into the city level planning

Policy 12(c): Modern means of surveillance should be sensitively incorporated in the site to enhance security without compromising the accessibility and overall aesthetics of the site.

Policy 12(c): Mock drills should be conducted periodically to assess the risk preparedness of all agencies concerned in diverse situations of threat to the property and its users.

8.0 INTERPRETATION, EDUCATION AND OUTREACH

The ensemble of the edifices, monuments and landscape elements of the Capitol Complex represents the most tangible manifestation of the architectural and urban design theories of Le Corbusier and has as such become a Mecca for architects, historians, researchers and scholars from all over the world. Fortunately, a vast amount of deeply researched and authentic literature is available documenting all the aspects of the Capitol Complex. The

Chandigarh Museum, Sector 10 and the Le Corbusier Centre, Sector 19¹⁸, showcase extensive drawings, models and literature for the awareness of the citizens and visitors regarding the nominated property. The Museum at the High court is a source of information regarding the same.

Numerous publications and research papers on the various aspects of the Capitol Complex are constantly being produced by national and international authors. The Complex has also been the subject of many undergraduate, post graduate and doctoral Thesis locally and globally.

However, awareness regarding the Complex is limited to scholars and historians and needs to be augmented through frequent heritage walks, dissemination of information to students and citizens through agencies like INTACH¹⁹ to promote it.

Issue13: Integration of educational and outreach programmes should be geared towards sensitising the visitors, users and stake holders regarding the heritage of the property.

Issue14: Scholarly research should be encouraged and facilitated in all possible ways to ensure the long term protection of its OUV and its subsequent management as it is a living heritage vulnerable to development pressures.

Issue 15: A comprehensive interpretation plan should be developed through various interpretive mediums including audio visuals, signage, publications, brochures and a dedicated website.

Issue13: Integration of sensitising the visitors, users and stake holders

Policy 13(a) To ensure that the heritage value of the Capitol Complex is understood and appreciated by a larger section of society, visitors and stakeholders a multi pronged approach should be adopted to create awareness and outreach regarding the site.

¹⁸ Le Corbusier Centre is housed in the building formerly called Architect's office in which Corbusier and his associates worked on the Chandigarh Project.

¹⁹ INTACH- Indian National Trust for Art and Cultural Heritage.

Issue14: Encouraging and facilitating study and research

Policy 14(a): Study and research on all aspects of the nominated property should be encouraged by providing access to both the property and previous research and literature already available. A dedicated Heritage Cell should facilitate dissemination of knowledge and provide avenues for further research.

Policy 14(b): Short and long term research projects in partnership with national and international schools of architecture, Fondation Le Corbusier ,France and other leading historians and scholars should be initiated and promoted by the Chandigarh College of Architecture and Chandigarh Administration.

Issue 15: Developing a comprehensive interpretation plan

Policy 15(a): The Department of Tourism should augment the literature available on the nominated property in the form of publications, brochures and a dedicated website highlighting the aspects of the Capitol Complex in an easily understood and visually attractive format to facilitate its interpretation at a local, national and global level.

Policy 15(b): Adequate signage in the city and within the Complex should facilitate awareness and understanding of the site.

9. FINANCIAL MANAGEMENT

The Chandigarh Administration earmarks sufficient funds for maintenance, conservation, valorisation and tourism promotion of the Nominated Property. A dedicated budget is made available for the annual short and long-term maintenance of the Nominated Property. An amount of Rs, 1583.55 lacs has been allocated by the Finance Department, U.T. for maintenance of all Govt. Non-Residential Buildings for the current financial year 2013-14. No separate allocation for the Capitol Complex has so far been provided. An expenditure of about Rs. 23.98 crore has been incurred in the last 10 years for the maintenance of Capitol Complex. However, keeping in view the nomination to World Heritage Status, funds commensurate with the needs of the Management Plan should be allocated in a time bound manner to sustain long-term conservation of the site. Further, inscription as a World Heritage Site will help perpetuate success in attracting funding for conservation and enhancement from a range of sources due to the importance and prestige associated with an internationally important site of Corbusier's architectural legacy.

Issue 16: A detailed Financial Plan for the implementation and sustenance of the management plan should be worked out to support the short and long term conservation and promotion of the site.

ISSUE16: Financial plan for the implementation and sustenance of the management plan.

Policy 16(a): The expected expenditure for the necessary conservation measures and for implementation of the management plan should be worked out in consultation with the diverse agencies involved.

Policy 16(a): A dedicated and detailed financial plan for the implementation and sustenance of the conservation plan, management plan, interpretation plan etc. should be created besides the funds needed for regular upkeep and maintenance of the site.

IMPLEMENTING THE MANAGEMENT PLAN

The policies and strategies outlined in the management plan need to be diligently implemented and closely monitored to ensure the effective and holistic conservation and promotion of the nominated property of Capitol Complex. This section outlines the provisions and programs that would ensure the same with suitable time frames for implementation and periodic monitoring at appropriate intervals.

RESPONSIBILITY OF IMPLEMENTATION OF THE PLAN

The Chandigarh Administration and its various Departments are responsible for the implementation of majority of the policies as the ownership and administrative control of the nominated property lies with them. However there are many other local and interstate agencies whose active participation and commitment is required for the successful implementation and sustenance of management plan. The process shall be initiated and completed in the following manner:

1. The first step would be the formal framing and implementation of policies and strategies, including committed partnerships with agencies and stake holders involved. The formal framing of the policy would involve:
 - a. Defining the role and responsibility of each agency and agreeing on specific tasks and time lines.
 - b. Specifying tangible targets and indicators of progress.
 - c. Detailing the resources –manual, financial and administrative- for achieving the outlined tasks within the time frame agreed on.
2. Conducting surveys, condition assessment, maintenance works, etc for framing further policies and actions.
3. Monitoring and measuring implementation of those policies and actions set out in Part 5 by following up with the stakeholders responsible for implementing the action plan.
4. Finalising the indicators for each subset and agreeing on the format of annual reports on the progress of each.
5. Formalising the establishment of a dedicated World Heritage Centre after the inscription of the site to oversee the implementation of Management plan.
6. Continuous and regular appraisal of the indicators for revising the policies as and when needed to address new issues arising post inscription.

The tabulation below outlines the key roles/areas of action of agencies involved indicating areas of individual responsibility of Departments within the Chandigarh Administration.

AGENCY/ STAKEHOLDER	ROLE/AREA OF ACTION
Chandigarh Administration	• Policy decisions regarding management of additions/alterations to buildings in consultation with stakeholders and state parties. • Interstate negotiations for management of area beyond northern buffer and shared buildings in nominated property. • Decision for removal of barricade on plaza. • Empowering a Statutory body (Chandigarh Heritage Conservation Committee, CHCC) for overseeing all future interventions. • Establishment of World Heritage Centre post inscription.
Department of Urban Planning	• Co-ordinating for completion of plaza and circulation as per original scheme. • Co-ordination with Horticulture Department to implement a landscape plan as per original scheme
Interstate committee with Punjab and Haryana	• Additions and alterations in Assembly & Secretariat Building • Maintenance and protection of buffer
Registrar ,High Court	• Circulation and parking of Judges' vehicles. • Decisions on removal of Additions and alterations.
Department of Tourism	• Visitor /Tourist Management • Promotion of the site at local and global level.
Department of Engineering	• Maintenance and repair of buildings, monuments and plaza. • Implementation of the Landscaping Plan as per original scheme and its upkeep by Department of Horticulture.
Department of Finance	• Budgetary allocation for maintenance works and additional staff for upkeep of property-annual amount, long term financing of retro fitting etc.
CBRI ²⁰ , Roorkee.	• Detailed condition assessment of buildings as/ MOU.
National Disaster Management Agency	• Risk preparedness assessment, conducting mock drills, and suggestions for retrofitting.
UT Fire and Emergency Department,	• Risk preparedness, mock drills, and suggestions for retrofitting.
Security agencies- Chandigarh Police, ITBP ²¹ , etc.	• Access of users, visitors while maintaining security. • Clearing of barricades on plaza. • Relocation of hutments/tents. • Establishing zones of security for each agency involved.
Chandigarh College of Architecture	• Capacity building, seminars, courses on conservation of concrete, heritage management etc.

²⁰ Central Building and Research Institute, Roorkee, Uttarakhand.

²¹ ITBP- Indo Tibetan Border Police

Monitoring indicators

Regular and systematic monitoring to assess how the values of the nominated site are being maintained over time and to measure whether the objectives of the Management Plan are being achieved is critical to the conservation of the Outstanding Universal Value of the nominated property. The indicators for monitoring the site are the factors that protect the authenticity and integrity of the site and thus measure the success or otherwise of the Management Plan. Effective monitoring of these indicators should help in assessing progress on site, future needs and formation of future annual and five year plans. The table below enlists the indicators for monitoring, frequency of monitoring and the authority responsible for the same.

OUV related aspect to be monitored	Monitoring Indicators	Frequency of Monitoring	Authority Responsible/ Location of records
PLANNING AND POLICY	Notification and implementation of the proposals of Chandigarh Master Plan 2031,	Once with regular monitoring of implementation	Chandigarh Administration, Interstate Development Committee, Registrar of High Court, Department of Tourism.
	Recommendations of the Expert Heritage Committee	As required	CHCC ²²
ACCESS AND VISITATION	Update of increase in number of visitors	Annually and as per need	Department of Tourism
	Review of facilities for visitors	Annually	Department of Tourism
	Procedure for security checking	Annually and as per need	Department of Tourism and Security agencies
CONSERVATION	State of exposed concrete of the buildings and monuments	Annually	Chief engineer's office, CBRI, Roorkee .
	Structural stability of the buildings	Once for all and later annually	CBRI, Chief Engineer, UT.
	State of Bronze of the Open Hand and foundation plaques	Once with annual monitoring	Heritage Cell.
	Documentation of later additions and alterations with pictures and data	Once with regular monitoring	Department of Urban Planning, Engineering Department, CCA/ Heritage Cell.
	Removal of present violations, ensuring sensitive interventions in future.	As per progress of works.	CHCC, Engineering Department, Department of Urban Planning / Heritage Cell.
FURNITURE AND FIXTURES	Inventory and Stock taking of heritage furniture both built in and mobile ,tapestries, art work, light fixtures, enamel door etc.	Once with Annual monitoring.	Department of Urban Planning, Engineering Department, CCA/ Heritage Cell.

²² Chandigarh Heritage Conservation Committee, which shall regulate and monitor the work undertaken by all agencies with respect to all the indicators.

	Repair and maintenance	Complete stock Once and later as per need.	Interstate Development Committee, Heritage Identification committee.
MANAGEMENT OF BUFFER ZONE	Change in land use if any within the defined buffer zone and of areas impacting the OUV.	As per request from stakeholders and foreseen threats.	CHCC, Chandigarh Administration.
FINANCIAL RESOURCES	Funds for maintenance and upkeep	Monthly	Department of Finance and Chief Engineer, UT.
LANDSCAPING AND PLANTATION	Completing the pathways and connections.	Once	Department of Urban Planning, Department of Engineering.
	Pruning of trees and removing unwanted growth to maintain vistas.	As per need	Department of Urban Planning, Horticulture wing of Department of Engineering.
	Maintenance and upkeep of plantation and greens.	Daily and As per need	Horticulture wing of Department of Engineering.
PEDESTRIAN PLAZA	State of concrete finish	Annually	Chief Engineer's office
	Accessibility across plaza	Once Annually	Security agencies- ITBP, Chandigarh Police etc.
	Water bodies in front of Assembly and High Court building	Once, maintenance as per need	Department of Engineering.
	Removal of Parking on plaza	Once	Chandigarh Administration, Registrar, Punjab and Haryana High Court.
RISK MANAGEMENT	Record of accidents and threats in and around the site	Monthly	Department of Engineering, Department of Traffic, Department of Home, ITBP, Chandigarh Police, CRPF
	Checking risk preparedness/mock drills	As per disaster management plan	Deputy Commissioner, Chandigarh Administration with National Disaster Management Authority, New Delhi, ITBP, Chandigarh Police, CRPF, etc.
	Reviewing security and emergency plans	Annually	Deputy Commissioner Chandigarh Administration with National Disaster Management Authority, New Delhi, Chandigarh Police, CHCC.
	Retrofitting for risk management and seismic threats	Implemented and monitored as per need	Department of Engineering CHCC, CBRI
RESEARCH AND CAPACITY BUILDING	Review of research projects and publications on the nominated property.	Ongoing and continuous.	Heritage Cell, CBRI, CCA. NITTTR²³

²³ National Institute Of Teachers Training and Research, Sector 26, Chandigarh.

Reviewing the Management Plan

The above indicators shall be used to assess the progress and performance of the Management Plan as per the time schedule mentioned. Moreover, the nominated property is a living heritage and constantly under developmental, environmental and political pressures- some of which cannot be anticipated at the time of finalising the Management Plan. Developments in the future and emergence of new areas of concern may necessitate revisiting certain policies and creation of new ones to address the changed realities.

To address both the scenarios the Management Plan shall thus be reviewed after five years in 2019.

To synchronise the Management Plan for the Capitol Complex with that of the Trans National Serial Nomination, issues common to all the other properties shall be incorporated as per guidelines received.

TIME FRAMES FOR THE COMPONENTS OF THE MANAGEMENT PLAN

The key aspects of the Management Plan have been elaborated in the preceding section. The following table shows how these aspects are linked and proposed to be implemented in conjunction with each other, and their anticipated time frames of implementation.

ASPECT OF MANAGEMENT PLAN	SUB SECTION	TIME FRAME Implementation envisaged as : i)-- one time intervention, ii) --Ongoing, iii)--Review task iv)--To be dealt as specific projects based on/dovetailed with /subhead of a larger plan such as the Conservation Plan/ Maintenance plan
3.0 CONSERVATION PLAN	b) The Built Fabric- The incomplete Martyr's Memorial and the Geometric Hill shall be completed as per the original design.	i) 1 year (one time intervention)
	c) Landscape- i) Execution of pathways, forecourts to complete the overall composition. ii) Removal of barricades, iii) Removal of construction sheds, temporary material stores on the plaza iv) Incongruous plantation and undergrowth obscuring salient and important views.	i) 0-6 months ,(already underway) and then ongoing ii) 1 year iii) 1 year iv) Immediate and continuous
	3.1 Concrete Conservation i) To ascertain the structural stability of the Secretariat and subsequently the High Court and the Assembly, vis a vis the high intensity seismic zone.	18 months for the Secretariat and then extend to the High Court & Secretariat
	ii) A Concrete Conservation and Preservation Plan should be worked out with the help of experts to guide all future interventions and retrofitting.	5 years
	3.1.1.2 Conservation of Other Elements –Bronze Open hand Monument, Tapestries, movable, immovable furniture, uplighters	2 years
	3.1.2 Architectural Regulations	2 years, Review every 3 years or earlier as/need .

4.0 MAINTENANCE & MANAGEMENT	4.1 Comprehensive Maintenance Plan	i) 2 years (Engineering department is currently conducting a survey of the nominated property) ii) Review every 18 months or earlier if specific issue is to be addressed.
	4.2 Maintenance & Management of the Edifices	1 year , an ongoing exercise .
5.0 DEVELOPMENT PLAN – BUFFER ZONE	Buffer Management Plan would include sub plans for traffic management, tourist circuits, Architectural and Urban Design guidelines /regulations ensuring streets views, vistas, with an overarching responsibility to safeguard the larger setting of the nominated property.	1 year Review Every 5 years
6.0. USER, VISITOR AND TOURIST MANAGEMENT	6.1 Requirement of Additional Work Space. A Comprehensive plan for the High Court extension located in the Buffer Zone is under preparation.	2 years Review every 5 years
	6.2 Infrastructural Needs i) Augmentation of tourist facilities, ii) Modern means of surveillance and security iii) Signage at appropriate locations and design.	i) 1 year ii) 2 years iii) 1 year
	6.3 Pedestrian & Vehicular Accessibility to the Property: With additional traffic generated by increased tourist visitation to the Nominated Property, parking needs will have to be addressed and resolved using areas in the buffer zone.	i) 1 year
7.0. RISK MANAGEMENT	7.1, 7.2 Disaster Mitigation, management and Risk Preparedness to cater to Fire and Seismic Safety. Risk preparedness against threats to loss of property and life.	i) 5 years ii) Review every 3-5 years iii) Risk preparedness drives for users to be dovetailed with annual activity calendar of the Nominated Property.
8.0 INTERPRETATION, EDUCATION AND OUTREACH	a) Dedicated Website for the Nominated Property to generate awareness towards its interpretation and to enhance visitation at the local, national and global levels.	i) 6months -1 year ii) Review and update every year with the uploading of the annual activity calendar of the Nominated Property.
9. FINANCIAL MANAGEMENT	Financial plan for the implementation and sustenance of the management plan to be drafted as a consultative process with various agencies/ government departments involved with the management of the Nominated Property	i) Annual Plan as a component of the city's annual budget ii) Special funding may accrue post inscription. iii) Review annually to assess special financial inputs to dedicated projects in the Conservation plan, Buffer Development plan etc. Risk Preparedness and annual financial plan.

Architectural & Urban Work of Le Corbusier - Nomination for Serial Transnational Inscription on the World Heritage List

The Capitol Complex, Chandigarh : Delimitation of the Property and Buffer Zone

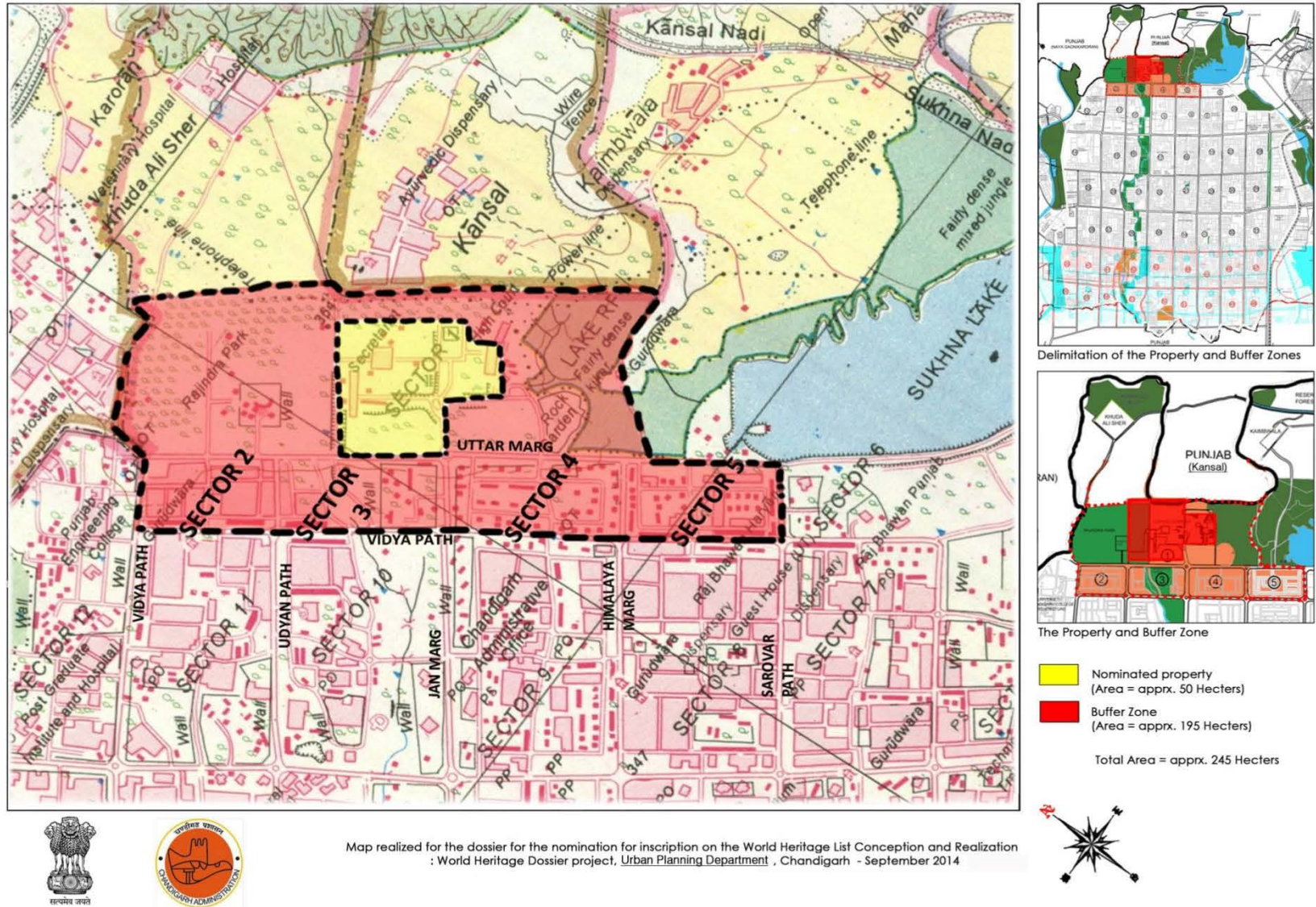
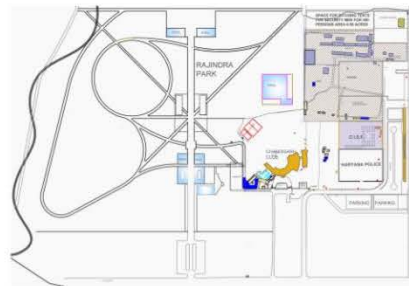


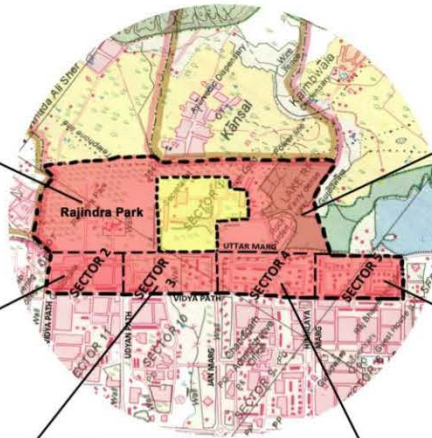
Fig 1. Delimitation of Nominated property and its buffer.

Architectural & Urban Work of Le Corbusier - Nomination for Serial Transnational Inscription on the World Heritage List
Details of the Buffer Zone, Capitol Complex, Chandigarh



RAJENDRA PARK

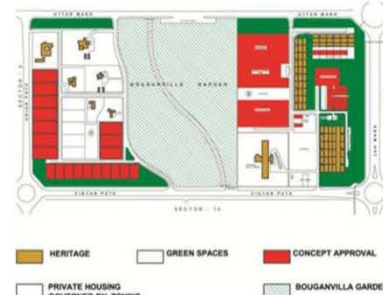
Spread over a sprawling area of 400 acres, Rajendra Park lies adjacent to the Secretariat building. The landscape of this park is designed by Le Corbusier himself and is protected as Heritage Zone 1



The Rock Garden, composed of organic & low laying structures does not impact the visual setting of the Capitol. However in the Draft Master Plan it has been decided to freeze its growth at the existing stage



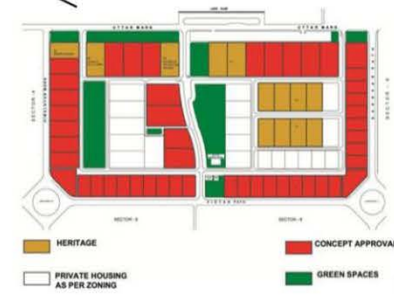
SECTOR 2



SECTOR 3



SECTOR 4



SECTOR 5

Yellow Nominated Property
Red Buffer Zone



Map realized for the dossier for the nomination for inscription on the World Heritage List Conception and Realization
: World Heritage Dossier project, Urban Planning Department, Chandigarh - September 2014



Fig.2 Details of Buffer Zone on all sides of the Nominated property.

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The nomination of the Capitol Complex under the Transnational Serial Nomination of the Architectural and Urban works of Le Corbusier is an important step towards highlighting the global impact of Corbusier's theory and work. The Capitol being the largest ensemble of Corbusier's oeuvre needs to be conserved for future generations as a manifestation of all that he stood for and achieved in his seminal works. From a local point of view the submission of Capitol Complex shall pave the way for recognition of the Heritage of Modern Architecture not just in Chandigarh but all over India and the world at large.

Statement of Outstanding Universal Value

The Capitol Complex in Chandigarh is one of the most monumental architectural compositions of Modern Urbanism by Le Corbusier- an important part of his global legacy arising out of a unique geo-political and cultural setting. It showcases landmark innovations in the fields of urban planning, architectural theory and practice and, advancement in building materials and technology.

The Assembly, the High Court and the Secretariat buildings celebrating the three pillars of democracy are skilfully juxtaposed in a vast pedestrian plaza. Monuments articulating the plaza include the Open Hand, the Martyrs Memorial, the Geometric Hill and the Tower of shadows. Together, the monuments and the edifices of the Complex represent the most tangible manifestation of the architectural and urban design theories of Le Corbusier. The unprecedented amalgamation of the principles of CIAM (Congress Internationale d'Architecture Moderne), with the aspirations of the newly created democracy culminated in a prototype which continues to deeply impact the development of architecture and urban planning all over the world.

Considered as his most mature plastic creations, each of the edifices and monuments has a unique sculptural form based on its function and a strong symbolism inherent in the form derived for each building. Here one sees a tangible manifestation of the principles of **Purism and Brutalism** uniquely tempered by the use of colours to offset the monochromatic finish of the exposed concrete. The

extensive use of brise-soleil and double roofs for solar control, orientation and design of fenestrations for trans-aeration, reflecting pools for rain water harvesting and thermal sinks, terrace gardens etc. were technological innovations for climate responsive architecture. The creation of complex forms based on a simple structural order within the limited resources of

time, money and manpower was a landmark in the advancement of architectural techniques in Chandigarh, India and the world at large.

The authenticity and integrity of the Capitol Complex is well maintained in the realised components i.e. the three edifices and the four monuments as well as the general layout of the Capitol Complex.

The key issues that directly impact site management have been broadly categorised into eight main sections in the management plan. These are:

1. Planning and policy
2. Conservation
3. Buffer zone management.
4. Traffic and parking
5. Risk management
6. Research
7. Tourism and visitor management
8. Financial management

The greatest challenges to the protection and management of this living heritage which sees the influx of thousands of staff, visitors and tourists each day is the issue of security since the complex houses important state functions. The increasing pressure on the limited space due to the growing needs and adaptation of the building to meet basic comfort levels has lead to some alterations and additions. Weathering and wear and tear of the extensively used exposed concrete due to the extreme tropical climate and excessive use by both users and visitors, has lead to its deterioration and decay at many places. Many policies and measures are already in places which are further being elaborated in the holistic management plan under the heads enlisted above with an aim to create a healthy balance between preservation and use while maintaining the inherent values of the site.

PART 1

VISION FOR THE MANAGEMENT PLAN

Aims and purpose of the Management Plan

Vision statement for the management plan

The structure of the plan

Aims and purpose of the Management Plan

The nominated property of the Capitol Complex, Chandigarh presents multiple challenges to its holistic management and conservation. Being the Administrative head of a growing modern city it is continuously facing pressures of development adaption to modern ways of working, increasing concerns of security and weathering due to the harsh Tropical climate. The Management Plan aims to lay out policies that shall become the blueprint for further action to

1. Preserve and conserve the OUV of the property.
2. Outline interstate and inter departmental cooperation for the maintenance and management of the site and its buffer.
3. Detail out future programs and measures needed for the sustainable development of this living heritage without compromising on its historic, aesthetic and functional values

Vision statement for the management plan

‘Our vision is to conserve, protect and enhance the outstanding universal value of the Capitol complex Chandigarh as a living repository of the largest and greatest urban composition of Le Corbusier, sustainably managing the balance between preservation and use. The Complex shall continue to be a celebration of democracy and an embodiment of the spirit of modern architecture inspiring present and future and generations of architects and planners across the world, highlighting the architectural contribution of the city of Chandigarh.’

The structure of the plan

The Management Plan is presented in six parts that are as follows:

Part 1: **Vision And Aims:** Outlines the vision and consequent long and short term aims for the site.

Part 2: **Site description** highlights the various aspects that contribute to the OUV of the site and hence form issues for the management plan.

Part 3: **Current management and use of the site**; assesses the present aspects related to the same to enlist areas and levels of intervention needed.

Part 4: **Key Management Issues**: outlining the action needed regarding factors impacting the OUV of the site as enlisted in Part 3.

Part 5: **Policies And Actions**: provides a policy framework and an action plan within a specified time frame to address the key management issues and to achieve the objectives of the Management Plan

Part 6: **Implementing the Management Plan**: explains the ways of monitoring and reviewing the holistic implementation of management plan to sustain the OUV of the site.

PART 2

DESCRIPTION AND SIGNIFICANCE OF THE SITE.



2.1 Identification of the site

2.2 Site description

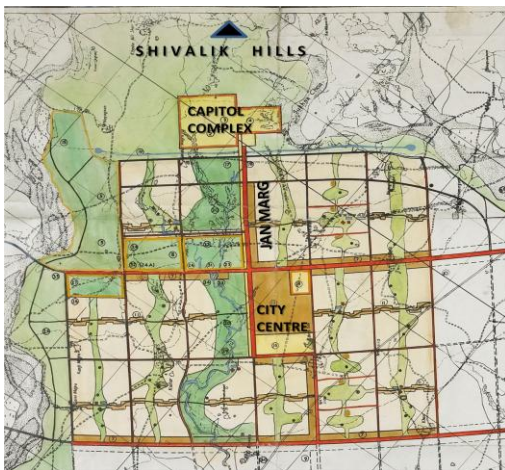
2.3 Statement of significance

2.1. Identification of the property

Country:	India
State, Province or Region:	Chandigarh, India
Name of property:	The Capitol Complex, Chandigarh
Geographical Coordinates:	30° 44' 25" N, 76° 48' 30"E

2.2 Brief description of Site

Site and Setting



The nominated property of the Capitol Complex is strategically and physically located at the geographic and topographic 'head' of the city- against the backdrop of the Shivalik Hills. The Complex, along with the 'Rajendra Park' on its West and the 'Sukhna Lake' on its East, form the Capitol Parc, which stretches across the width of the city. The Complex is connected

with the rest of the city through the ceremonial boulevard, Jan Marg. Towards the North the vast expanse of the site seamlessly flows towards the foothills of the Shivalik Hills which form the natural backdrop of the Complex. Towards the **south**, running parallel to the Capitol Parc is the Uttar Marg, V3 leading further to the Rock garden and the Sukhna Lake, flanked by the low rise and low density residential Sectors.

Site components

The nominated property comprising the Capitol group of buildings includes the three monumental edifices of the Secretariat, the High Court and the Assembly spread over 50 hectares. A vast elevated pedestrian esplanade linking the buildings is interspersed with the Monuments of the Open Hand with the Trench of contemplation, The Martyr's Memorial, The Tower of Shadows, The Geometric Hill, and the reflecting pools of the High Court and the Assembly. The vast concrete

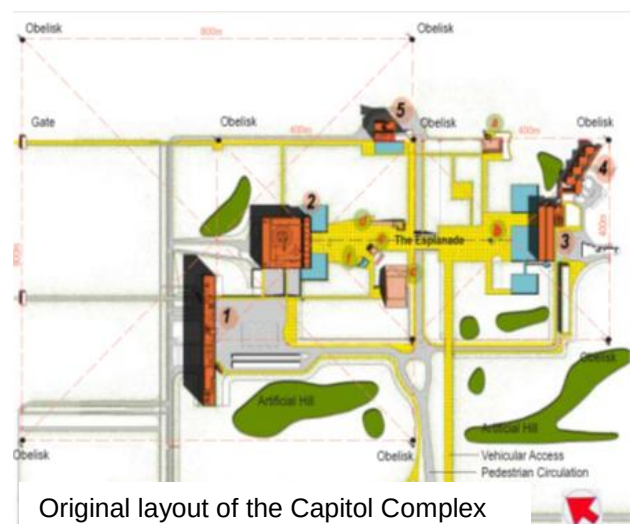
esplanade facilitates uninterrupted pedestrian linkage between the High Court and the Assembly and is a central design feature. All vehicular circulation is arranged, and dug out where necessary, at 5m below the esplanade. Strategically located artificial hillocks created out of excavated ground from the Capitol site create a “play of forms’ and help to create vistas that gradually unfold the various components to the visitor. Mango groves existing at the site were retained and integrated into the design to form the natural boundary towards the High Court.

The natural backdrop of the Shivalik Hills, though lying beyond the boundaries of the site, and the uninterrupted vistas form the intangible yet critical part of the composition and thus become an important element in the Outstanding Universal Value. Also of relevance are the other creations of Corbusier and smaller elements like pieces of furniture, lighting fixtures and works of art, including the famed enamel door for the Legislative Assembly, monumental tapestries and bas relief signs and symbols embossed in the concrete.

Site planning:

The layout is based around an invisible geometry of three interlocking squares, their corners and intersection-points marked by ‘Obelisks’. The northern and western edges of the larger 800m-side square define the boundaries of the Capitol, while the two smaller, 400m-side squares determine relative placing of the four ‘Edifices’ and proportions of the spaces in between.

The main edifices are placed on a cross axis wherein rigid symmetry has been avoided to enable a visual thrust towards the hills while providing each building a suitable foreground. The present layout clearly reflects the original planning principles. While the linear façade of the Secretariat marks the edge of the Complex on the left



side, the Assembly and the High Court are placed on the opposite ends of the cross axis, facing each other across a 450-metre Esplanade where the monuments symbolising Le Corbusier’s theories of City Planning have been placed. The

placement of buildings of the Secretariat and the High Court with the longer facades perpendicular to the hills lend an unobstructed view of the foothills.

Architectural form and construction materials:

Disciplined by a limited budget, a primitive technology and a brutal climate, Corbusier has been able to create in India an architectural expression surpassing in power any of his previous efforts. Considered as his most mature plastic creations, each of the edifices and monuments has a unique sculptural form based on its function and a strong symbolism inherent in the form derived for each building. Here one sees a tangible manifestation of the principles of Purism and Brutalism uniquely tempered by the use of colours to offset the monochromatic finish of the exposed concrete.

The buildings exhibit the adaptation of European Modernism exploring the multifarious possibilities of deploying reinforced concrete and the unique expression that was achieved in this modern material through application of indigenous techniques and respect for local constraints. The concern for controlling climate without the aid of mechanical devices is evident in the orientation of the buildings, the careful design of the brise-soleil as well as intricate systems devised for trans-aeration. Sculptural gargoyles drain rain water from the expansive roofs into the pools dotted with river bed stones.

2.3 Statement of Outstanding Universal Value

The Capitol Complex in Chandigarh is one of the most monumental architectural compositions of Modern Urbanism by Le Corbusier- an important part of his global legacy arising out of a unique geo-political and cultural setting. It showcases landmark innovations in the fields of urban planning, architectural theory and practice and, advancement in building materials and technology.

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Complex represent the most tangible manifestation of the architectural and urban design theories of Le Corbusier. The unprecedented amalgamation of the principles of CIAM (Congress Internationale d'Architecture Moderne), with the aspirations of the newly created democracy culminated in a prototype which continues to deeply impact the development of architecture and urban planning all over the world.

Considered as his most mature plastic creations, each of the edifices and monuments has a unique sculptural form based on its function and a strong symbolism inherent in the form derived for each building. Here one sees a tangible manifestation of the principles of **Purism and Brutalism** uniquely tempered by the use of colours to offset the monochromatic finish of the exposed concrete. The extensive use of brise-soleil and double roofs for solar control, orientation and design of fenestrations for trans-aeration, reflecting pools for rain water harvesting and thermal sinks, terrace gardens etc. were technological innovations for climate responsive architecture. The creation of complex forms based on a simple structural order within the limited resources of time, money and manpower was a landmark in the advancement of architectural techniques in Chandigarh, India and the world at large.

Outstanding Global influence as an object: “masterpiece”

The Capitol Complex is an important landmark in the progression of modern architecture and thought the world over. This seminal creation transcends national and temporal boundaries. The abstract geometric composition of the buildings, the coherent use of 'Modular' dimensions to achieve aesthetic proportions, and the strong symbolism of the sculptural forms created by the use of new building materials and techniques have elevated the Capitol from a nationalist idiom to a transnational globalised work of art. Further, overcoming the constraints of local technology and lack of trained labour became an inspiration for modern architecture for developing countries all over the world. Corbusier's concerns towards Sun, space and verdure are by far represented best in this ensemble.

Strong influence in a region of the world

The creation of the Capitol Complex introduced modernization in South Asia- not just in architecture and urban planning but also at the cultural, societal, economic and technological level. It set the stage for ushering in Modernity within the constraints of a shoestring economy, near absence of mechanized labour and in response to

Chandigarh's harsh, composite climate. Chandigarh's Capitol has been a role model and pace setter for civic architecture in the Indian subcontinent and continues to be a source of inspiration even today.

Crystallization of an idea that had exceptional and global influence: prototype

The nominated property is one of the most significant and unique examples of Corbusier's contribution to the creation of new building types in the realm of civic architecture. As a global influence, it served as a prototype for contemporaneous developments such as Doxiadis's Islamabad, Dodoma in Tanzania, Lucio Costa's Brasilia and Louis Kahn's Dacca. Further, the individual buildings of the Capitol are in themselves representatives of distinct archetypes- the Secretariat represents a linear office building addressing concerns of efficient circulation, disposition of office spaces with abundant natural light and ventilation. The square based Assembly building symbolic of majesty and power crowned by a sculptural skylight and the double roofed High Court signifying the shelter of law are the principal edifices of the composition, each a product of the unique interaction between different cultural and technological influences.

Plastic innovation

The three realised edifices of the Capitol are considered to be the most visually evocative and expressive plastic creations of Corbusier's impressive oeuvre as an artist, architect and sculptor. The aesthetic conceptions are derived from a unique blend of the elements of purism, brutalism with sculpture and landscape sensitively correlated to the site planning. It showcases an exceptional mastery of form, space and structure as a generator of emotional expression. The hallmark of the Complex is the extensive utilisation of exposed concrete to create one of the grandest examples of monumental architecture symbolising a free nation state. The use of primary colours on monumental gateways, tapestries, pylons and joinery elements to balance the monochromatic concrete created a distinct vocabulary for Brutalist architecture.

Spatial innovation

The nominated property, strategically located at the uppermost edge of the administrative city as its symbolic and physical head, encompasses a vast expanse of space seamlessly merging into the backdrop of the Shivalik Hills. A strong

architectural statement is achieved by the sensitive interrelationship of the monumental edifices with each other and most importantly with the space they are set in. This concept of spatial experience is heightened by the juxtaposition of the monuments such as Geometric Hill, Artificial Mounds and serial visions created by the designed landscape. The spatial composition reflects abstract planning, spatial correlation based on the Modular, integration with the natural setting, site responsive landscaping and sculptural innovations.

Testing of technology and prefabrication

The Capitol with its innovation in design, detailing and execution unleashed the true potential of modern architectural techniques. It is of great technical significance in the way it revolutionised the construction techniques, paving the way for the extensive use of concrete in future constructions.

Climate responsive architecture: The extensive use of brise-soleil and double roofs for solar control, orientation and design of fenestrations for trans-aeration, reflecting pools for rain water harvesting and thermal sinks, terrace gardens etc. were technological innovations for climate responsive architecture. The Tower of Shadows and the sun dial represent tangible tools for microclimatic amelioration.

Structural innovations The creation of complex forms based on a simple structural order within the limited resources of time, money and manpower was a landmark in the advancement of architectural techniques in Chandigarh, India and the world at large. The construction of the thin hyperboloid shell of the immense column-free, circular Assembly Hall was a landmark technical achievement displaying the immense plastic and structural potential of concrete.

Acoustics: Innovative low cost yet effective elements such as the artistic tapestries in the high ceilinged courtrooms and the free flowing acoustic panels in the assembly chambers create a skilful union of function and aesthetics.

Modular: Another important feature is the formalised use of the Modular on various scales from site planning and building proportions to the articulation of fenestration. The Capitol complex is a rare example where the principles of the Modular find physical manifestation.

CLARIFICATIONS REGARDING THE MANAGEMENT PLAN OF THE CAPITOL COMPLEX, CHANDIGARH**A. BOUNDARY:****1. Clarify the delineation of boundary between High Court and extension:**

A plan on a larger scale clarifying the already delineated boundary of the property between the original High Court building and the later extension is clearly shown on **Drawing 1 annexed herewith**. This drawing shows the connection and corridor link to the Annexe, which lies in the Buffer Zone.

2. Increasing the boundary towards the Rock Garden to include the right side hillock and pedestrian access to the plaza:

As desired the boundary of the property towards the Rock Garden and Uttar Marg has been revised and extended to include the mound and the pedestrian linkage from the Jan Marg to the Capitol Plaza as shown in **Drawing 2 annexed herewith**. The earlier and revised boundaries of the Nominated property are shown in blue and red colour respectively.

B. BUFFER ZONE

As rightly pointed out in the comments, the vista of the Shivalik Hills is critical to the OUV of the property and the same has been accorded protection at both the institutional and legislative levels.

1. Extend the buffer zone at the North eastern side to include the vista i.e. germane to the genesis of the Capitol Complex site:

The area beyond the Buffer zone towards Punjab is protected by the existing legislation. The vista to the North eastern side is germane to the genesis of the site and seeks to enhance the OUV of the Nominated Property. The north eastern buffer extending towards Punjab ensures this with existing legislations well in place i.e. The Punjab New Capital (Periphery) Control Act, 1952. This act provides only for planned development in the 10 mile area around the boundary of Chandigarh.

2. Clarify Protection in general for the wider setting of the Capitol Complex in relation to the surrounding hills:

The Expert Heritage Committee¹ report which has been approved by the Government of India has designated the land up to the foothills of the Shivaliks under its Heritage Zone I. This area also falls under the Heritage Zone I in the notified Chandigarh Master Plan 2031. The development, if any, in this zone is monitored by the Chandigarh Heritage Conservation Committee. This area is also an Eco Sensitive zone as declared by the Ministry of Environment and Forest, Government of India. Besides, there exists an institutionalised mechanism of Interstate Coordination Committee comprising of the Adviser to the Administrator, Union Territory, Chief Secretary, Government of Punjab and Chief Secretary, Government of Haryana to ensure protection of the vista as common stakeholders.

¹ The Expert Heritage Committee for the city of Chandigarh was constituted on 31.05.2010 to designate heritage status and thereby protect, conserve and enhance the modern heritage value of the ensembles, precincts and properties.

3. ***Clarify the specific protection of the green areas north of the site which are outside the Union Territory of Chandigarh but within the Capital of Punjab Act of 1952 which “extends to that area of the State of Punjab which is adjacent to and is within a distance of ten miles on all sides from the outer boundary” of Chandigarh and applied to the Chandigarh building code:***

The green areas north of the site was notified as Wildlife Sanctuary vide Chandigarh Administration notification No. 694- HII(4)-98/4519 dated 6th March 1998 and form part of the Sukhna Wildlife Sanctuary covering an area of 25.9849 square kilometres/6420.99 acres. This has been declared as Eco Sensitive Zone surrounding the nominated property and buffer area as per the above draft notification of the Ministry of Environment, Government of India dated 02.9.15 (copy enclosed) and offer ample environmental protection to the green areas around the nominated property as indicated in the notified **Drawing 3** annexed herewith.

4. **Clarify protection for the Punjab village of Kansal, which is clearly within the ten mile protection area mentioned above, in relation to any proposed high-rise development which might impact on view of the Shivalik hills from the Capitol Complex:**

Village Kansal forms part of the Naya Gaon Development Plan which notifies one kilometre area along the eastern edge of the Secretariat building as low rise-low density zone. For rest of the area, the Chandigarh Administration is in active dialogue with the state of Punjab as part of the Interstate Co-ordination Committee at the level of the Chief Secretaries of Punjab and Haryana. At the Federal level, there is a Coordination Committee headed by the Secretary, Ministry of Urban Development, Government of India for interstate coordination between the three states.

C. Conservation Plan for Complexe du Capitole (Chandigarh)

Various components of the Management Plan have already been outlined in the Dossier along with detailed Monitoring Indices with timelines. The same are being reviewed periodically by the Chandigarh Heritage Conservation Committee.

The process of formulation of the Conservation Plan has been initiated as follows:

1. Visual and structural survey of the buildings and property. Structural analysis report of the Secretariat building has already been submitted by Central Building Research Institute, Roorkee.
2. Engagement of a Conservation Architect by March 31, 2016.
3. Formulation of an action plan for restoration and conservation based on the combined findings of the visual and structural surveys by December, 2020.
4. Framing of Architectural Regulations to oversee future development and conservation efforts. Interventions required to deal with the projected infrastructural needs such as HVAC etc. shall be outlined by the conservation architect and controlled by these Architectural regulations by January, 2017.
5. Implementation of conservation and restoration measures which are ongoing and continuous.

Given below are the key contents of the conservation plan with timelines and the present status of the work:

TABLE OF TIMELINES FOR IMPEMENTATION OF THE CONSERVATION PLAN

ASPECT OF MANAGEMENT PLAN	SUB SECTION	TIME FRAME	PRESENT STATUS
	a)Overall Geometrical Composition and layout	Intact with no major alterations	No intervention required
3.0 CONSERVATION PLAN	b) The Built Fabric- The incomplete Martyr's Memorial and the Geometric Hill shall be completed as per the original design.	2016	-The Geometric Hill has been completed on schedule. - The process of completing the Martyr's Memorial is underway.
	c) Landscape- i) Execution of pathways, forecourts to complete the overall composition. ii) Removal of barricades, iii) Removal of construction sheds, temporary material stores on the plaza iv) Incongruous plantation and undergrowth obscuring salient and important views.	i) June 2015 (ii) January 2016 iii) January 2016 iv) immediate & continuous	Most parameters are complete. Maintenance of the landscape is ongoing and continuous. (ii) Already done by September 2015. iii) Already done by September 2015. iv)Already done and continuous
	3.1 Concrete Conservation i) To ascertain the structural stability of the Secretariat and subsequently the High Court and the Assembly, vis a vis the high intensity seismic zone.	June 2016	Already achieved for Secretariat Building where structural analysis and stability report has been submitted by the Central Building Research Institute, Roorkee in September 2015, well before timeline.
	ii) A Concrete Conservation and Preservation Plan should be worked out with the help of experts to guide all future interventions and retrofitting.	December, 2020	Conservation plan shall be made on the basis of the structural analysis, visual survey and projections for future infrastructure needs to ascertain appropriate interventions and retrofitting.

ASPECT OF MANAGEMENT PLAN	SUB SECTION	TIME FRAME	PRESENT STATUS
	3.1.1.2 Conservation of Other Elements – Bronze Open hand Monument, Tapestries, movable, immovable furniture, up lighters etc.	January 2017	Empanelment of various conservation experts shall be done by the Chandigarh Administration.
	3.1.2 Architectural Regulations	January 2017	Shall be prepared by the Sub - Committee of Chandigarh Heritage Conservation Committee.
4.0 MAINTENANCE & MANAGEMENT	4.1 Comprehensive Maintenance Plan	January 2017 Review every 18 months or earlier if specific issue is to be addressed.	Shall be prepared by the Conservation Architect in consultation with Chief Engineer, Union Territory and to be approved by the Chandigarh Heritage Conservation Committee.
	4.2 Maintenance & Management of the Edifices	2016 - Structural analysis report for the Secretariat has been submitted by the Central Building Research Institute, Roorkee as per schedule . The structural analysis report for the Assembly and the High Court is being entrusted to the Central Building Research Institute, Roorkee.	Ongoing process. The structural analysis report of all the three edifices shall be reviewed. Thereafter the comprehensive Maintenance & Management Plan shall be prepared and implemented.

ASPECT OF MANAGEMENT PLAN	SUB SECTION	TIME FRAME	PRESENT STATUS
5.0 DEVELOPMENT PLAN – BUFFER ZONE	Buffer Management Plan would include sub plans for traffic management, tourist circuits, Architectural and Urban Design guidelines /regulations ensuring streets views, vistas, with an overarching responsibility to safeguard the larger setting of the nominated property.	January 2016 Review Every 5 years	All parameters listed for the buffer area within the jurisdiction of Chandigarh Administration are already well protected. An institutionalised mechanism of Interstate Coordination Committee comprising of the Adviser to the Administrator, Union Territory, Chief Secretary, Government of Punjab and Chief Secretary, Government of Haryana is existing to ensure protection of the vista as common stakeholders.
6.0. USER, VISITOR AND TOURIST MANAGEMENT	6.1 Requirement of Additional Work Space. A Comprehensive plan for the High Court extension located in the Buffer Zone is under preparation.	January 2017 Review every 5 years	The High Court is in the process of hiring a consultant for further extension within heritage considerations.
	6.2 Infrastructural Needs i) Augmentation of tourist facilities, ii) Modern means of surveillance and security iii) Signage at appropriate locations and design.	i) January 2016 ii) January 2017 iii) January 2016	i)-In Place as per schedule ii)-Underway iii)- Designed and approved-being implemented
	6.3 Pedestrian & Vehicular Accessibility to the Property	January 2016	i)-In Place as per schedule

RÉPONSES CONCERNANT LE PLAN DE GESTION DU COMPLEXE DU COMPLEXE DU CAPITOLE

A. DÉLIMITATION

1. Clarifier le tracé de la délimitation entre la Haute-Cour et l'extension de l'Annexe afin d'éviter toute confusion :

Un plan à plus grande échelle, clarifie la délimitation existante de la propriété entre le bâtiment originel de la Haute-Cour et son extension ultérieure, dans la **Figure 1** ci-jointe. Ce plan montre la connexion ainsi que le passage menant au Bâtiment annexe, lequel se trouve dans la Zone Tampon.

2. Étendre la délimitation vers Nek Chand's Rock Garden afin d'inclure le côté droit des collines et d'insérer la voie d'accès figurant sur le plan directeur initial de Chandigarh :

Comme demandé, la limite de la propriété du côté du Rock Garden et Uttar Marg a été modifiée et reculée afin d'inclure le monticule et la liaison piétonne du Jan Marg au complexe du Capitole telle que l'on peut le voir dans le **Figure 2** ci-jointe. Les limites antérieurement proposées et les limites modifiées de la propriété soumise à la candidature sont représentées respectivement en bleu et en rouge.

B. ZONE TAMPON

Comme observé à juste titre, la perspective vers les collines des Shivaliks est cruciale à l'égard de la **valeur universelle exceptionnelle** de la propriété, dont la protection est assurée à la fois aux niveaux institutionnel et législatif.

1. Étendre la zone tampon du côté nord-est afin d'inclure la perspective qui est impotatnte pour l'origine du site du Capitole :

Les terres situées au-delà de la Zone tampon du côté du Punjab sont protégées par la législation existante. La perspective au Nord-Est, liée à la genèse du site, vise à améliorer la **valeur universelle exceptionnelle** de la Propriété soumise à la candidature.

La zone tampon au Nord-Est vers le Punjab garantit ladite Valeur par les législations existantes, à savoir le Punjab New Capital (Periphery) Control Act de 1952. Cette loi vise uniquement les développements prévus dans la zone de 10 miles tout autour des limites de Chandigarh.

2. Clarifier la protection pour le cadre plus vaste du complexe du Capitole, en relation avec les collines environnantes :

Le rapport du Comité d'experts du patrimoine, qui a été approuvé par le Gouvernement indien a classé les terres jusqu'aux contreforts des Shivaliks dans la Zone I de son patrimoine. Ce territoire relève également du patrimoine de la Zone I dans le plan directeur arrêté de Chandigarh 2031. Le développement, le cas échéant, de cette zone est contrôlé par le Chandigarh Heritage Conservation Committee. Par ailleurs, cette zone est une zone Eco sensible comme l'a déclaré le ministère de l'Environnement et des Forêts du Gouvernement indien. En outre, il existe un mécanisme institutionnalisé d'Interstate Coordination Committee comprenant le Conseiller auprès de l'Administrateur du Territoire fédéral, le Secrétaire en chef du Gouvernement du Punjab et le Secrétaire en chef du Gouvernement de l'Haryana pour assurer collectivement la protection de la perspective par les parties prenantes.

3. Clarifier la protection spécifique pour les espaces verts au nord du site, qui sont en dehors du territoire de l'Union de Chandigarh mais compris dans le Punjab New Capital (Periphery) Control Act de 1952 qui «s'applique aussi à cette région de l'Etat du Punjab laquelle est adjacente et se trouve à moins de dix miles des limites extérieures "de Chandigarh et s'applique au code de la construction de Chandigarh :

Les espaces verts au nord du site ont été classés Wildlife Sanctuary en vertu de la Chandigarh Administration notification n ° 694- HII (4) -98 / 4519 en date du 6 mars 1998 et font partie du Sukhna Wildlife Sanctuary qui couvre une superficie de 25,9849 kilomètres carrés / 6420,99 acres . Ils ont été désignés comme Eco zone sensible autour de la Propriété candidate et de la zone tampon dans le projet de notification mentionnée ci-dessus du ministère de l'Environnement du Gouvernement indien en date du 02/09/15 (copie ci-jointe) qui offre une protection suffisante de l'environnement pour les espaces verts autour de la Propriété soumise à la candidature, comme le montre la **Figure 3** ci-jointe.

4. Clarifier la protection du village de Kansal du Punjab, qui est clairement compris dans la zone protégée des 10 miles mentionnés ci-dessus, en relation à toute demande de construction de bâtiments de grande hauteur qui impacteraient les vues des collines de Sivaliks depuis le Complexe du Capitole :

Le village Kansal fait partie du Naya Gaon Development Plan qui classe une zone d'un kilomètre le long de la bordure orientale du bâtiment du Secrétariat comme une zone de densité faible et de hauteur limitée. Pour la tranquillité de la région, Chandigarh Administration poursuit un dialogue actif avec l'État du Punjab dans le cadre du Comité de coordination inter-États au niveau des Secrétaires en chef du Punjab et de l'Haryana. Au niveau fédéral, il y a un comité de coordination présidé par le Secrétaire du ministère du Développement urbain du Gouvernement indien pour la coordination entre les trois États.

C. Plan de conservation pour le complexe Capitole (Chandigarh)

Différentes composantes du plan de gestion ont été décrites dans le dossier avec les Indicateurs de suivi détaillés et des échéanciers. Elles sont révisées périodiquement par le Comité de conservation du patrimoine Chandigarh.

Le processus d'élaboration du Plan de conservation a été mis en oeuvre de la manière suivante :

1. Examen visuel et structurel des bâtiments et des biens.
Le rapport sur l'analyse structurelle du bâtiment du Secrétariat a déjà été présenté par le Central Building Research Institute de Roorkee.
2. Recrutement d'un architecte du patrimoine d'ici le 31 mars 2016.
3. Rédaction pour décembre 2020 d'un plan d'action pour la restauration et la conservation en fonction des résultats conjugués des relevés visuels et structurels.
4. Élaboration de prescriptions architecturales pour superviser les efforts de développement et de conservation futurs. Les interventions requises pour répondre aux besoins en infrastructure prévus tels que HVAC, etc. doivent être proposées par l'architecte du patrimoine et soumises à ces règlements architecturaux de janvier 2017.
5. Mise en œuvre permanente de mesures de conservation et de restauration.

Dispositions principales du plan de conservation avec les échéanciers et l'état actuel des Travaux :

CALENDRIER D'EXÉCUTION DU PLAN DE CONSERVATION

Aspects de la gestion	SOUS-SECTION	CALENDRIER	SITUATION ACTUELLE
3.0 PLAN DE CONSERVATION	a) Composition géométrique globale et disposition	Intact sans modification majeure	Aucune intervention n'est requise
	b) Structures construites. Le mémorial des Martyrs inachevé et la Colline géométrique devront être achevés suivant la conception originale.	2016	-La Colline géométrique a été achevée conformément au calendrier. - Le processus de réalisation du mémorial des Martyrs est en cours.
	c) paysage - i) Achèvement des voies, des avant-cours pour compléter la composition globale. ii) Élimination des barricades. iii) Élimination des hangars de construction, des magasins de matériaux temporaires sur la grand-place. iv) Élimination des plantations incongrues et des sous-bois cachant des vues importantes et saillantes.	i) juin 2015 ii) janvier 2016 iii) janvier 2016 iv) immédiat et sans interruption	La plupart des paramètres sont achevés. L'entretien du paysage est en cours sans interruption. (ii) exécutée dès septembre 2015. iii) exécutée dès septembre 2015. iv) exécutée sans interruption

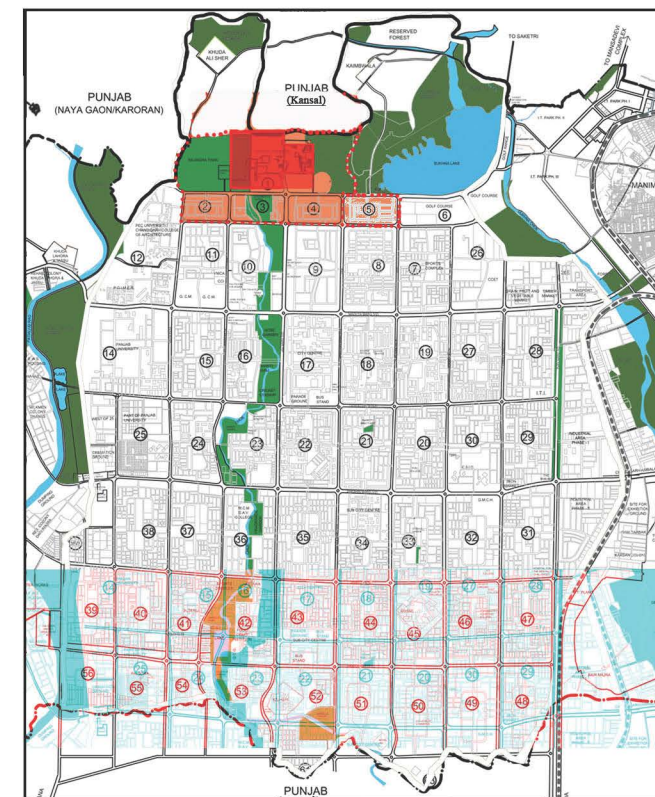
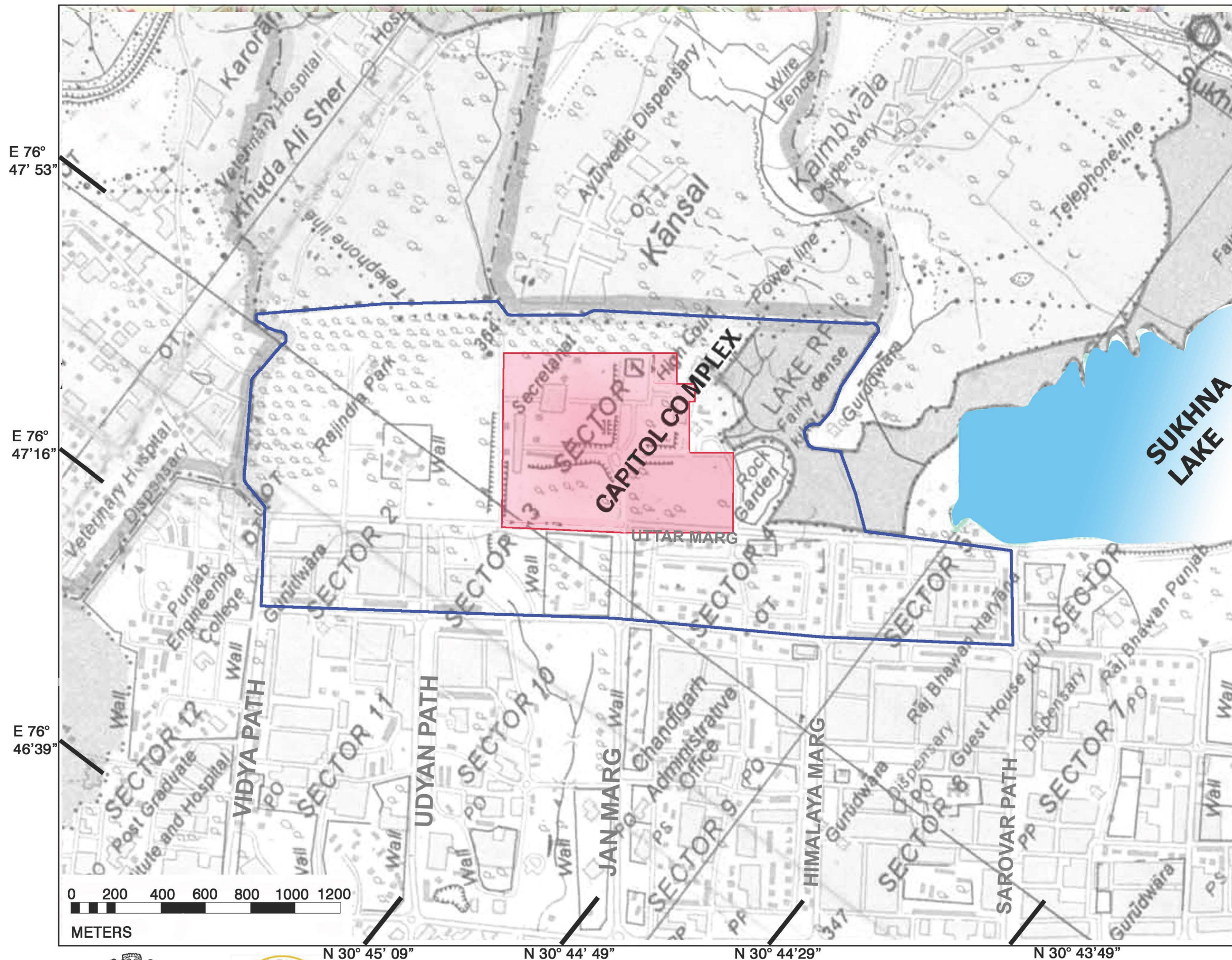
	3.1 Conservation du béton i) Vérifier la stabilité structurelle du bâtiment du Secrétariat, puis celle de la Haute-Cour et de l'Assemblée, vis-à-vis de la zone sismique de haute intensité.	juin 2016	Vérification déjà accomplie du bâtiment du Secrétariat où l'analyse structurelle et le rapport sur la stabilité ont été soumis par le Central Building Research Institute de Roorkee en septembre 2015, bien avant le délai spécifié .
	ii) Un plan concret de conservation et de préservation devra être élaboré avec le concours d'experts pour guider toutes les interventions futures et la mise aux normes.	décembre 2020	Le plan de conservation devra être élaboré en fonction d'analyse structurelle, d'étude visuelle et des prévisions des besoins futurs en infrastructures pour déterminer les interventions appropriées et la mise aux normes.
	3.1.1.2 La conservation des autres éléments– monument Main ouverte de bronze , tapisseries, meubles, éléments mobiliers, appliques murales, etc.	janvier 2017	La constitution d'un vivier de divers spécialistes de la conservation devra être réalisée par Chandigarh Administration

	3.1.2 Prescriptions architecturales	janvier 2017	Seront élaborées par le Sub-Committee of Chandigarh Heritage Conservation Committee
4.0 MAINTENANCE	4.1 Plan complet de maintenance	janvier 2017 À revoir tous les 18 mois ou plus tôt si un problème spécifique doit être abordé	Devra être élaboré par l'architecte de conservation en consultation avec l'ingénieur en chef du Territoire fédéral et approuvé par le Chandigarh Heritage Conservation Committee.
	4.2 Maintenance et gestion des édifices	2016 - Le rapport sur l'analyse structurelle du bâtiment du Secrétariat a été présenté par le Central Building Research Institute de Roorkee, conformément au calendrier. Le rapport sur l'analyse structurelle pour l'Assemblée et la Haute- Cour a été confié au Central Building Research Institute de Roorkee.	Processus en cours. Le rapport sur l'analyse structurelle des trois edifices devra être réexaminé. Puis, le plan global de maintenance et de gestion devra être préparé et mis en œuvre.

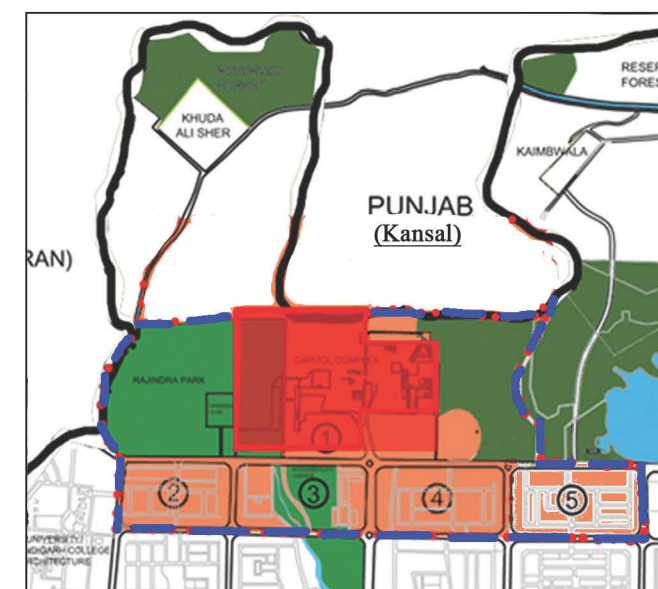
5.0 PLAN DE DÉVELOPPEMENT - ZONE TAMPON	Le Plan de gestion de la zone tampon comprendrait des sous-plans de gestion de la circulation, des circuits touristiques, de directives/règlements d'architecture et de design urbain pour assurer l'aspect des rues, les perspectives, en conservant pour principe de préserver le cadre le plus large pour la Propriété candidate.	janvier 2016 À revoir tous les 5 ans	Tous les paramètres inscrits de la Zone tampon tombant sous la juridiction de la Chandigarh Administration sont toujours bien protégés. Un mécanisme institutionnalisé de Interstate Coordination Committee comprenant le Conseiller auprès de l'Administrateur du Territoire fédéral, le Secrétaire en chef du Gouvernement du Pendjab et le Secrétaire en chef du Gouvernement de l' Haryana est mis en place pour assurer collectivement la protection de la persective.
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6.0. UTILISATEUR, VISITEUR ET GESTION TOURISTIQUE	GESTION 6. Le besoin d'espaces supplémentaires de travail. Un plan global visant le bâtiment annexe de la Haute-Cour sise dans la Zone tampon est en préparation	janvier 2017 À revoir tous les 5 ans	La Haute- Cour est en train de recruter un consultant en vue d'un nouvel agrandissement dans le respect des considérations patrimoniales
	6.2 Besoins en infrastructure i) Augmentation des équipements touristiques ii) Moyens modernes de surveillance et de sécurité iii) Signalisation aux endroits appropriés et adaptée au site	i) janvier 2016 ii) janvier 2017 iii) janvier 2016	i) Mise en place conformément au calendrier ii) En cours iii) Conçus et approuvés- en cours d'exécution
	6.3 Accessibilité des piétons et des véhicules à la Propriété	janvier 2016	Mise en place conformément au calendrier

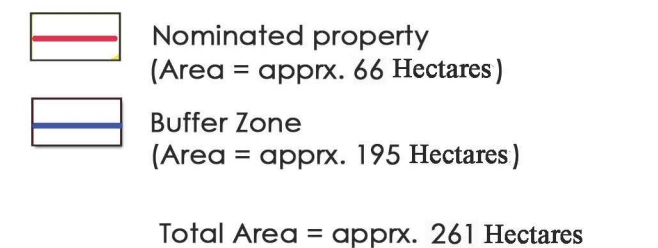
11a - The Capitol Complex, Chandigarh : Delimitation of the Property and Buffer Zone



Delimitation of the Property and Buffer Zones



The Property and Buffer Zone

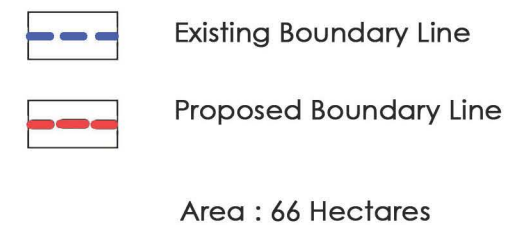


सत्यमेव जयते



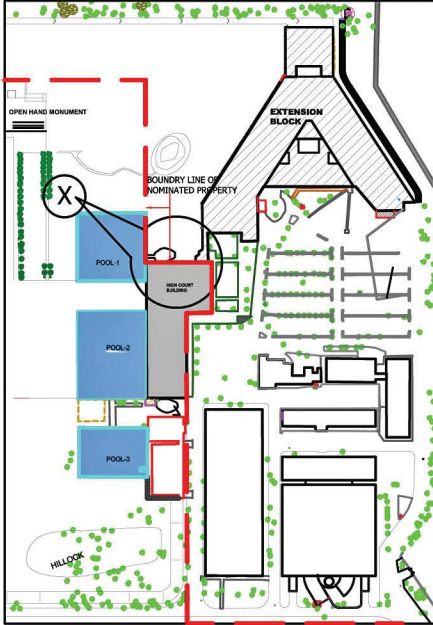
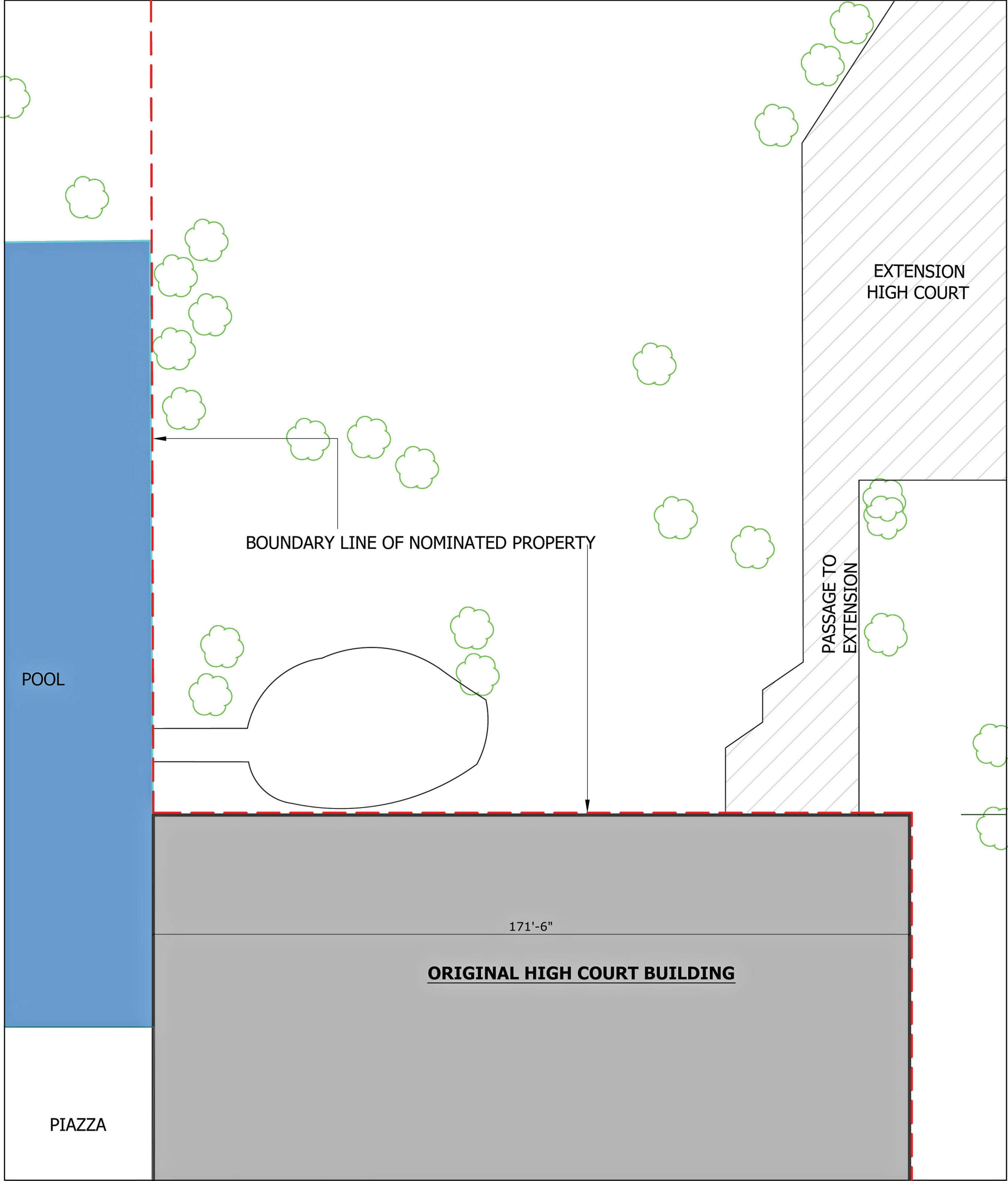
Map realised for the dossier for the nomination for inscription on the World Heritage List Conception and Realisation
: World Heritage Dossier project, Chandigarh College of Architecture, Chandigarh - December 2014
Source of Map : Survey of India, Date : 1997



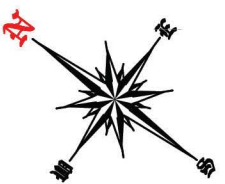


DRAWING - 2



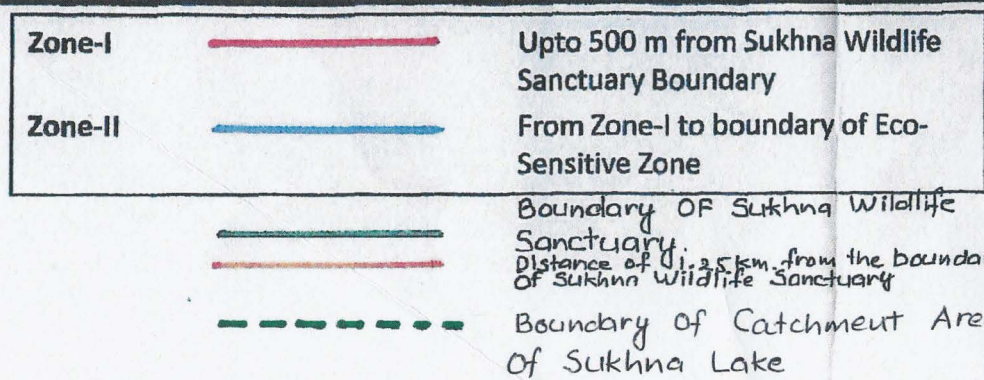
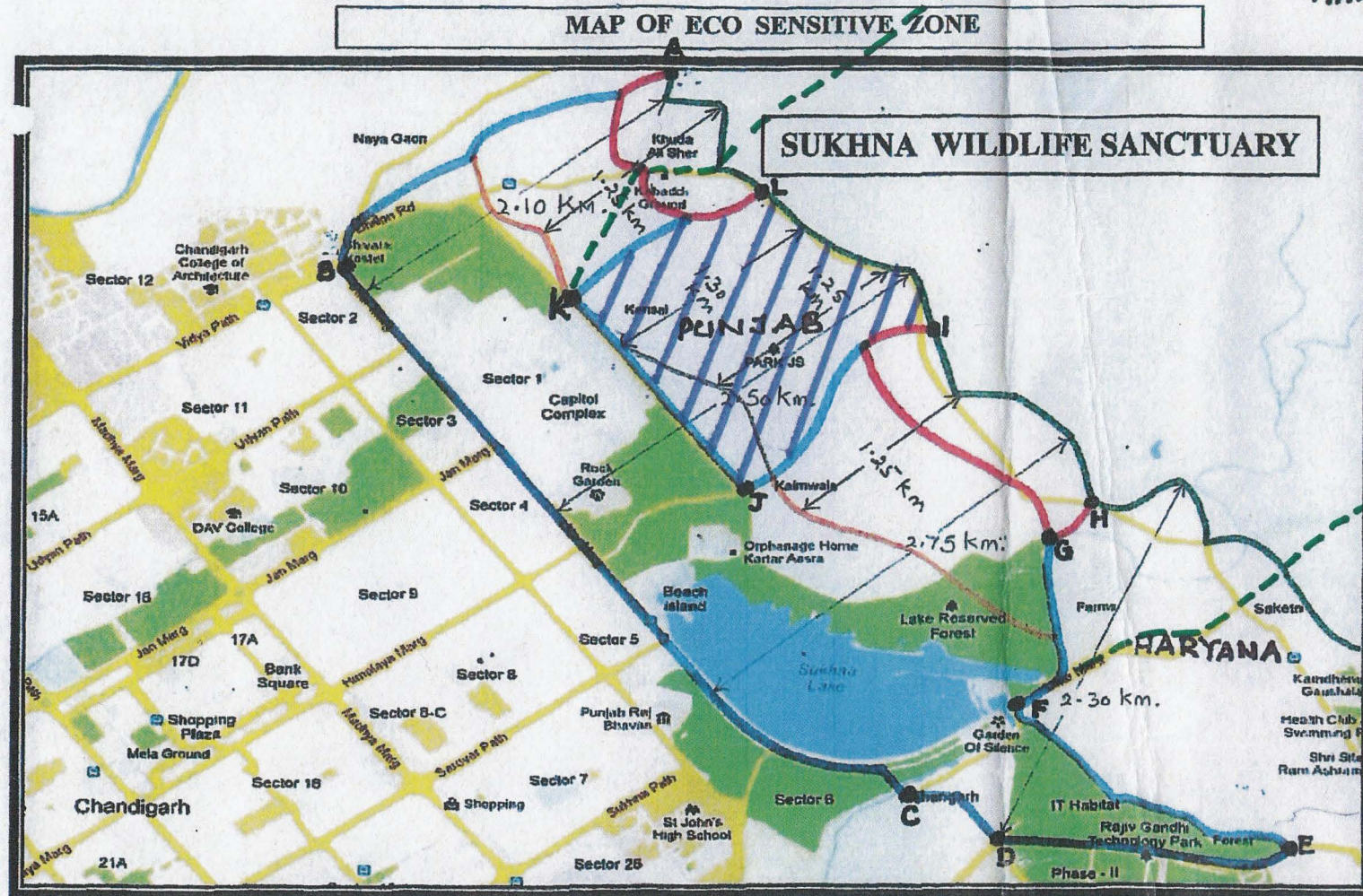


LOCATION PLAN



BLOW UP OF 'X'

DRAWING - 1



DRAWING - 3

Conservator of Forest
Chief Wild Life Warden
Chandigarh Administration
Chandigarh

EXPERT COMMITTEE FOR PRESERVATION OF ARCHITECTURAL HERITAGE OF CHANDIGARH

Report of Sub Committee On Restoration and Preservation of Building Materials Concrete & Brick Masonry Buildings

Subcommittee:

Prof. Manoj Datta

Mrs.SumitKaur

Er. G.S Rosha

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EXPERT COMMITTEE FOR PRESERVATION OF ARCHITECTURAL HERITAGE OF CHANDIGARH

Report of Sub Committee on Restoration and Preservation of Building Materials - Concrete and BrickMasonryBuildings

1. BACKGROUND AND OBJECTIVES

1.1 Background

The buildings in Chandigarh that are now more than fifty year old and are showing signs of deterioration and thus no longer do justice to the vision and original concept behind creation of the city. Keeping in view the nature of antecedents of the whole project of planning and creation of Chandigarh, the Ministry of Home Affairs, Government of India, constituted an Expert Committee for preservation of architectural heritage of Chandigarh. The committee is headed by his Excellency, the Governor of Punjab and Administrator, U.T, Chandigarh. The first meeting of the Expert Committee for the preservation of heritage of Chandigarh was held under the Chairmanship of the Administrator, Chandigarh at Punjab Raj Bhawan on 20-07-2010 .

It was felt in the meeting that over the years, the deterioration of heritage buildings has taken place due to insufficient maintenance and weathering effects. Therefore, the Expert Committee constituted a sub committee comprising of

- (i) Prof. Manoj Datta, Director PEC University of Technology, Chandigarh.
- (ii) Mrs.SumitKaur, Chief Architect, Department of Urban Planning UT Chandigarh
- (iii) Mr.G.S.Rosha, Chief Engineer, Chandigarh Housing Board, Chandigarh.

The subcommittee was asked to suggest the measures for restoration and preservation of building materials and solutions to the problems of concrete and brick & mortar buildings in Chandigarh.

1.2 Objectives

The following objectives were specified by the Expert Committee to the subcommittee.

- (i) To suggest methods for restoration and preservation of building materials.
- (ii) To suggest solutions for problems of concrete buildings and brick & mortar buildings.

2. METHODOLOGY

- ❖ First Meeting (on August 11, 2010)
- ❖ First Site Visit (on August 19, 2010)
- ❖ Second Site Visit (on September 1, 2010)
- ❖ Second Meeting (on September 13, 2010)
- ❖ Presentation of Draft Report to Expert Committee (on September 22, 2010)
- ❖ Visit to Ahmedabad
- ❖ Third Site Visit (on October 13, 2010)
- ❖ Final Meeting (on October 15, 2010)

The Committee was assisted in its task by the following faculty members of PEC University of Technology

- (i) Prof. N.P. Devgan
- (ii) Prof. Roshan Lal

2.1 First Meeting

In the first meeting of the subcommittee held on August 11, 2010, it was decided to identify the type of deterioration of concrete and masonry in various buildings on the basis of visual examination. The option of involving experts from outside Chandigarh was also discussed.

2.2 First Site Visit

The committee visited the following buildings on August 19, 2010

- (i) Civil Secretariat Building
- (ii) Assembly Hall, Haryana
- (iii) Punjab and Haryana High Court

SNAP SHOTS
Civil Secretariat Building





Abuse of
Building by
Corridor
Encroachment
by providing
Glazing



Wild Growth
& poor
maintenance





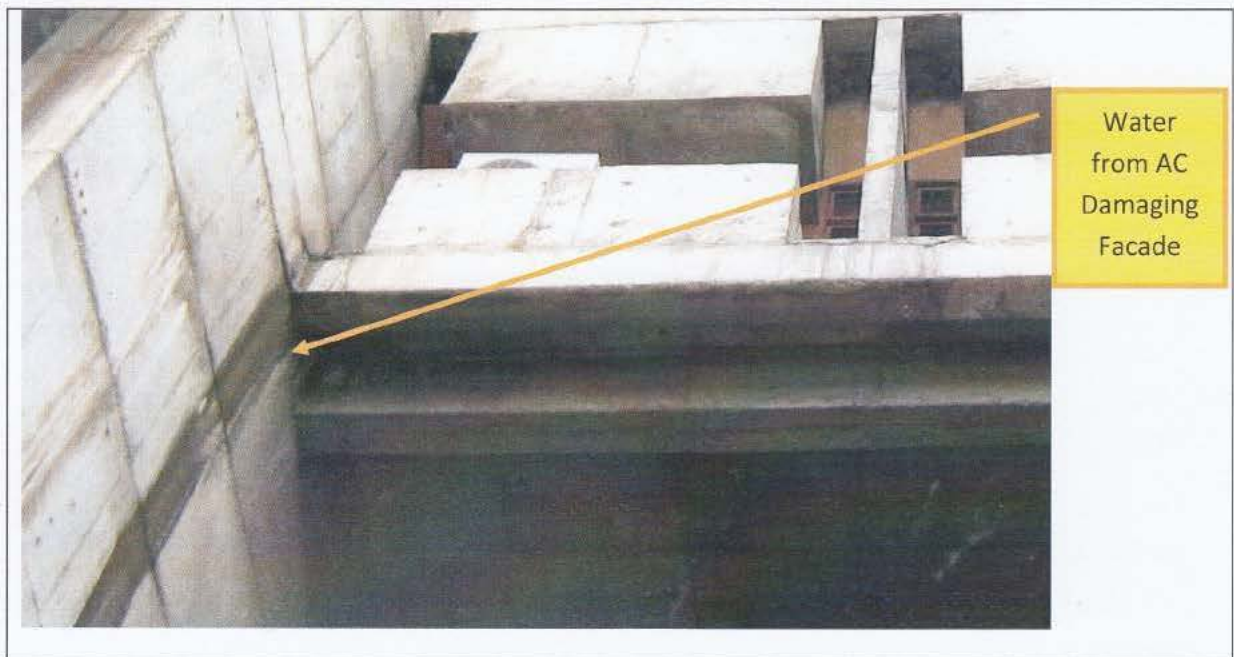
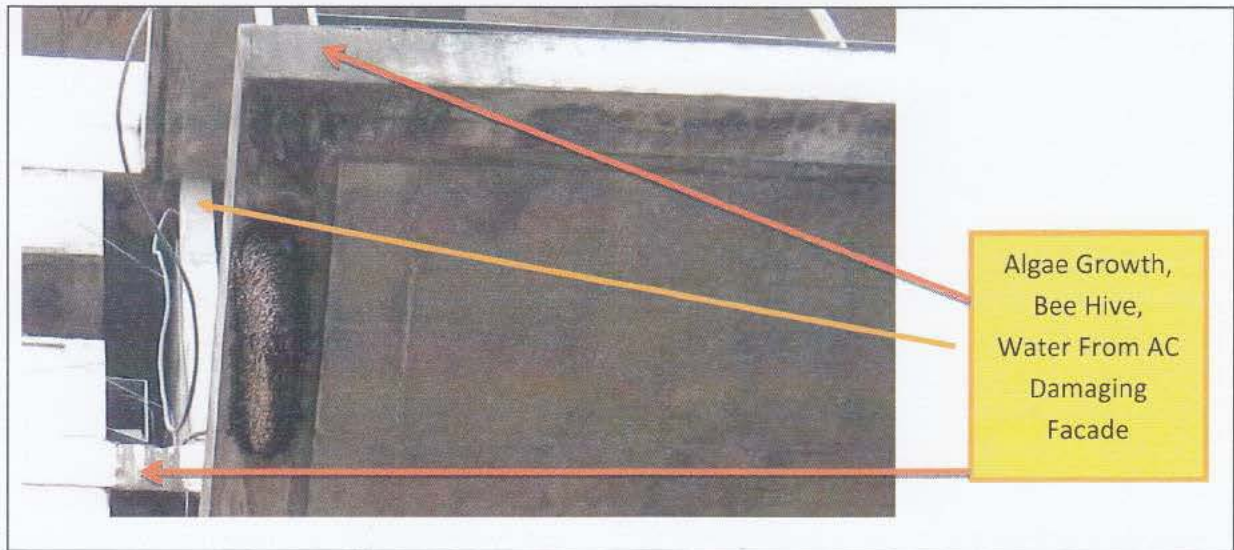
Water
accumulation



Water from AC
flowing over
Facade



Water seepage
through
Expansion Joint
& damaged RCC





Damaged Concrete, Algae Growth & Different colours of façade





SNAP SHOTS
Assembly Hall, Haryana





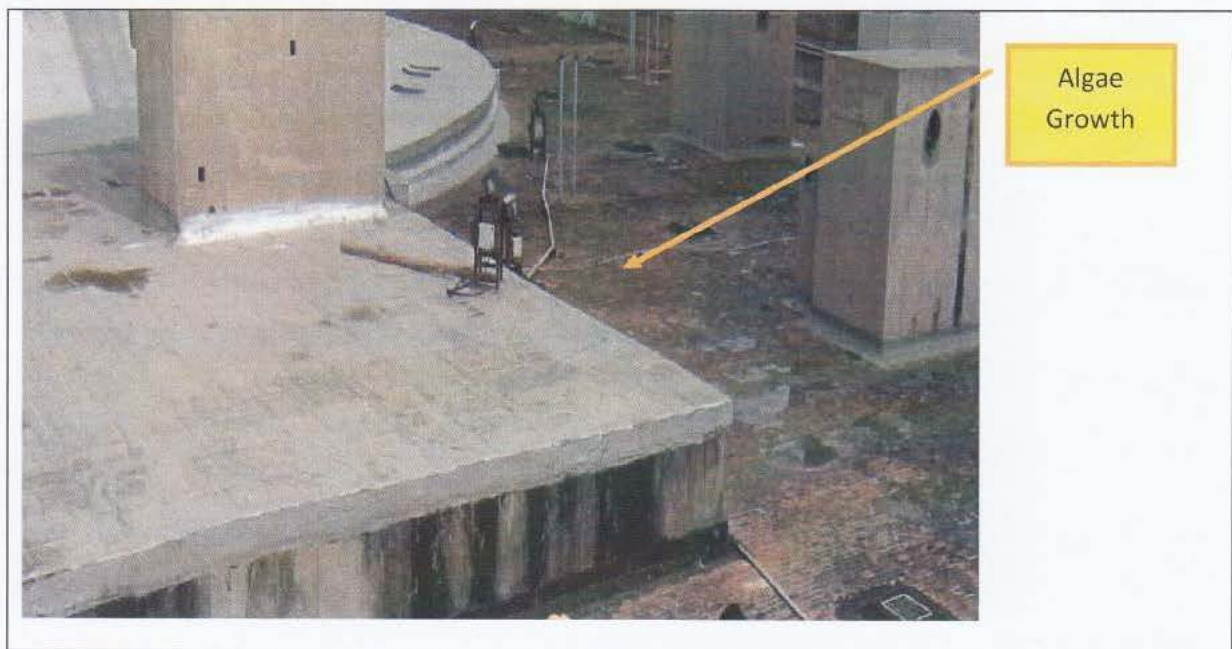
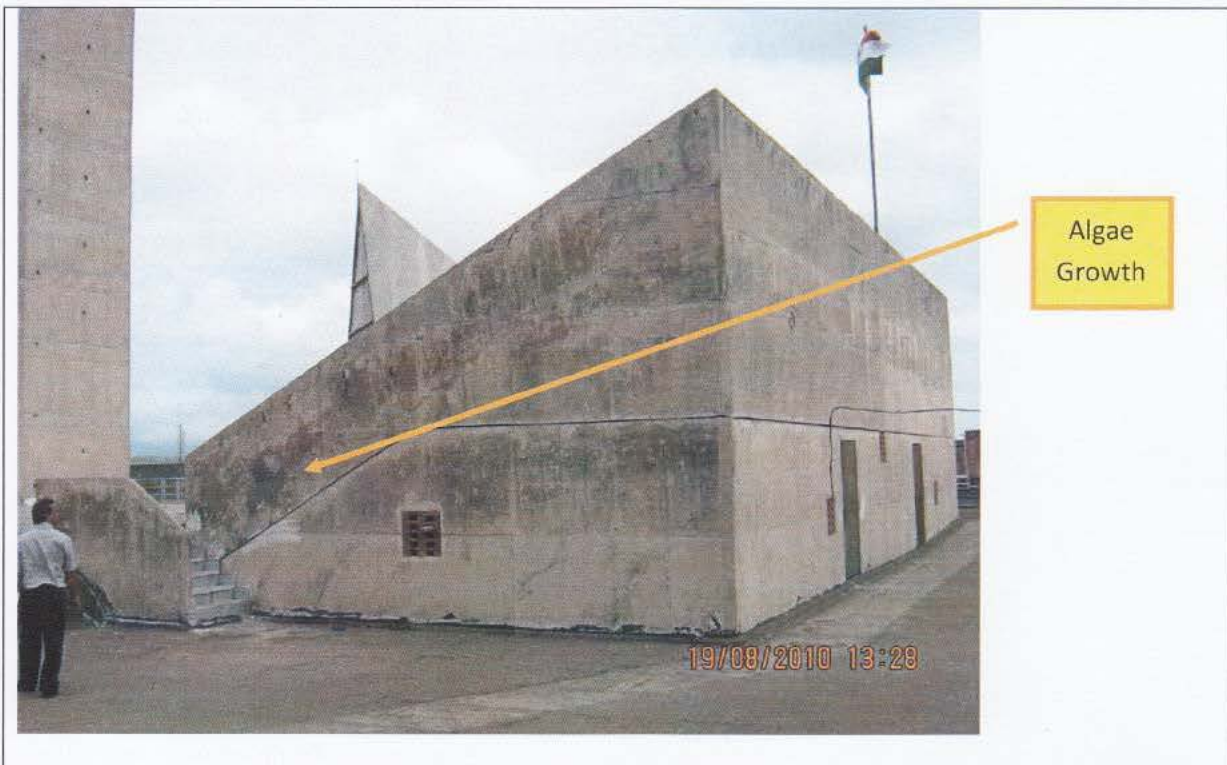
Seepage &
Poor
Maintenance
causing
structural
damage

19/08/2010 13:31



Damaged
& Discolored
Concrete

19/08/2010 13:30



SNAP SHOTS
The Punjab and Haryana High Court



Algae
Growth



Algae
Growth



Algae
Growth



Damaged
Concrete



Wild Growth
in concrete



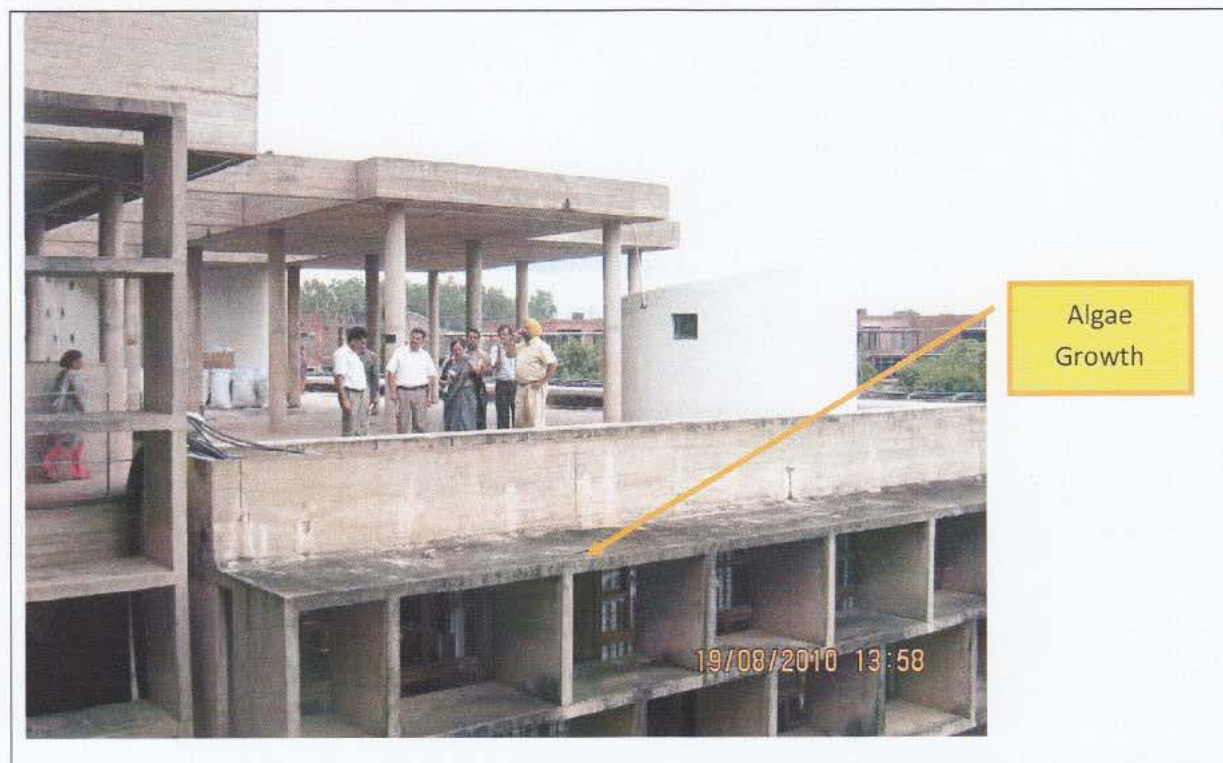
Algae
Growth &
Damaged
Concrete



Water
leakage
& Wild
Growth



Water
seepage





Broken /old
Furniture
Dumped
onRoof



Damaged
Waterproofi
ng
Treatment



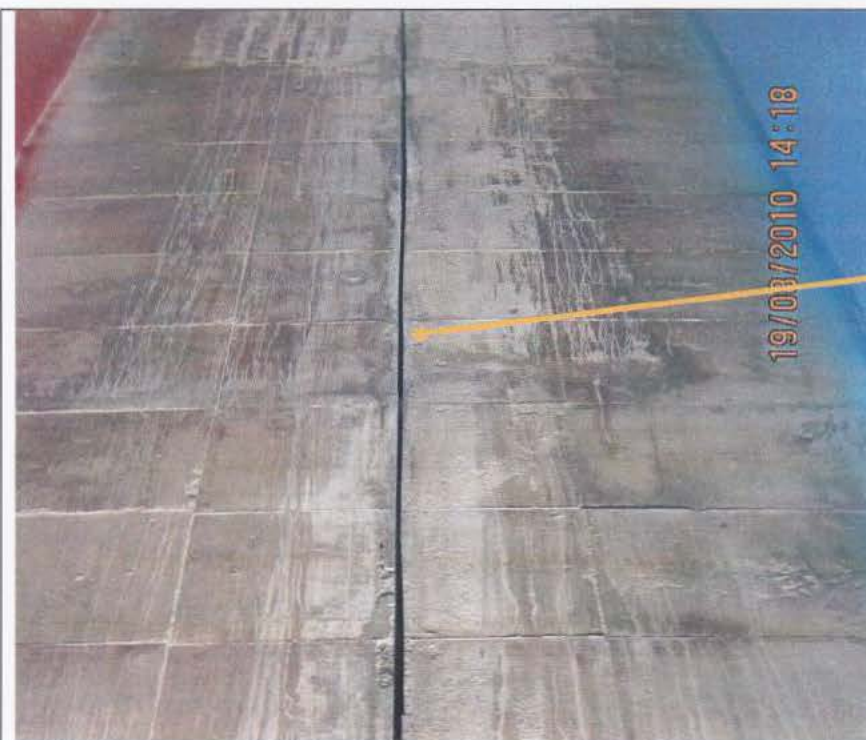
Wild
Growth On
terrace &
damaged



Rain water
Accumulation
on Duct Beam
through an
opening in
roof



Lid not
provided over
opening in the
Roof allowing
Rain
WaterEntry



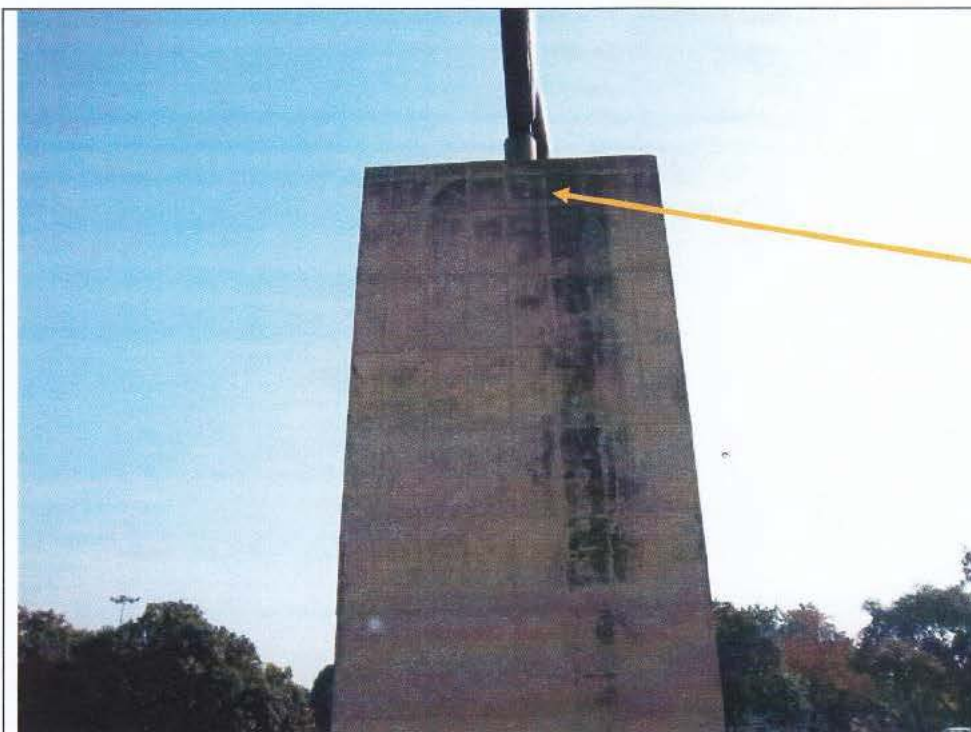
Water leakage
traces in ceiling

SNAP SHOTS

Open Hand Monument



Algae Growth



Algae
growth



Algae
Growth



Algae
Growth

2.2.1 The following main observations were made by the Sub Committee in respect of various buildings of the Capitol Complex, during its visit on August 19, 2010;

2.2.1.1 Civil Secretariat

1. Honey combing of concrete at many places due to improper mixing, exposed steel due to inadequate cover, compaction etc etc at the time of construction.
2. Seepage of water from floor/roof at many places.
3. Fungus deposit/blackening of concrete surface.
4. Corrosion of reinforcement and consequent spalling of cover.
5. Discoloration of concrete surface due to weathering.
6. Damaged expansion joints treatment roof of the building could not be inspected.
7. Treatment of surface at some places with cement based snowcem giving different look than the original concrete surface.

2.2.1.2 Assembly Hall, Haryana

1. Falling of concrete from edges of louvers (Thin members)
2. Seepage from roof in the portion painted with black colour.
3. Damaged tile terracing and tar felt at roof top.
4. Blackening of concrete surface due to fungus deposit at some places.
5. Discoloration/ irregular surface of concrete at some places due to weathering.
6. Repaired concrete surface looking different than the original.
7. Painting of top Pyramid leading to loss of original surface.

2.2.1.3 Punjab & Haryana High Court

1. Deposit of rust on the concrete surface due to corrosion of temporary. Steel frames.
2. Spalling of concrete at some places.
3. Blackening of concrete surface.
4. Damaged Tar felt at roof top.

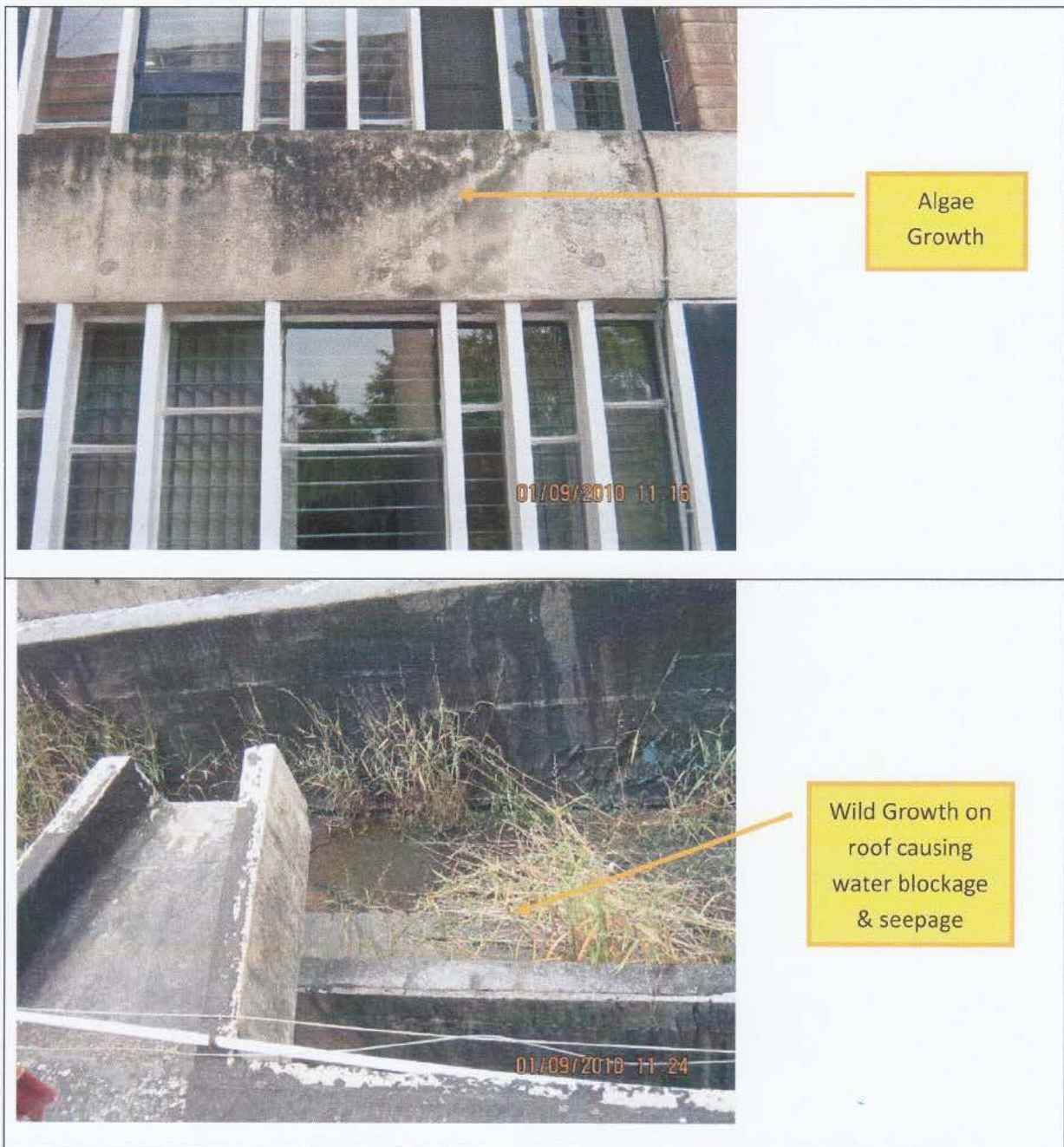
2.3 Second Site Visit

The following buildings were inspected on September 1, 2010

- (i) Museum- Sector -10
- (ii) 17 Bays Building- Sector -17
- (iii) Neelam Piazza -Sector -17
- (iv) Residential Houses (Type 13) -Sector-22

SNAP SHOTS

Museum Complex- Sector -10





Poor
Maintenance
causing
structural
damage



Wild Growth
& Water
Accumulation
on roof



Algae
Growth on
roof top



Damageto
WaterProofing
Treatmenton
account of
Wild Growth



Algae
Growth



Damaged
Water proofing
treatment on
Roof of
Auditorium



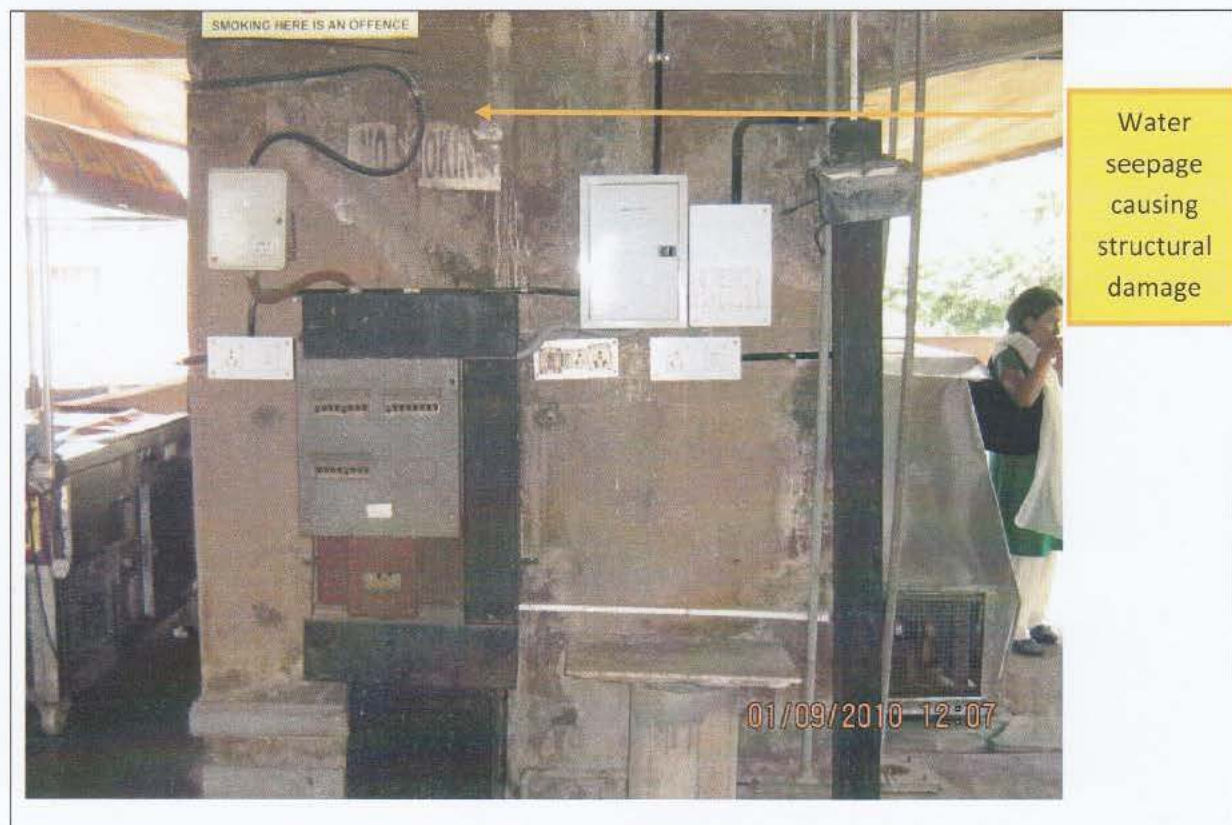
Water
seepage
causing
Structural
Damage



01/09/2010 11:40



Water
seepage
from
roof



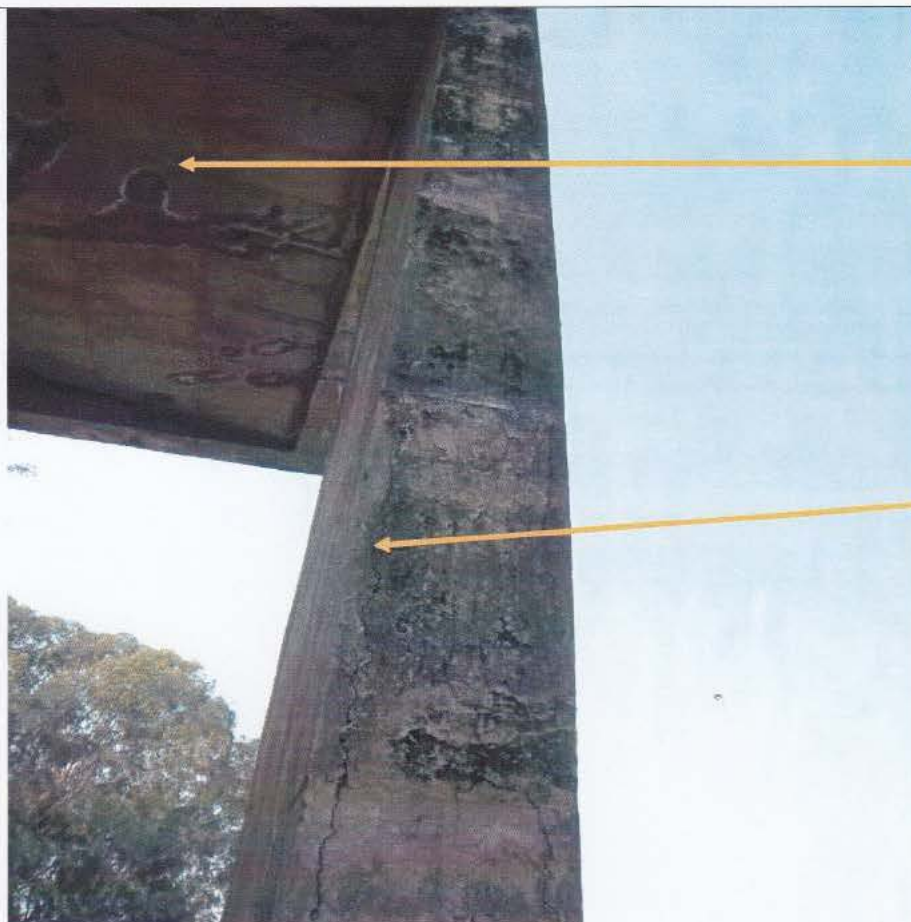
Water
seepage
causing
structural
damage



Algae Growth over shadowing the original facade



Structural
Distress &
Algae Growth



Leakage
from roof

Structural
Distress in
Column

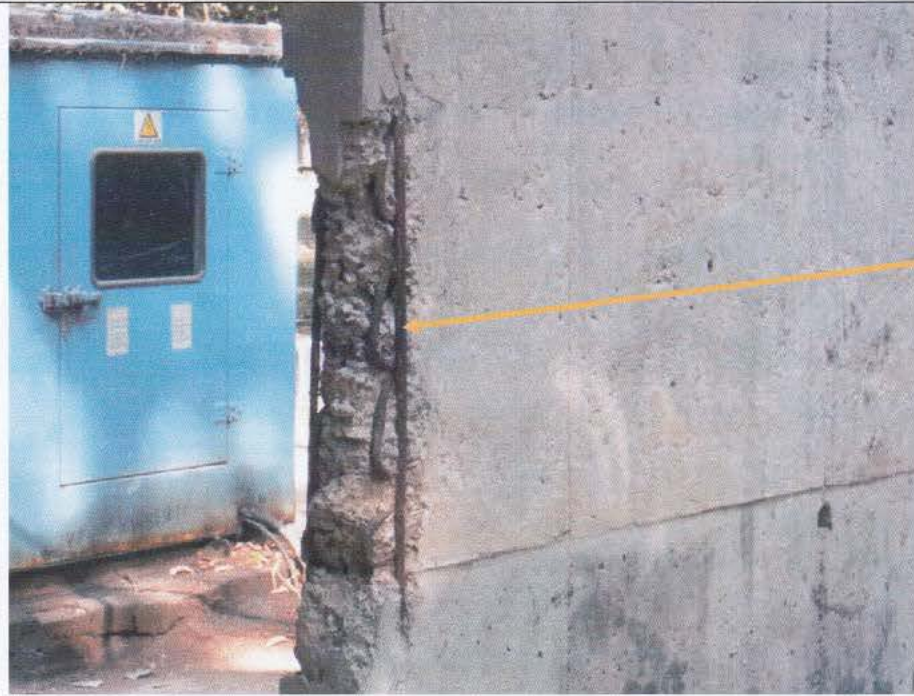


Indication of
Reinforcement
carbonization



Deteriorated
Concrete





Deteriorated
Concrete



Crack in Tile Face
& Damaged
Original work with
cement mortar



Crack in
Concrete



Cracks in
Concrete &
Painted Surface





Cracks in
Auditorium wall



Cracks in
Auditorium
wall

2.3.1 The following main observations were made by the Sub Committee in respect of following buildings during its visit on September 1, 2010;

2.3.1.1. Museum and Art Gallery- Sector 10. (Auditorium/ City Arch. Building)

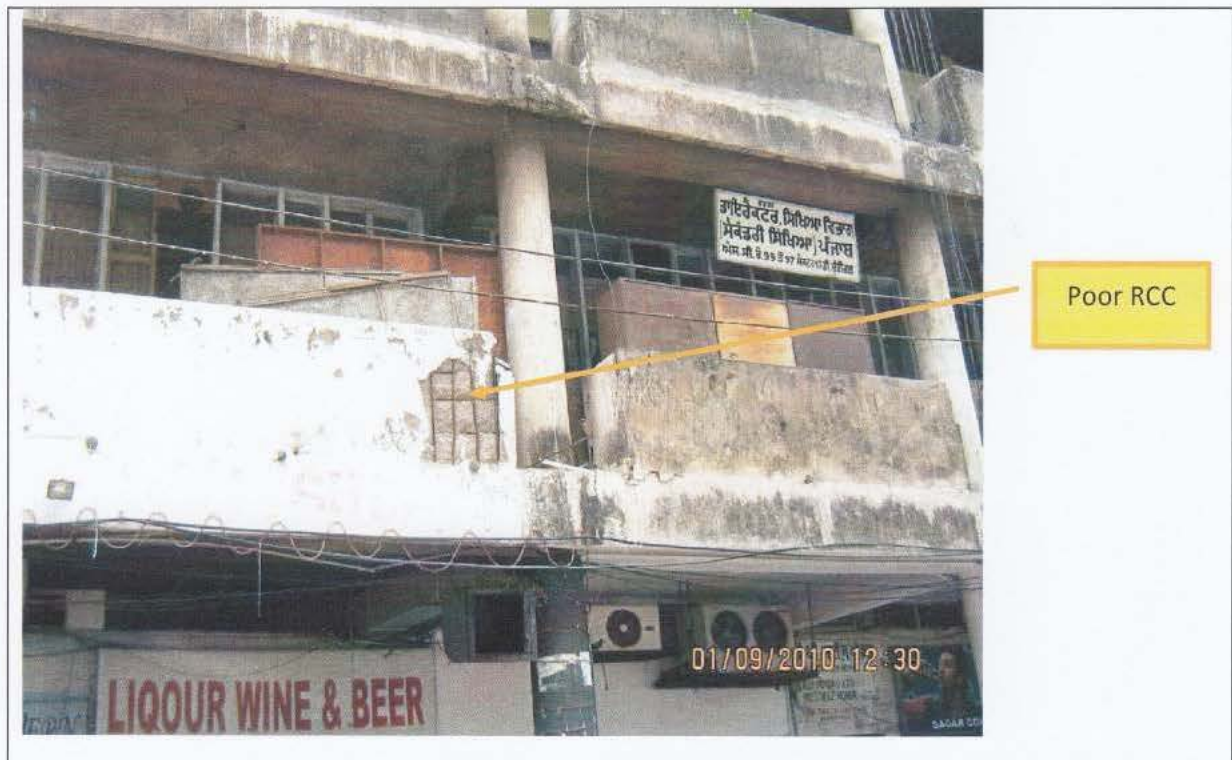
1. Peeling off concrete at edges from thin elements and exposed RCC beam surface near roof.
2. Water marks under roof due to seepage of rain water.
3. Seepage of water from the trough provided for disposal of rain water due to blockage of trough by the vegetation growth inside of the trough.
4. Exposed reinforcement at some places.
5. Spalling of concrete cover
6. Seepage of rain water in mummy area.
7. Damaged tile terracing.
8. Exposed Concrete mullions painted with synthetic paint

2.3.1.2. City Arch. Building

1. Blackening of concrete surface.
2. Excessive spalling of concrete cover due to seepage of rain water and consequent corrosion of reinforcement in the ramp area.
3. Damaged joints of tiles provided on ramp.
4. Blocked rain water disposal system.
5. Patches of dampness in the roof due to improper drainage of water.
6. No access to roofs is provided; hence it could not be inspected.

SNAP SHOTS

17 Bays Building Sector -17 & Neelam Piazza Sector -17





Painted
RCC



Poor
condition
of RCC



Distress in
RCC
Column



Cracks in RCC
Column



Spalling in
RCC Columns



Distress in
RCC roof



Poor
Condition
of RCC

01/09/2010 12:44



Poor
Condition
of RCC

01/09/2010 12:43

2.3.2 The following main observations were made by the Sub Committee in respect of following buildings during its visit on September 1, 2010;

2.3.2.1 17 Bays Building, Sector-17

1. Blackening of all parapet facia due to dampness and fungus deposit.
2. Spalled concrete cover, exposing reinforcement at many places.
3. Some of the parapets partly broken.
4. Vegetation growth at the top of roof.
5. Facia painted with variety of Cement based Snowcem.

2.3.2.2 Neelam Piazza, Sector-17.

1. Damaged facia partly broken at some places with exposed reinforcement at various Storey levels.
2. Spalling of concrete cover of the column of connecting passages to main block with exposed corroded reinforcement.
3. Growth of Vegetation at the roof tops.
4. Blackening of concrete of exposed surface of building.

2.4 Second Meeting

The Second meeting of the sub Committee was held on September 13, 2010 in the office of Chief Architect, Dept. of Urban Planning UT, Chandigarh. It was decided in the meeting that suitable models for carrying out the repair/rehabilitation of buildings be suggested to the Heritage Committee along with recommendations of subcommittee for consideration.

2.5 Presentation of Draft Report before the Expert Committee

A Presentation of the Draft Report was made by the subcommittee to the Expert Committee on September 22, 2010 and feedback was obtained on various aspects.

2.6 Visit to Ahmedabad

One member of the Subcommittee, Er. G.S Rosha visited IIM, Fort wall restoration site, Jamal Pur Gate, CEPT University, ATMABuilding and

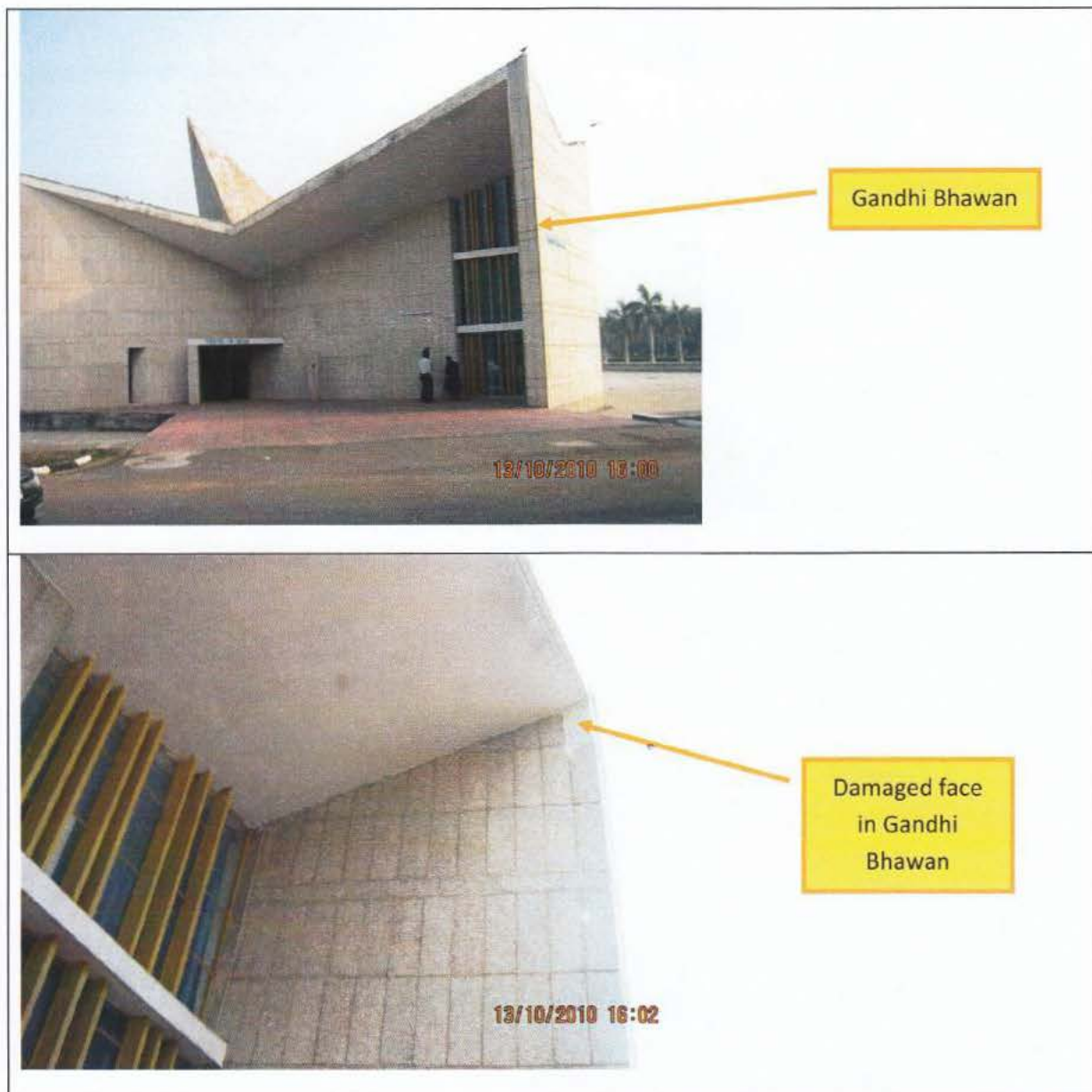
Museum at Ahmadabad and held discussion with Mr. Deveshish Nayak, Restoration Expert, to have first hand input on methodology being adopted for the restoration of these buildings.

2.7 Third Site Visit

The following buildings were inspected on October 13, 2010:

- Gandhi Bhawan, P.U.
- Fine Arts Block, P.U.
- Library Building, P.U.
- Administrative Block, P.U.

SNAP SHOTS





Leakage
Signs in
Gandhi
Bhawan



Leakage
Sign in
Gandhi
Bhawan





Damaged
FlooringLibra
ryBuilding in
PU



Algae Growth
and Colored
pointing on red
stone in Library
Building PU
roof Growth



Algae
Growth in
LibraryBuil
ding, PU



Algae Growth
in Admn.
Block PU

2.7.2 The following main observations were made by the Sub Committee in respect of following buildings during its visit on October 13, 2010;

2.7.2.1 Gandhi Bhawan, Panjab University

1. Seepage from the roofs
2. Falling of Finished Cladding Panels at some locations.
3. Vegetation Growth at some Locations

2.7.2.2 Fine Arts Building, Panjab University

1. Leakage from Roofs and Drainage Pipes.
2. Discolouring and Cracks in Concrete Facia.

2.7.2.3 Library, Panjab University

1. Blackening of Concrete Surface.
2. Leakage from Roof.
3. Leakage from Expansion Joints.
4. Vegetation Growth at some Locations. (*Refer Plate 31*)
5. Cracks in Rubble Masonry.
6. Steaks of Colour on Sandstone Panels.

2.7.2.4 Administrative Block, Panjab University

1. Spalling of Concrete at Some Locations.
2. Blackening of Concrete Surface.
3. Leakage from Roof.

2.8 Third and Final Meeting

The third and final meeting of the Subcommittee was held on October 15, 2010 and the final recommendations were made for onward transmission to the Expert Committee

2.9 Presentation before the Administrator

A meeting was held at the level of Administrator, UT, Chandigarh on December 12, 2010 to formalize the issue. During the course of the deliberations held on the issue it was decided that as far as the issue regarding preservation of Heritage Buildings is concerned, the Administration should restrict its role only to face-lifting of the Heritage Buildings under Capitol Complex only in addition to the Buildings under the Government Museum and Art Gallery, Sector 10. In the light of the said deliberations the Sub Committee has finalized the resource requirement in respect of these Buildings only for the time being

3. OBSERVATIONS FROM FIELD VISITS

3.1 Overall Observations

On the basis of visual examination of various buildings the following major points emerged:

- (i) The structural elements like columns, beams and slabs etc are in an overall good condition at all locations but need attention in few specific buildings in sector -17, where the distress has been noticed.
- (ii) At significant number of locations in the thin elements of various buildings, the distress in the form cracking and spalling of cover, corrosion of reinforcement etc has been noticed. Water leakage and damaged roof treatment have also been observed in many buildings.
- (iii) Significant discolouration with algae and fungus deposit has been observed on the exposed concrete surface of various buildings. Apart from this, at some locations, the exposed surface has been painted with variety of cement based Snowcem giving non uniform look.
- (iv) Buildings with Red Sandstone finish presented a clean and neat look except at a few locations where streaks of colour appeared to have spread on the surface during carrying out pointing of joints.

3.2 Specific Observations

The specific problems identified on the basis of visual examination are listed below:

- 1. Honey combing of concrete at many places due to improper mixing, exposed steel due to inadequate cover, improper compaction etc at the time of construction.
- 2. Seepage of water from floor/roof at many places.
- 3. Fungus deposit/blackening of concrete surface.
- 4. Corrosion of reinforcement and consequent spalling of cover.
- 5. Roughening of concrete surface due to weathering.
- 6. Damaged expansion joints treatment.
- 7. Damaged tile terracing and tar felt at roof tops.
- 8. Repaired concrete surface looking different than the original.
- 9. Painting of top of Assembly Hall, Haryana pyramid leading to loss of original surface.

10. Deposit of rust on the concrete surface due to corrosion of temporary steel frames.
11. Peeling off concrete at edges from thin elements.
12. Seepage of water from the trough provided for disposal of rain water due to blockage of trough by the vegetation growth inside of the trough of museum, Sector 10.
13. Damaged joints of tiles provided on ramp of city Architect Building in Sector 10.
14. Blocked rain water disposal system.
15. Patches of dampness in the roofs due to improper drainage of water.
16. Facia painted with variety of cement based snowcem in Sector 17 Building.
17. Damaged facia partly broken at some places with exposed reinforcement at various story levels.
18. Structural distress in some of the columns in Sector 17 buildings.
19. Leakage from GI pipelines.
20. Minor crazing on plastered surfaces.
21. Vegetation growth on walls, terraces, facias/junctions.
22. Diagonal cracks in masonry walls at few places.

3.3 Estimated Life Expectancy of Buildings

Evidently the task assigned to the Sub Committee was for suggesting ways and means for Restoration and Preservation of Building Materials with particular reference to Concrete and Brick Masonry Buildings and as such before an in-depth assessment of the health of the buildings is made it is utmost important to understand the basic behaviour of the buildings subjected to its present environs. The aspect that how the building has responded to the climatic changes is a very important and crucial factor that will determine the life expectancy of the building and will also pave the way for the experts to determine and formalize future policies for its preservation and restoration.

Undisputedly, the expected useful life of the building, being the average amount of time that an item, component or system is estimated to function when erected/installed new and assuming routine maintenance is practised.

To deliberate further the matter, the Committee would like to draw attention to some extracts of the relevant provisions of the 'CPWD Maintenance Manual 2000' which are outlined as under:

- ❖ As the building ages there is deterioration to the various parts of the building and services. Major repairs and replacements of elements become inevitable. It becomes necessary to prevent the structure from deterioration and undue wear and tear and as well as to restore it back to its original condition to the extent possible. Mainly the following types of works in general are undertaken under special repairs:-
 - i. White washing, colour washing, distempering etc., after completely scrapping the existing finish and preparing the surface afresh.
 - ii. Painting after removing the existing old paint from various members.
 - iii. Provision of water proofing treatment to the roof. All the existing treatments known are supposed to last satisfactorily only for a period of about ten years.
 - iv. Repairs of internal roads and pavements.
 - v. Repairs/replacement of flooring, skirting, dado and plaster.
 - vi. Replacement of doors, window frames and shutters.
Replacement of door and window fittings.
 - vii. Replacement of water supply and sanitary installations like water tanks, WC cistern, Wash basins, kitchen sinks, pipes etc.
- ❖ The building services and fixtures including internal wiring, water supply distribution systems etc. are expected to last for 20-25 years. There afterwards it may be necessary to replace them after detailed inspection.
- ❖ Electrical special repairs in general are whole sale replacement of the wiring and the electrical installations. Earthing is also required to be attended.
- ❖ The CPWD Manual further lays down the expected economic life of the building under normal occupancy and maintenance conditions, as under :

(i)	Monumental buildings	100 years
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(ii)	RCC Framed construction	75 years
(iii)	Load bearing construction	55 years
(iv)	Semi permanent structures	30 years
(v)	Purely temporary structures	5 years

- The projections given above are only indicative and it depends on several factors like location, utilization, specifications, maintenance and upkeep/caretaking.
- The replacement, renovation and major repairs become inevitable as the life of all the components are not identical.
- All the three categories i.e. day to day, annual and special repairs/services are interrelated. Neglect of routine maintenance and preventive measures lead to more extensive periodical maintenance that in the long run leads to major repair or restoration works, which could have been otherwise avoided or postponed otherwise.

The Committee would also like to draw the attention of the relevant provisions pertaining to the designed life of the buildings as enshrined under the 'National Building Code of India 2005' under Part-6, Section-1 Table-4 Clause 4.4.3.1 which inter-alia reads as under:

S.No	Class of Structure	Mean Probable Design Life of structure in Years
(i)	All General Buildings	50
(ii)	Temporary sheds, structures such as those used during construction operations (for example formwork & falsework) structures during construction stages and boundary walls.	5
(iii)	Buildings and structures presenting a low degree of hazard to life and property in the events of failures such as isolated towers in wooded areas, farm buildings other than residential buildings	25
(iv)	Important buildings and structures such as hospitals, communications buildings/towers and power plant structures	100

4. METHODS FOR RESTORATION AND PRESERVATION OF BUILDINGS

The possible reason of deterioration as listed above include unsound construction practices like honey combing of concrete, inadequate cover to the reinforcement and faulty detailing practices etc. Apart from this the weathering effects like carbonation; chloride attack, sulphate attack, ingress of water and temperature variation etc also result in deterioration of concrete. The deterioration can be slowed down by appropriate measures such as adequate cover depth, proper mix proportioning, compaction, curing and use of inert aggregates. However, once the deterioration starts the appropriate remedial measures are required for refurbishment of damaged structures.

To repair the damaged concrete surface the following solutions are possible.

4.1 Method for repair of Spalled Concrete and Corroded Reinforcement

The following procedure may be used for repair of cracks and spalling of cover due to corrosion of reinforcement. The various steps include:

- Removal of loose/damaged/carbonated concrete by chiselling/sand blasting technique and making the surface free from all loose particles and dust.
- De-rusting and clearing of corroded bars by rotary brushes or by using antirust chemicals
- Washing and saturating all cavities in the adjoining concrete with clean water and removal of all free water before placing of repair mortar.
- Application of repair mortar/concrete/grout on damp surface. Care should be taken to match the colour of original concrete and form work impressions.
- In case of loss of steel section the additional steel may be tied to the existing bars prior to the application of bond coat.
- Application of protective coating on the finished surface of repaired element.

4.2 Method For Water Proofing

The steps for carrying out the water proofing are described below:

- Dismantling of all tiles, mud phaska and bituminous coating.
- Removal of all dust and old coating with wire brushes to make the surface smooth and clean.
- Washing the substrate with clean water and drying the surface.
- Filling of cavities with water proof epoxy mortars and treating the surface with suitable water proofing chemicals to complete details.
- Laying of mud phaska and tiles to the required slope and specifications.
- Filling of surface tiles joints with water proof cement mortars.

4.3 Method For Treatment of Fungus/Blackening of Surface

The steps carrying out the fungus/algae treatment are listed below:

- Washing of the surface with hot water/high pressure water jets etc for removal of fungus/algae.
- Removal of fungus/algae and loose material, if any, with suitable scrappers and wire brushes.
- Repairing, as explained in section 4.1, wherever required.
- Spraying and impregnation of hydrophobic water repellent (silanesiloxene) with deep penetration on affected concrete surface, wherever required.

4.4 Method For Repair of Cracks in Masonry Walls

The steps involved for repairing of cracks in masonry walls are described below:

- Drilling of holes on both sides of crack
- Thorough cleaning of holes and washing of holes with clean water
- Anchoring U shaped metal units in the holes with non-shrinking grout/epoxy.

4.5 Cleaning of Sand Stone Surface

The streaks on sand stone surface can be cleaned by gentle grinding and washing of surface.

5. SOLUTIONS FOR CONCRETE AND BRICKMASONRY BUILDINGS

The following methodology may be adopted for carrying out the repair/rehabilitation work of various heritage buildings.

- Floating of EOI/Tender by UT Engineering Department for comprehensive condition survey (visual examination and NDT techniques) and recommending repair methodology for various buildings by expert agencies with experience of preservation of heritage buildings and preparation of detailed report including quantification of various Items/Works and detailed repair methodologies as well as budget estimate.
- During the condition survey, the unauthorised modifications made to the exterior of the buildings including fixing of steel frames/grills will also be quantified and the estimate for restoration to the original exterior condition will also be prepared.
- Constitution of Technical Appraisal Committee (TAC) by Expert Committee to assess the proposals submitted by expert agencies.
- The followings are suggested to be the members of TAC:
 - a) Secretary Engineering – Chair Person
 - b) Chief Engineer, UT Engineering Department
 - c) Chief Engineer, Chandigarh Housing Board
 - d) Mr.Mahinder Raj- Structural Consultant, New Delhi
 - e) Nominee of ASI
 - f) One Architect from Expert Committee
 - g) One Structural Consultant from Chandigarh
 - h) Any Other
- Comprehensive condition survey (visual examination and NDT techniques) of various Heritage Buildings (one by one or in sets) by the selected expert agency and preparation of detailed report including quantification of work and repair methodologies to be adopted for various problems.
- Validation/Modifications of Repair/Rehabilitation methodologies by Technical Appraisal Committee
- Inviting Technical and Financial Bids for executing the specified rehabilitation work from the agencies having experience of rehabilitation of such heritage buildings.
- Short listing of agencies based on assessment of Technical/Financial Bids by the Technical Appraisal Committee.
- Allotment of work to the executing agency based on assessment of Technical /Financial Bids for execution of work.
- Monitoring cell for reviewing quality and progress of works.

Three Expert Agencies who can be approached to undertake the condition survey work are:

- i) Central Building Research Institute, Roorkee, Haridwar Uttaranchal-247667
- ii) Structural Engineering Research Centre, Tharamani, Chennai-600113
- iii) Engineers India Limited, EIL Bhawan Bhikaiji Cama Place R.K Puram New Delhi

6. UNIFORMITY OF COLOUR / EXTERNAL FACADE

One of the major issues, both for concrete as well as brick masonry is the uniformity of colour. Fresh concrete has an external appearance which is different from old concrete. This leads to repair work giving a patchy and untidy look, unless the whole element or panel is repaired / replaced. Even then the new element / panel appears to be visually different than the old element / panel nearby. This difference is to be expected and accepted; otherwise an overlay is required which results in modification of the texture of the exposed concrete.

At locations where the concrete has been painted upon, scraping and wire brushing can be undertaken but this may not result in uniform exposure of original concrete. Here too, treatment similar to that for blackened / fungus infested surface is to be undertaken with careful surface preparation. In such cases, fresh concrete finish will become visible adjacent to old concrete.

At locations where exposed brickwork has been painted over, scraping and wire brushing will not expose the original brick surface uniformly. Some approved brick coloured shade would have to be painted over the brick surface to give uniform appearance.

7. CONCLUSIONS

Under the given mandate of the Sub Committee, the Sub Committee had made a visual assessment of the buildings of the Capitol Complex, Government Museum, Sector 10, Buildings in Sector 17, Punjab University and Residential houses in Sector 22, as already brought out in the earlier part of the report.

The Sub Committee, during the course of their visit to these buildings has observed that no doubt presently there is no major threat to the stability of these structures however surely there are definite signs of neglect because of poor/unplanned maintenance, which the State owning agencies need to monitor through a well-defined Maintenance Protocol that will help in identifying the crucial areas for consideration under any remedial/restoration works at a later stage.

The Sub Committee had also observed that the buildings of the Capitol complex were inaugurated during the period 1953 to 1968 and as such have already completed around 60% of their useful designed life. Appearance of superficial cracks in concrete, spalling of concrete, rusting/carbonation of steel reinforcement, leakages, vegetation growth and damaged fascias are testimony to the aging of these buildings of heritage importance. The below noted table indicates approximately the present life of these buildings, as the relevant record pertaining to the commencement/completion of these buildings lies with the State owning agencies.

Sr.No.	Name of the Building	Date of Inauguration
1.	The Civil Secretariat	November 7, 1953
2.	Assembly Hall	1962
3.	The OpenHandMonument	1972-73
4.	The Punjab & Haryana High Court	March 19, 1955
5.	Government Museum, Sector 10	May 6, 1968

During the course of the deliberations held at the level of Administrator, UT Chandigarh on December 15, 2010 wherein it was decided that as a first step, in the direction of the preservation of Heritage Buildings of Chandigarh, an assessment is to be made to immediately improve the aesthetics of these buildings by scrubbing of the black spots appearing on concrete façade on account of algae growth. Accordingly a fresh assessment of the issue has been made and it has been observed that the problem of blackening of the concrete surface exists in most of these prestigious buildings as is evident from the photographs appended in the report in respect of each of these buildings.

It has been assessed that a sum of Rs.33.35Lac approximately will be needed immediately for cleaning and scrubbing of the concrete façade of these buildings that can be completed within a short time frame of 3 to 6 months. An abstract of the tentative financial requirements in respect of each of these buildings is outlined below:

1. The Civil Secretariat	Rs. 16.81Lac
2. Assembly Hall Building	Rs. 6.87 Lac
3. The Open Hand Monument	Rs. 1.33 Lac
4. The Punjab & Haryana High Court	Rs. 5.00 Lac
5. <u>Government Museum, Sector 10</u>	<u>Rs.3.34 Lac</u>
Total	Rs.33.35 Lac

The above costing projections are based on the methodology and the rates adopted by the UT Engineering Department in the similar type of work undertaken by the Department in respect of the Deluxe Building, Sector 9, Chandigarh and are applicable under routine works. These projections do not include the cost of providing water repellent (Silicone Treatment). In the event, a decision is taken to provide water repellent (Silicone Treatment) to the surface, as has been proposed by the UT Engineering Department in the case of Deluxe Building Sector 9 Chandigarh, the overall cost will be around Rs. 70.81 Lac. Further, it is felt that because of the complex architecture of the Assembly Hall, Punjab & Haryana High Court and Civil Secretariat Buildings the rates may vary depending upon the requirement of scaffolding/machinery required for the treatment of the curved and projected surfaces of these Buildings rising up to 25 meters without any intermediate building elements.

This shall, however, cannot undermine the necessity of looking at other signs of distress in these buildings as brought out by the Committee by a mere glance. These will have to be further substantiated through a complete analysis of the health of the buildings by destructive/non-destructive tests and through comprehensive Condition Surveys to be undertaken by the Estate Owning Agencies through specialized agencies in the field.

Pertinently the main components of a Condition Assessment comprise of the following sub activities:-

- (i) Rapid Visual Investigation
- (ii) Gathering of information pertaining to the complete record of building design, drawings, architecture details, construction details including specifications of material used and details of any retrofitting works done from time to time.

- (iii) The details of major additions/alterations undertaken in the building.
- (iv) The identification of visible structural damage such as concrete spalling and general quality of construction.
- (v) Observations on soil conditions and conditions of foundation.
- (vi) Any signs of settlement of building foundations.

The further strategy for rehabilitation/preservation of buildings will flow from the detailed outcome of the Condition Assessment that will also determine the level of improvements required in respect of the following:

1. Rehabilitation of the existing structure – Improvements in structural strengths of column/beams/slabs and other structural elements such as thin fascias.
2. Improvements in water proofing/roof drainage.
3. Improvements in flooring.
4. Treatment of expansion joints.
5. Replacement of sanitary/electrical installations/ Earthing.
6. Treatment for leakage/seepage.



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CHANDIGARH HERITAGE

Identification

Conservation

Management

Maintenance



Identification

Conservation

Management

Maintenance



A HOLISTIC APPROACH HAS BEEN ADOPTED FOR THE PRESERVATION /CONSERVATION OF CHANDIGARH HERITAGE WITH FOCUS ON RETAINING THE INTEGRITY OF THE ORIGINAL CONCEPTS IN SUCH DIVERSE DISCIPLINES AS TOGETHER CONTRIBUTE TO THE MAKING OF A CITY A *SOCIAL ORGANISM* AND A *WORK OF ART*. THESE INTERACTIVE-INTERDEPENDENT DISCIPLINES ARE:

•PLANNING

•URBAN DESIGN

•ARCHITECTURE

•LANDSCAPING

•ART



***“The seed of Chandigarh is
well sown. It is for the
citizens to see that the tree
flourishes”***



Cover design : Ar. Sumit Kaur
Ar. Abha J. Sharma

CHANDIGARH HERITAGE

This document contains:

1. Report of Sub Committee-I – Identification, Conservation, Management and Maintenance of Government Buildings & Precincts (Page 1-97 also 105-153).
2. Report of Sub Committee-II – Identification of Private Buildings for heritage status (Page 98-104 also 105-153).

A REPORT ON CHANDIGARH HERITAGE

**An Identification, Conservation, Management,
& Maintenance of Chandigarh Heritage_**

by

Sub Committee - I

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Chief Architect, Chandigarh Administration

SS Bhatti

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PROLOGUE

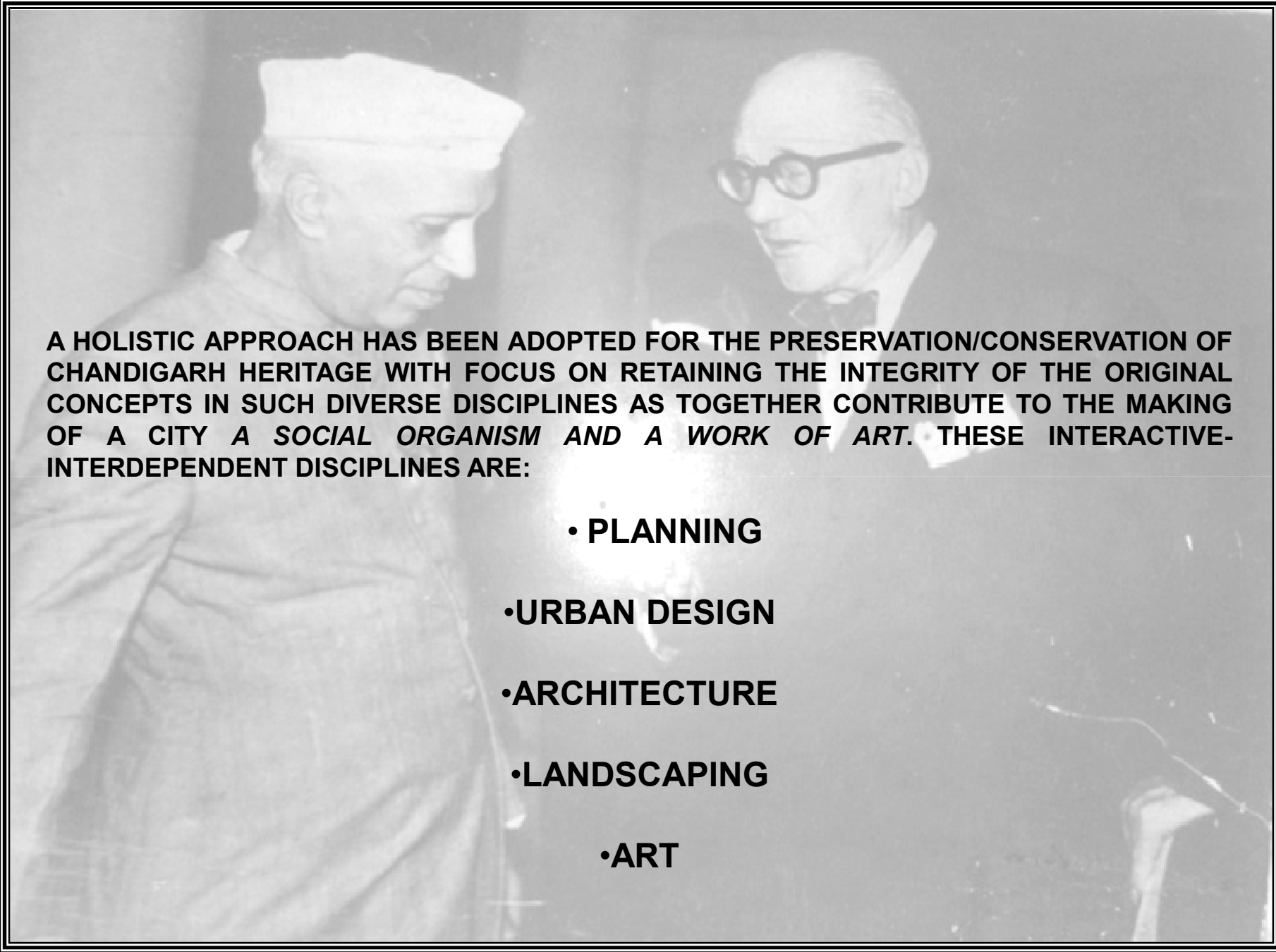
Unique stands Chandigarh as a magnificent testimony to what India could do with her newly-earned freedom under the vanguard of farsighted leadership!

This City is a living testimony to independent India's first Prime Minister Pandit Jawaharlal Nehru's vision of what our cities should be and he found a matching genius in the Swiss-born French architect Le Corbusier to translate that vision into a palpable physical reality. Chandigarh built from scratch has been the first attempt in comprehensive city planning and the first large experiment in Modern Urbanism. Fondly called the "City Beautiful", Chandigarh holds its significance as a reference point in the evolution of modern architecture and town planning which has placed India on the world-map. It has produced excellent town planning, urban design, landscaping, architecture created with the use of ordinary construction materials, and embellished with integral works of art, and so forth. The city has significance also from the historical point of view, and is one of the most liveable cities of India. The most important fact about it is that so far it has retained the integrity of its original concept of holistic design, which should be reason enough for us not let it go the way of other cities, from the "City Beautiful" to a shanty town like other Indian urban settlements have gone - characterised by uncontrolled, and unplanned growth that is not commensurate with their infrastructures. The city's monumental architecture, principles of town planning of **Sun, Space, and Verdure**, as enunciated by Le Corbusier, along with urban design, landscaping, honesty in the use of construction materials, like shuttered concrete and exposed brick-work, ought to be preserved as **Modern Heritage of Universal Value** for which Chandigarh has become known throughout the world.

The Committee has worked out guidelines both for their sector-wise application and for adoption at the city-level.

It is strongly recommended that regular upkeep, which is an integral part of the continuous process of Conservation [which implies Management, Maintenance, and Monitoring], should be done in the light of the Guidelines given in the **Edict of Chandigarh**, which once used to be the case until not long ago. This important document is appended to this report for ready reference.

The Committee is of the considered opinion that all the original plans, which were drawn up by the team of foreign architects headed by Le Corbusier, must be studied to see how far they have been implemented. If not, projects should be completed as intended. If yes, the completed buildings/complexes should be studiously managed to ensure that they are always well maintained and kept in good repair with all the components comprising them fully operational. For example, the reflecting water-bodies, which formed an integral part of the Master Architect's concept of the High Court and the Legislative Assembly, are rarely filled with water—and thus give the impression of utter neglect that is a slur on the Universal Heritage Value of these Edifices, which, along with the Secretariat, have been hailed as three of Modern Architecture's most hallowed shrines.



A HOLISTIC APPROACH HAS BEEN ADOPTED FOR THE PRESERVATION/CONSERVATION OF CHANDIGARH HERITAGE WITH FOCUS ON RETAINING THE INTEGRITY OF THE ORIGINAL CONCEPTS IN SUCH DIVERSE DISCIPLINES AS TOGETHER CONTRIBUTE TO THE MAKING OF A CITY A *SOCIAL ORGANISM* AND A *WORK OF ART*. THESE INTERACTIVE-INTERDEPENDENT DISCIPLINES ARE:

- PLANNING**
- URBAN DESIGN**
- ARCHITECTURE**
- LANDSCAPING**
- ART**

PLANNING



THE MASTER PLAN, rendered in the characteristic style of Le Corbusier, who was a master painter too, is a magnificent work of Art: an abstract painting of great emotive power.

PLANNING

The Master Plan

Chandigarh was planned as an Administrative Town for a population of 5 lakhs and built in two phases: Sectors 1 to 30 which formed the First Phase, and Sectors 31 to 47 constituting the Second Phase of its development. The City was planned on the principles of CIAM (*Congress Internationaux d' Architecture Moderne*) Theories focusing on four major city-functions i.e. Living, Working, Care of Body & Spirit, and Circulation. Le Corbusier conceived the Master Plan of Chandigarh as analogous to Human Body in terms of **Head** (the Capitol Complex, Sector 1), **Heart** (the City Centre, Sector 17), **Lungs** (the Leisure Valley, innumerable open spaces, and sector-greens), the **Intellect** (the cultural and educational institutions), the **Circulatory System** (the network of roads, the 7Vs) and the **Viscera** (the Industrial Area).



SALIENT FEATURES OF THE MASTER PLAN

Neighbourhood Concept

- The function of **Living** occupies primary place and has been organised into a cellular system of sectors based on the concept of a neighbourhood unit. Each sector (with the exception of Sectors 1 to 6, 12, 14, 17, and 26) has a size of 800m x 1200m which was determined on the parameter of providing all amenities i.e. shops, schools, health centres and places of recreation and worship within a 10-minute walking distance of the residents. The originally planned population of a sector varied between 3000 and 20,000 depending upon the sizes of plots, the topography of the area, and the urban-design considerations. Every sector is introvert in character and permits only four vehicular entries into its interior to provide a tranquil and serene environment conducive to the enrichment of life.

Green City Concept

- Planned as a Green City with abundance of open spaces, Chandigarh ensures that every dwelling has its adequate share of the three elements of Sun, Space and Verdure.

Concept of V7s

- A well-defined hierarchy of **Circulation** based on Le Corbusier's V7s road-system permits rich diversity in land-uses covering commercial areas, educational facilities, health and social infrastructure, and open spaces.

Hierarchical Distribution of Population

- Hierarchical distribution of population with the density is the lowest in the northern sectors and gradually increasing towards the southern sectors.

Low-Rise Development

- Planned as a low-rise city, it has developed on the stated principles and, even after sixty years of its inception, it still retains the original concept to a large extent.
- The city is, however, now under tremendous pressure owing to manifold increase of population, traffic-congestion, stress on infrastructure, building violations, limited availability of land, all of which have begun to adversely affect the sacrosanctity of the Master Plan concepts.

RECOMMENDATIONS FOR CITY-LEVEL APPLICATION

It is recommended that efforts should be directed to retain the essence of the Master Plan as was originally conceived by Le Corbusier. As an evidence of this all-important endeavour, Heritage status be accorded to the planning concept of the **first phase of the city** i.e. Sectors 1 to 30 which were planned and detailed out by the original team of architects in fulfilment of the four principal city functions classified by Le Corbusier as **Living, Working, Care of Body & Spirit**, and **Circulation** on which the success of this daring experiment in Modern Urbanism depends. These sectors should be given the title of “**Corbusian Chandigarh**” on the lines of Lutyens’ Delhi.

In light of the foregoing imperatives,

- Chandigarh shall remain by and large an Administrative City.
- Chandigarh shall retain the essential planning postulates of Sun, Space, and Verdure.
- Chandigarh shall be a Low-Rise City.
- * Chandigarh shall be a “Green City” as originally conceived by Le Corbusier.

“**Corbusian Chandigarh**” should continue to retain its low-rise character and no private residential building be allowed to rise higher than three floors as already permitted. Accordingly, the public and government and commercial buildings should continue to observe the height-restrictions prescribed in the architectural controls.

The City’s monumental Edifices of the Built-Environment, designed by Le Corbusier and his team of Architects, namely, Pierre Jeanneret, E Maxwell Fry, Jane B Drew, shall be protected, preserved, and conserved as identified and enlisted in this document.

No further FAR relaxation should be given, and Architectural Control/Frame Control restored as a primary step towards the conservation of this urban complex of Universal Heritage Value. Road-sections of each category of the V7 hierarchy were standardised by the Master Planner.

However, it has been observed that to address the phenomenal increase in the volume of traffic, road-widening is/has been carried out in the City at the expense of pathways for the pedestrians. This has not left enough space for survival of the existing trees. The pedestrian footpaths and cycle tracks, which formed an integral part of the V7s concept of the Circulation system, have not yet been fully implemented. It is proposed that a comprehensive mobility plan for non-motorised vehicles and the pedestrian movement be worked out to provide unhindered and seamless connectivity besides improving the Walkability Index of the City to make it pedestrian-friendly.

The ongoing proposal of streamlining the Circulation System of the City by introducing an efficient public transport system and removing bottlenecks in the road network by road-widening and introducing underpasses, etc. needs to be holistically addressed in keeping with the character of Chandigarh. Though Metro has been proposed to be taken underground, the ancillary infrastructure, such as metro nodes, provision of public and private parking, need to be carefully dovetailed into the existing fabric.

HERITAGE STATUS TO SECTOR 22



SECTOR 22, built as the first typical sector on the concept of a **neighbourhood unit**, should be preserved in terms of its original planning concept and land use, including the Shopping Centre, Kiran Cinema, and the Peons' Village.

The very success of this neighbourhood as an experimental prototype is reason enough for suggesting the stated action. No development should, therefore, be allowed that may jeopardise its original concepts of Modern Urbanism as covered under the four city-functions classified by Le Corbusier: Living, Working, Care of Body & Spirit, and Circulation.

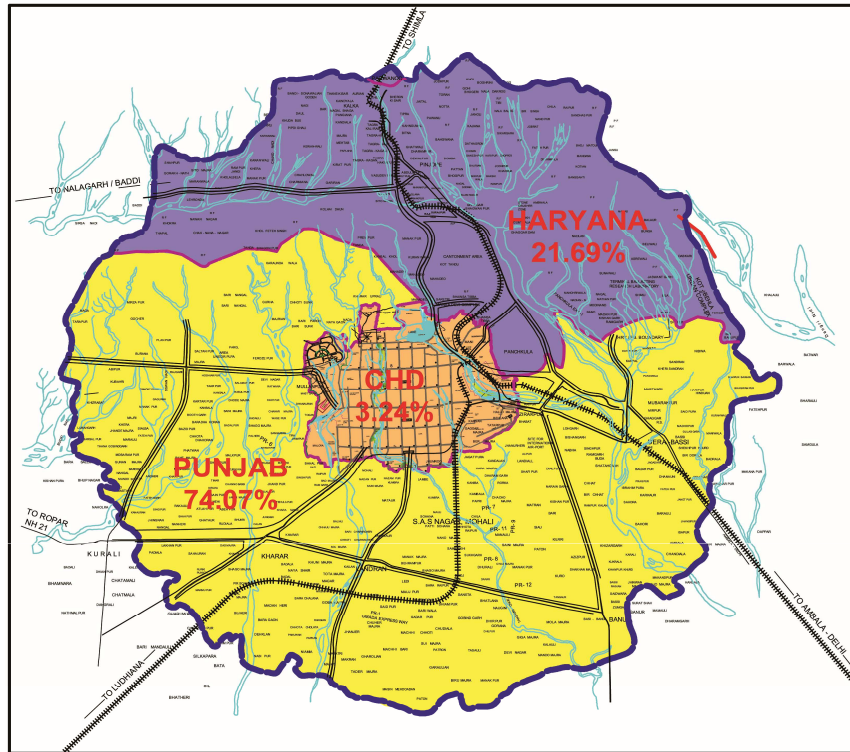
However, if its revitalisation becomes necessary at a future date, the Department of Urban Planning should draw up a comprehensive master plan for scrutiny and approval by the Chandigarh Heritage Conservation Committee, which would ensure that the integrity of intention embodied in the concept of the original master plan for this sector is not lost in the flurry of urban renewal or revitalisation. This very principle would also apply in the case of the two Albert Mayer Sectors, numbers 7 and 8, which are subsequently recommended for a similar future treatment.

HERITAGE STATUS TO SECTOR 7 & SECTOR 8

As a tribute to the American planner, Albert Mayer, who was the first to be commissioned to prepare the initial Master Plan for Chandigarh, **Sectors 7 & 8** should be preserved as an example of alternative neighbourhood planning concept in terms of master plan, land use, etc. These two sectors are tripartite in design as against Le Corbusier's standard/typical Sector which is quadripartite. Also, Sector 8 has Shopping Centre planned on the precinct principle, which is a distinguishing feature of Albert Mayer neighbourhood concept. No development must be allowed that may jeopardise their original concepts of Modern Urbanism. However, if their revitalisation becomes necessary at a future date, the Department of Urban Planning should draw up comprehensive master plans for scrutiny and approval by the Chandigarh Heritage Conservation Committee, which would ensure that the integrity of intention embodied in their original concept of neighbourhood is not lost in the flurry of urban renewal or revitalisation.

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THE PERIPHERY OF CHANDIGARH

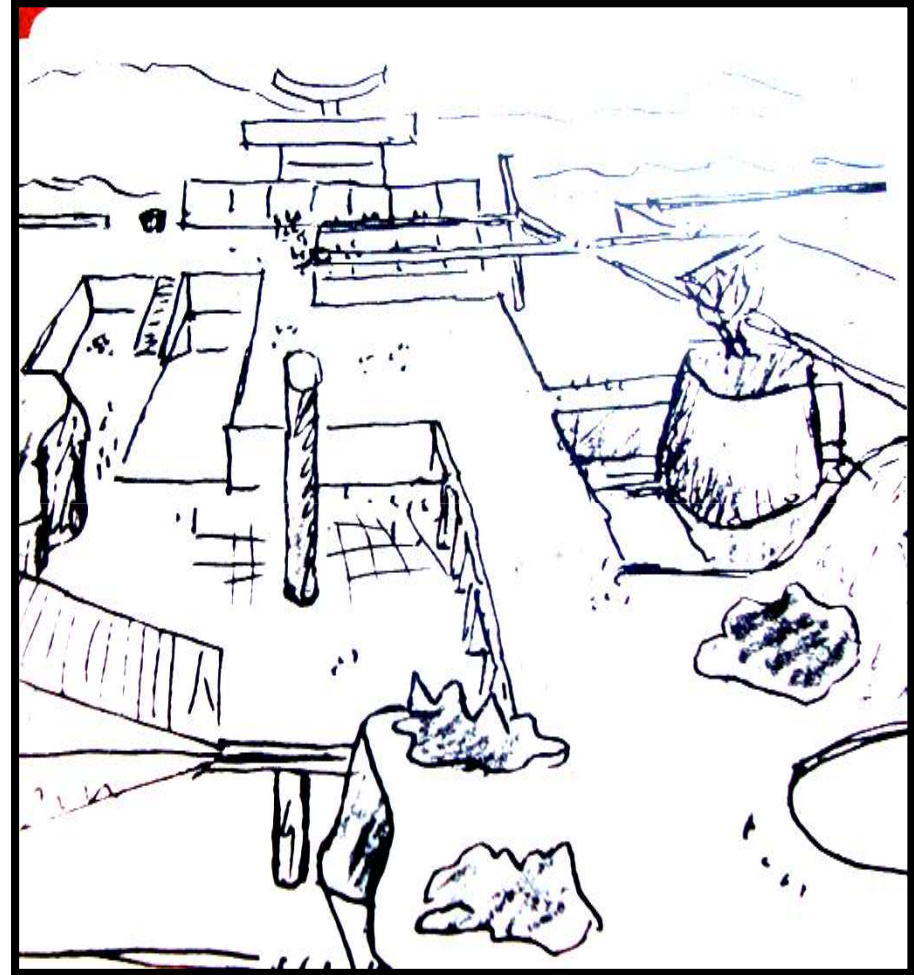


To safeguard the city from unplanned and unregulated growth, an 8-kilometre stretch, which was later extended to 16 kilometre around the urban area, was earmarked as green and agricultural area. In 1966, area under Periphery was subdivided between the states of Punjab, Haryana and Chandigarh Union Territory, with city getting only a limited 3% of the area.

The peripheral areas of Punjab and Haryana have witnessed large-scale urbanisation, both planned and unplanned, which have affected the concept of Master Plan and put pressures on city's infrastructure. Both the States have further extensive plans of urbanisation in this peripheral area and have either already notified or are in the process of notifying the master plans of additional townships therein, as a consequence of which immediate coordinated efforts are necessary to ensure balanced growth in the region.

The area behind the Capitol Complex is NO CONSTRUCTION ZONE in accordance with the EDICT of CHANDIGARH and the CHANDIGARH URBAN COMPLEX plan. However, the master plan of Nayagoan prepared by Punjab state shows it as proposed to be urbanised. Since there are no height-restrictions in the area, there is a potential danger of multi-storey high-rise buildings coming up at the foothills of the Shivaliks which form the most powerful natural landmark of Chandigarh and a magnificent backdrop of the Capitol Complex. Similarly, Haryana state has also proposed high-rise building close to the regulator-end of the Sukhna Lake. **There is thus an immediate need to stop the proposed construction by taking up the matter with the States of Punjab and Haryana with executive firmness.**

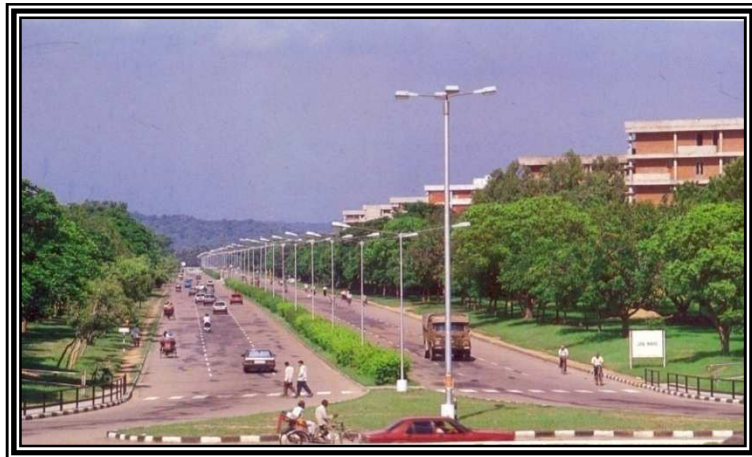
URBAN DESIGN



URBAN DESIGN: SALIENT CONCEPTS



Siting of the Capitol Complex



A view of the Jan Marg looking towards the Shivalik Hills: the seven-storey blocks add a touch of urban habitat to an-otherwise pastoral setting

- Plan in consonance with nature's magnificent backdrop.
- Orientation of the major roads directed to enable an uninterrupted view of the Shivalik Hills.
- Location of the Capitol Complex at the highest point of the city-site on the foothills.
- Low-rise, low-density development in the first phase of the city.
- Green City concept based on the planning postulates of Sun, Space, and Verdure.
- Urban legislations for harmonious development of the Built-Environment.
- Mechanism to regulate the city's urban form is an extensive range of architectural controls, zoning, building rules, etc. These devices have resulted in a very distinct and harmonious picture.
- Uninterrupted view of the Shivalik Hills along major roads.

HARMONY OF THE BUILT ENVIRONMENT AND LANDSCAPING



Himalaya Marg



V3 dividing Sector 22 and Sector 23



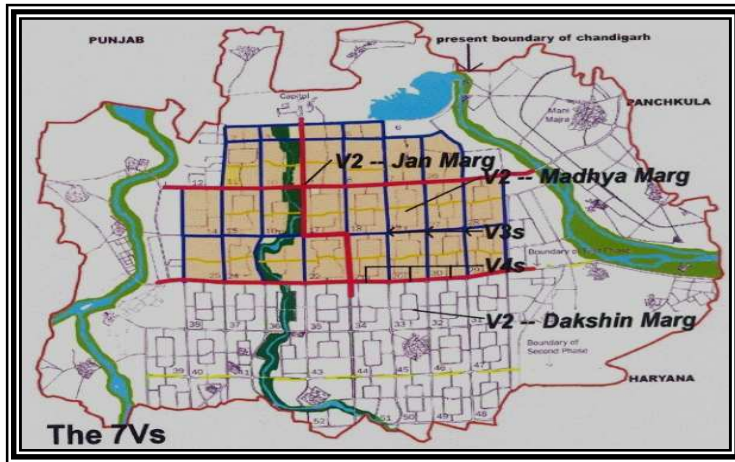
A Typical Cycle Track



Jan Marg: People's Avenue as a Ceremonial Vertical V2

A city, as a social organism and a work of art, is the creation of three disciplines: Town Plan; Architecture; and Landscape. When they come alive as an organic whole they give birth to Urban Design: the Architecture of the City, with its distinct urban form and psycho-social imageability. Thus Chandigarh stands apart from other cities by virtue of its order, and harmony of the Built-Environment with rich Landscape Design and carefully-planned arboriculture or roadside tree-plantation, along with other stated factors. Therefore, there is need to conserve its distinguished Modern Urbanism at all cost.

URBAN DESIGN ON V2s: JAN MARG



Architecturally-Controlled Institutional Buildings

Jan Marg forms main ceremonial road leading to the Capitol Complex and has along its one side the Leisure Valley and cultural belt, and the institutional buildings on the other side. These architecturally-controlled buildings are the highest structures in the city, with the exception of the Capitol Complex edifices and the unbuilt 11-storeyed building in the City Centre. Buildings oriented at an angle to the road lend a distinct character to the street while at the same time provide glare-free light into the interiors. Plantation of tall trees reduces the impact of the built-mass. However, the ambience of this major road is marred by unplanned security barracks and the additional parking. It is proposed that underground parking be introduced along this belt and security rationalised. Construction should be regulated and monitored along with architectural controls.



DESIGN CONCERNS ALONG JAN MARG



Wilting of trees due to insensitive tree-to-tree distance



The recent provision of parking along this road has weakened the fabric of Urban Design. It is proposed that the parking should be made underground



Security barracks near MLA Hostels



Use of new materials

ARCHITECTURAL CONTROLS ALONG MADHYA MARG



SCOs in Sector 7 & 26 towards North

Madhya Marg, linking the Railway Station with the City Centre, the Panjab University and the PGI [short for Post-Graduate Institute of Medical Education & Research], is flanked by institutional buildings along one side, and predominantly-commercial buildings along the other. Violations such as painting of brick and concrete surfaces and unorganised advertisements create visual disorder.

The public and government buildings along the major horizontal arterial road [V2] contribute to the urban image of the city and thus need to be strictly regulated and monitored.



SCOs in Sector 9 towards North



Institutional buildings towards South

UTTAR MARG RUNS PARALLEL TO THE CAPITOL COMPLEX



This thoroughfare is not permitted for public use due to security reasons



Security barracks for staff

Since the residences of the Chief Ministers of Punjab and Haryana fall on this road, the road has been barricaded to prevent through-traffic. Security check-posts and barracks, which were not part of the original Master Plan, have been constructed at various locations throughout the stretch of the road.



Security check-post to ensure restricted entry

RECOMMENDATION

The presently-barricaded road should be opened up to public movement after the security concerns have been addressed satisfactorily

URBAN DESIGN ON V3 : SECTOR DIVIDING ROADS

V3s, the inter-sectoral dividing roads carrying the fast traffic of the city, have been planned to avoid buildings opening onto them. Buildings along these roads, open spaces, sealing walls, signage, street-furniture and landscaping contribute to the urban image of the city. Houses, designed by the original team of the Chandigarh Capital Project, private residences earlier subjected to full architectural control and institutional buildings flank some of these arteries. The rear of the buildings along these roads is important from the urban-design point of view. Ground realities, however, bring out that violations, need-based relaxations of allowing green-rooms, enhancement of FAR, shifting of setback lines and doing away with of the Frame and Architectural Controls of residential houses have grossly impacted the street- scape. In addition, poor maintenance and uncontrolled additions and alterations of the government housing and the open spaces also add to the problem.



Government Housing celebrate visual order as design discretion: a crucial element of sanity in Architecture



Sealing Walls are works of art in themselves

VISUAL DISORDER ALONG V3s



The varying heights of boundary-walls, construction of green-rooms, covering of courtyards, poor maintenance, uneven setbacks, and other additions and violations, have adversely impacted the order of the Built-Environment, and are a cause of serious concern.



Additional covered area and shifting of rear setback of Frame Control of private houses has impacted the streetscape along V3.

RECOMMENDATION

The architectural character of the private buildings along these roads, which were earlier controlled by the special architectural regulations, should be monitored carefully as before. It is proposed that concept approval from the Heritage Board of all the government and private buildings should be mandated before undertaking any additions and alterations.

ARCHITECTURAL CONTROL ALONG V4: COMMERCIAL BUILDINGS

V4, or the shopping street, which forms the spine running central within each sector and along which are located the neighbourhood community facilities and the shopping centres, was intentionally planned as a slow carriageway. Buildings on either side of this meandering road were initially planned to be architecturally controlled. The shopping centres have been detailed out by the original team, with the design varying from sector to sector. These privately owned and architecturally controlled Shops-cum-Flats [SCFs] while ensuring uniformity of the architectural expression, were climate-responsive, ensured cost-effectiveness and mandated use of local building materials and had pre-determined space for advertisements. However over the years a number of violations and additions/alterations have been done which have resulted in visual disharmony.



ORDERLY ORIGINAL FACADES



COLOURFUL CONFUSION OF TODAY

VIOLATIONS, ADDITIONS AND ALTERATIONS ALONG V4

At present, many changes / violations such as advertisements, change in facade along with need-based sanctions, such as coverage of rear courtyard on the ground floor, conversion of SCFs into SCOs, and flexibility in internal planning have taken place, which are in conflict with the original concept.



RECOMMENDATION

Due to change in the shopping patterns, lifestyles, and advanced technologies, there is a persistent demand for change in architectural control. Limited uniform changes within the existing frame may be permitted with the approval of the Heritage Committee.

FULL ARCHITECTURAL CONTROL ALONG V4: RESIDENTIAL BUILDINGS



Sectors 15 & 16



Sector 18



Sectors 10 & 11

EXISTING GROUND REALITIES: ARCHITECTURAL CONTROLS and RESIDENTIAL BUILDINGS ON V4 [Shopping Street]

Architectural Control is no longer applicable to the residential houses along V4. The houses are now governed by Zoning which stipulates the maximum ground coverage, FAR, and maximum height permissible. The permission to build car porches, balconies, change in gate-design (subject to compounding fees), and change in size and shape of windows has brought in a variety of shapes and forms. Since many of the buildings have not been sensitively designed it has resulted in a distorted urban picture. The meandering profile of V4s provides the maximum visibility of urban form and thus needs to be sensitively conserved to retain the city's distinct imageability. Concept approval by the Heritage Committee of all buildings along the V4 has thus been recommended.



Sector 21



Sector 11

ARCHITECTURE



Architects Original Office is located in Sector 19 on the busy Madhya Marg. It is in this building that the Chandigarh Capital Project, as a daring experiment in Modern Urbanism, was launched in 1950. Designed by Pierre Jeanneret, Le Corbusier's cousin, this is a most innovative building in the city in terms of space concept, use of low-cost materials, and indigenous techniques of construction; above all, its environment-friendly architectural design.



This building should be conserved in its original form and no additions and alterations permitted.



Entrance view

The block of the building which is already in use as Le Corbusier Centre

RECOMMENDATION

The second block at present in use by Offices of the Chandigarh Administration should be got vacated and put to use as Chandigarh Research & Development Centre, where all the archival material pertaining to the city's planning, architecture, urban design, landscape, art, and other related aspects be made available to scholars both Indian and foreign. The building should be named '**Pierre Jeanneret Bhawan**' and got affiliated to Le Corbusier Foundation in Paris for expanding its database to facilitate higher research.



Interior view

LIVING



GOVERNMENT HOUSING



Arched Entry to Community Housing



Single-storey Type-13 Housing



Unfortunately, Housing such as this, which set the trend for disciplined architectural design, is no longer the in-thing

Government Housing: There are 14 types of houses for different income-groups. Keeping in mind the principle of Sun, Space and Verdure for everybody, the team of architects created very interesting spaces, forms, shadows, patterns, and textures with local materials and indigenous construction methods giving birth to a new style of architecture, which came to be known as **Chandigarh Architecture**. Chief characteristics of this distinguished Architecture are Order and Harmony.

RECOMMENDATION

This Committee has recommended that certain belts be kept as heritage zones along V3 and V4. Internal pockets will be identified by the Heritage Board.



Senior Officers' Housing created machine aesthetic with manual labour backed by refined sensibilities

Government Housing celebrate visual order as design discretion: a crucial element of sanity in Architecture



PRIVATE HOUSING

Private Housing: Catering to the needs of all strata of society, plots of various sizes, ranging from five *marlas* to eight *kanals*, were carved out in various sectors of the city. The marla houses and some houses along important arteries of the city were governed by architectural/frame control. The remaining houses, one kanal and above, were governed by zoning. Frame-control houses were dictated by front and rear setbacks and the built-masses of fixed heights. This was to ensure a uniform urban street-picture. The restrictions of the size of houses, percentage of penetration in built-mass were all fixed. No structure was permitted beyond these lines. In the case of zoning, the footprint of the building was designed within which flexibility was allowed. Maximum-height restrictions were imposed along with percentage of covered areas on respective floors. These farsighted measures created even among Private Housing specimens of Order and Harmony.



NEED FOR ENSURING SUN, SPACE, AND VERDURE



Marla Houses



Cheap Houses

The original plan, architectural controls and building rules ensured that each individual gets adequate share of Sun, Space, and Verdure for good quality of life and healthy living. Many changes have been permitted over the years which have impacted the urbanscape due to enhanced ground coverage and FAR, which are amongst the highest in the country. Doing away with the architectural control/frame control, additional covered area outside the frame in the rear of the houses, flexibility in size and shape of windows, balconies beyond the frame, etc. have done more harm than good to the city's Built-Environment.

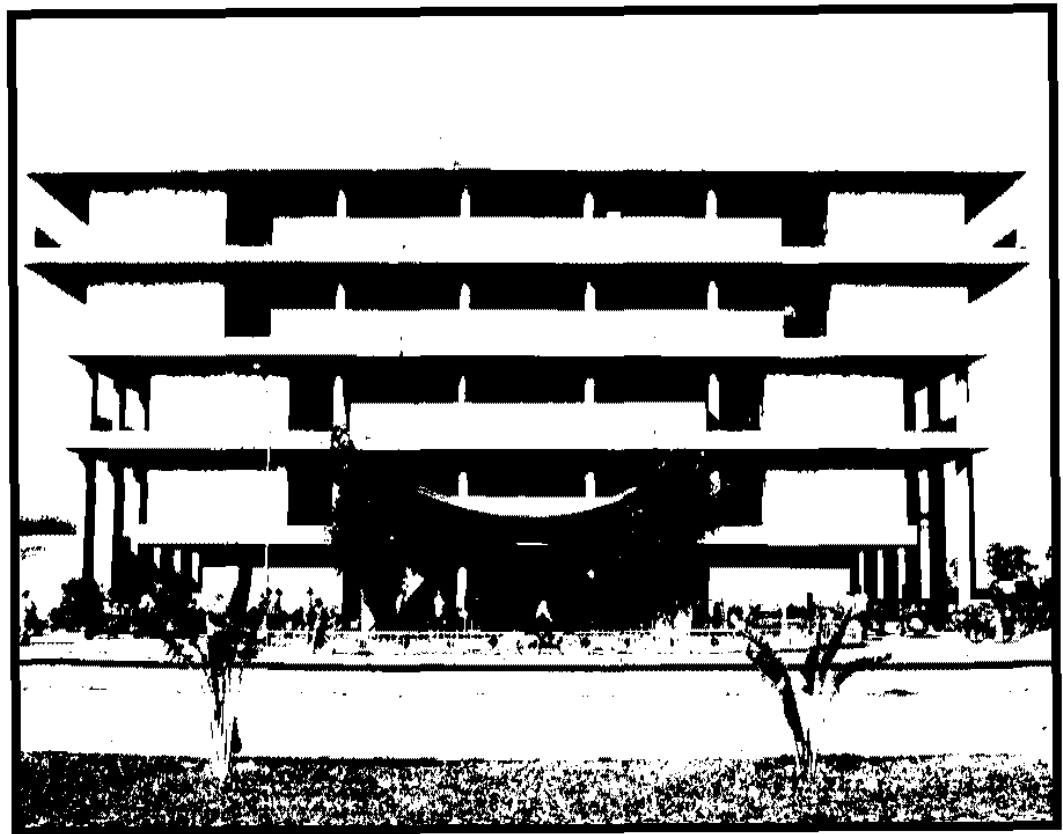
It is recommended that, on the one hand, no further enhancement of ground coverage and FAR should be allowed and, on the other, the possibility of reversing the notification dated 16.10.2008 be seriously examined for prompt and decisive action.

VIOLATIONS IN THE RESIDENTAIL HOUSES

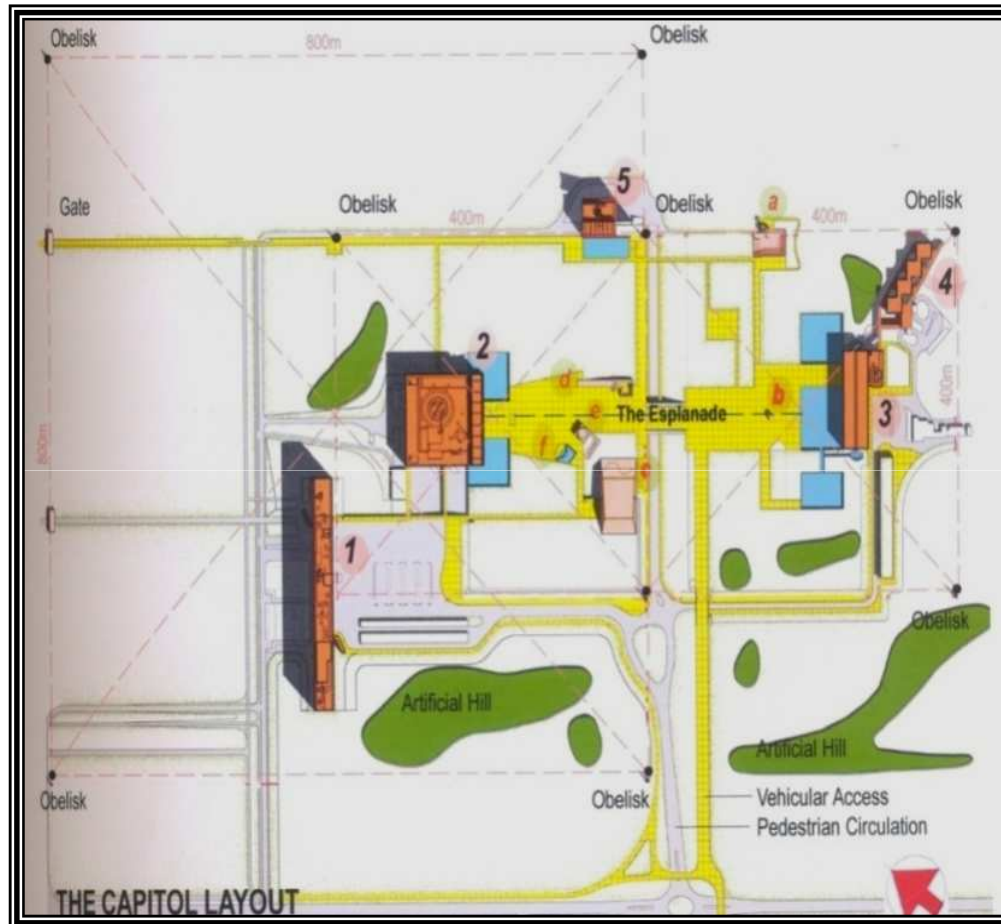


Violations in the rear courtyard of the marla houses have resulted in a narrow linear and open space. Totally violating the concept of outdoor living besides adversely impacting the urban streetscape. The residual open space is the only light source to the main living rooms of the house which is much below the norms and against the concept of sun space and verdure

WORKING



CAPITOL COMPLEX – HERITAGE PRECINCT



The Capitol Complex: The symbolic 'head' of the city, set against the backdrop of the Shivalik Hills, consists of a group of buildings designed by the Master architect Le Corbusier: Secretariat, High Court, Legislative Assembly and the Museum of Knowledge. The complex also has monuments like the Tower of Shadows, Open Hand, and Martyrs Memorial built on a monumental scale and is flanked by the Rajendra Park and the Sukhna Lake. The architecture of the Capitol Complex, the most representative of Le Corbusier's works, is the embodiment of the spirit of exaltation, power and permanence experienced by Indians on acquiring the prerogative of self-governance after long, bitter struggle for freedom. The Capitol Complex was designed as a great pedestrian plaza with motorised traffic confined to sunken trenches.



VIEW OF THE TOWER OF SHADOWS, THE LEGISLATIVE ASSEMBLY AND THE SECRETARIAT

The Capitol Complex is planned on a cross axis wherein rigid symmetry has been avoided in the placement of various buildings. While the linear façade of the Secretariat marks the edge of the Complex on the left side, the Assembly and the High Court are placed on the opposite ends of the cross axis, facing each other across a 450-metre Esplanade where a number of monuments symbolising Le Corbusier's theories of City Planning have been placed. The sculptural buildings built to excellence have earned international recognition and this masterpiece of human creative genius needs to be given 'Heritage Building' status of the first order. The location of the Capitol Complex at the highest point of the city-site and at the foothills with the Shivaliks as the backdrop was a conscious decision underlying the concept of Chandigarh's urban design. The placement of buildings of the Secretariat and the High Court with the longer facades perpendicular to the hills lent an unobstructed view of the foothills. Future development should ensure that the above concepts are not marred by any physical barriers.

The Secretariat: At the time of its conception and construction the Secretariat was the largest office building that ushered in what Le Corbusier called the machinist aesthetic. It was exceptionally bold and beautiful in that it had no historical precedent nor showed any fickle-minded preference for eclectic pot-pourrie of a mongrel mixture of elements picked up from here and there.





Though Le Corbusier's edifice still retains something of its pristine majesty [as seen in the previous picture] it is under constant threat of abusive tinkering, as can be seen above, by its insensitive users who are altering its façade with couldn't-care-less impunity. Since they are the tenants of the Chandigarh Administration it should act fast and firm to stem the rot if this priceless world architectural Heritage is to be conserved for posterity!

SECURITY ISSUES



The Capitol Complex was so planned as to gradually unfold to the visitor the beauty and magnificence of the “edifices” designed by Le Corbusier. This concept of spatial experience, heightened by the use of geometric hill, artificial mounds with heterogeneous plantation, and meandering roads/pathways, was geared to create caves of surprises. However, due to security reasons, the public Circulation system has been so reoriented as to totally nullify the Master Architect’s concept. Tents for security personnel pitched all over the Secretariat surroundings give it the keep-off-me appearance of a citadel rather the welcome receptivity of an edifice that symbolises the people’s power of self-governance in a parliamentary democracy.





SHED IN FRONT OF RAMP



ADDITIONAL PORCH IN FRONT OF MAIN BLOCK

These four pictures show the wanton way in which Chandigarh's principal Heritage is being butchered by its callous users.



COVERING OF VERANDAHS



ADDITIONAL SHEDS



Dumping of garbage and poor maintenance of the Complex is a symptom of our epidemic sickness that prevents us from seeing beauty in our environment and Heritage monuments



Le Corbusier called Reinforced Cement Concrete [RCC] modern-times “artificial stone” with unique plastic qualities, and raised it to the level of a new aesthetic cult by its persistent use in all his buildings that created countless followers throughout the world. Since this is the most important and easily identifiable element of Corbusiana, it is incumbent to conserve it in its original form by appropriate modern techniques.

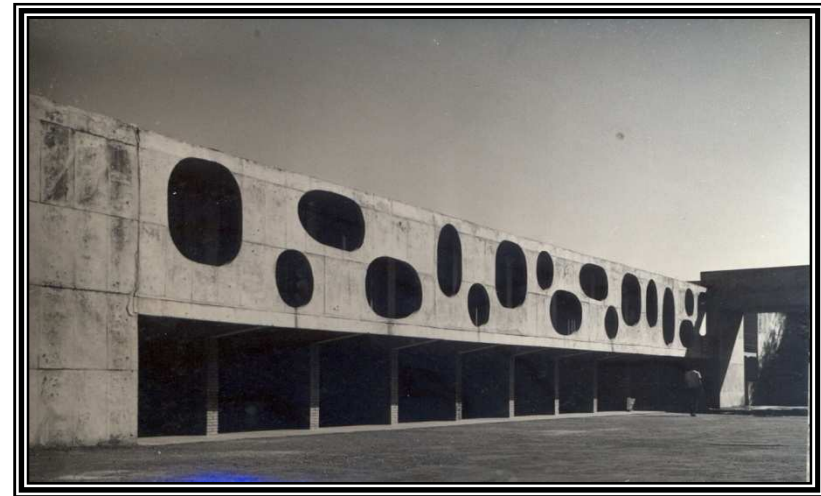


Damage to the facade due to additional glazings

THE LEGISLATIVE ASSEMBLY



Poor condition of the roof-terracing has also resulted in seepage and leakage which has damaged large parts of the ceiling of this edifice; the seat of law-makers!



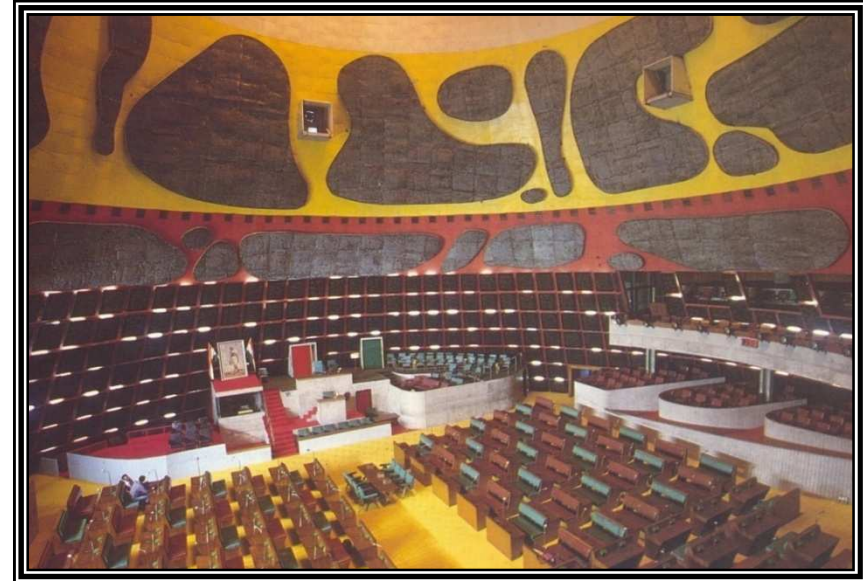
External changes like the painting of the pyramid and weathering and poor maintenance of shuttered concrete have turned these monuments of modern architecture into irritating eyesores.



Painted pyramid and
Barricade segregating the High Court
and the Legislative Assembly
building



Interior of the Assembly showing the false ceiling



Interior of the Assembly showing acoustic clouds designed by Le Corbusier for sound absorption



Internal wooden partitions raised in the main foyer

Internal changes in the material of the flooring, addition of partition-walls, false ceilings in rooms and corridors, renovation of toilets with new materials, and the painting of concrete surfaces have been carried out. Addition of aluminium glazing and wooden panelling in the main foyer vitiates the original concept of undulatory glazing with precast concrete mullions and steel 'T'-Sections personally designed by Le Corbusier.

THE HIGH COURT

An outstanding structure, its double roof is designed like an upturned umbrella, which shades the entire edifice. The grand foyer of this imposing formation is set in between the Chief Justice's courtroom and eight other courts. **External changes with manifold increase in the number of courtrooms from the original 9 to 68 has resulted in massive** new constructions on the rear of the main building, namely, the construction of two- and four-storey Lawyers Chambers, judicial record-room, Advocate General's Block, judgement writers/stenographers' pool, addition to the extension block, have already been carried out. Construction of multi-level parking and multi-utility/Lawyers Chambers, extension of the Judges Library and committee/conference halls are being carried out which are violative of the original concept. Massive damage to the parasol roof of the main High Court building has been done due to the fixing of and thereafter removal of glazing at the terrace-level. Use of the pedestrian plaza for parking of vehicles of judges already damaged has necessitated the re-carpeting of the concrete flooring.



Internal changes: Renovations, in all courtrooms, judges lounge and conference hall for judges, in the form of false ceilings, wall-to-wall wooden dais, air-conditioning and partitions, additions and alterations in the office, conversion of cycle- and scooter-stands and garages into offices and ASD Lab into High Court Museum have been carried out in the main building.

MAIN PEDESTRIAN PROMENADE THAT CONNECTS THE HIGH COURT WITH THE LEGISLATIVE ASSEMBLY, AND WAS INTENDED TO BE A CEREMONIAL SPACE AT THE OPENING OF SESSIONS, IS BEING USED FOR VEHICULAR MOVEMENT AND PARKING, THOUGH ITS ACCESS IS DENIED TO THE PEOPLE AT LARGE.

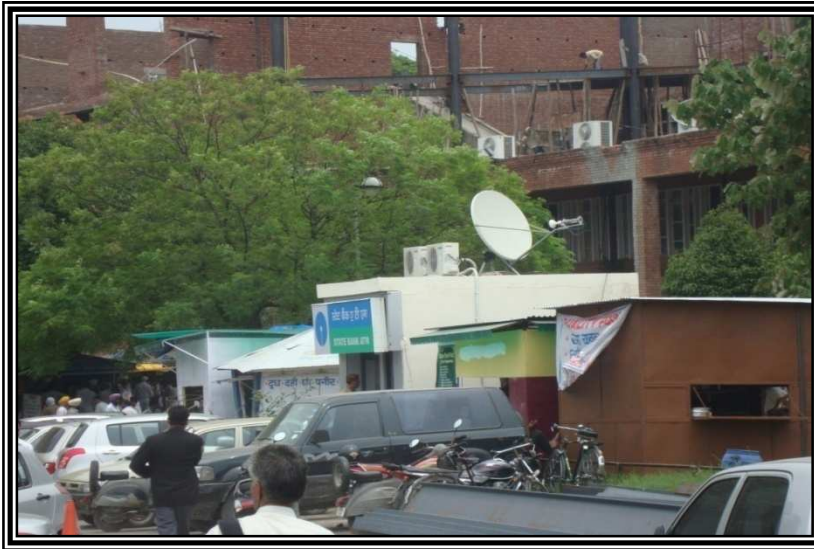


The Promenade is in utter disrepair and betrays its Heritage Affiliations.



Using the ambient space of the High Court for parking for which it was never meant turns a monument into a mundane structure.

ADDITIONS AND VIOLATIONS AT THE REAR OF THE HIGH COURT



Massive additional constructions on the rear of the main building, Lawyers' Chambers, extension of the library block, are violative of the original concept



On going construction of additional floor of the extensional block.



The picture on the left hardly tells you that you are looking at what the American architect Paul Rudolph, on his visit in 1960, designated as the greatest complex of the 20th century.



Dumping of Heritage furniture, and discarded articles on the terrace of the High Court speaks volumes for our reverence for our Heritage



AC ducting exemplifies our pitiable lack of aesthetic sense

THE OPEN HAND MONUMENT



MOBILE TOWER BEHIND THE OPEN HAND

The significance of Open Hand is that it conveys the social message of peace and unity that is "open to give and open to receive." The Open Hand is the city's official emblem. It has been designed in the form of a giant hand made from metal sheets that rotates like a weathercock, indicating the direction of wind. This giant hand is 14 metres high and weighs around 50 tonnes. Poor upkeep and misuse of the intended function, with a telecom tower in the backdrop, have marred the beauty of this work of significant art.

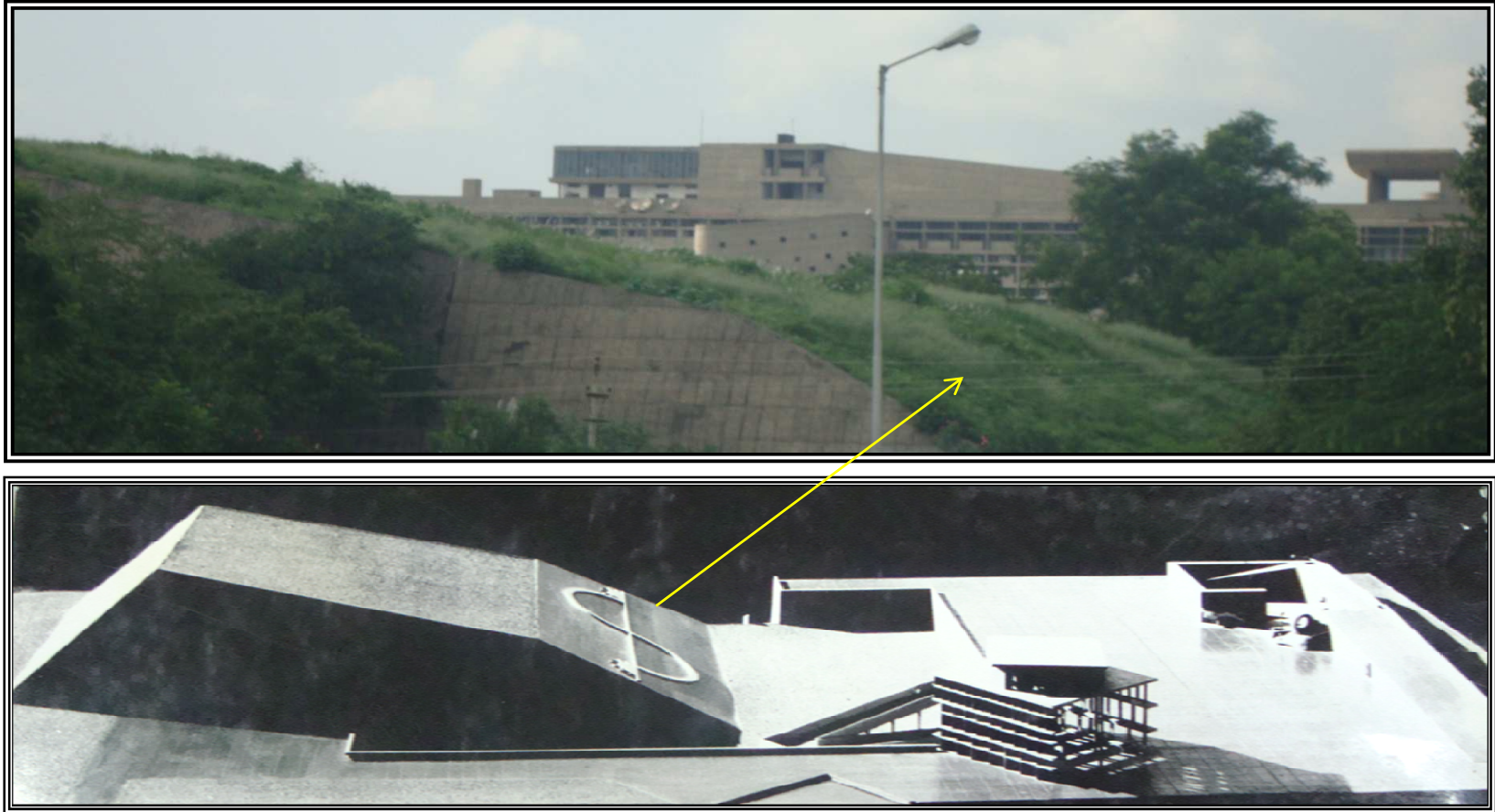
WEATHERING OF THE BRONZE OF THE OPEN HAND



URGENT REPAIR IS CALLED FOR AND RECOMMENDED

INCOMPLETE PROJECTS OF THE CAPITOL COMPLEX

Even those, which are purported to have been completed, lie in utter neglect, and evoke remorse rather than respect for Chandigarh monuments of Universal Heritage Value.



PHOTOGRAPH OF MODEL OF THE TOWER OF SHADOWS, GEOMETRIC HILL WITH SUN DIAL AND MARTYRS' MEMORIAL IN THE CAPITOL COMPLEX

MUSEUM OF KNOWLEDGE

Non-execution of an important building, the **Museum of Knowledge**, which was intended to be the focal point of the Capitol Complex, hailed worldwide by the American architect Paul Rudolph in 1960 as the greatest complex of the 20th century, makes the composition appear disjointed and out-of-scale.

This building was to come up at the place originally earmarked for the Governor's Palace by Le Corbusier who had himself proposed this building after the idea of constructing the Governor's Palace was dropped by the Government in year 1959 as unsuitable to the tenets of democracy. A number of efforts have been made at various stages to realize this building but due to one reason or other this project has not taken off.



Model of Governor's Palace



Model of Museum of Knowledge

Construction of the Museum of Knowledge is essential to achieve the desired ambience of the Capitol Complex which at present appears fragmented due to its missing focal point.

- Accordingly, it is imperative to build the Museum of Knowledge to complete the Capitol Complex design as conceived in its entity by Le Corbusier.
- While the topmost priority in the preservation of Chandigarh Heritage would be the immediate repair / upkeep and management of three Edifices of the Capitol Complex: the Legislative Assembly, the Secretariat, and the High Court, it will gain its intended importance in the long run only when the crowning building of the precincts—the Museum of Knowledge—along with its entire landscape, as conceived and designed by the master architect Le Corbusier, is completed so that it looks as one organic finished architectural whole. At present, this focal point of the Capitol Complex as indicated in the concept master plan is not there. This building was designed as an alternative to the Palace of Governor and conceived with great foresight as the Museum of Knowledge which would not only be the focal point of the Capitol Complex but also an active centre fully equipped with the state-of-the-art electronic gadgetry as a resource for decision-making as an ongoing process in the three Edifices: the Legislative Assembly, the Secretariat, and the Museum of Knowledge would be the database to provide information of all kinds drawn from records compactly kept in what he called the “Round Books” (CDs). He rightly believed that prompt access to such information would make the picture clear to High Court.
- Le Corbusier’s idea was that this the decision-makers in terms of precedents, previous decisions, rules and regulations, their amendments, and so forth. It was also meant to guide decision-making by providing statistical information on various aspects of complex situations as encountered in the daily operation of the legislature, the executive, and the judiciary, which form three pillars of our parliamentary democracy. The Museum would also enable the decision-makers to foresee the results of their deliberations with the help of electronic forecasts.
- In the light of the foregoing exposition, it need hardly be emphasized that this Museum of Knowledge is not an ordinary Museum which customarily houses historical material, or artefacts or cultural relics. In fact, a museum of this kind has not been built anywhere in the world. At the time the building was conceived it was a totally revolutionary idea. This Museum, when put in place, will not only bring out the aesthetic charm of

the masterly Capitol Complex design, which the American architect Paul Rudolph described as the greatest of the 20th century way back in 1960, but also pay homage to architect prophetic vision of Le Corbusier who, seven decades ago, could foresee the worldwide spread of electronic gadgetry which we now find rampant in the form of IT [Information Technology].

- To build this Museum to Le Corbusier's design but to house artefacts of any kind other than the stated ones would be both contradictory and waste of public money. All other kinds of museums can be built anywhere in the city—in fact, they already are there: Government Museum & Art Gallery, Fine Arts Museum at Panjab University—or, for that matter, in any other city of the country. But Museum of Knowledge that is an integral part the Capitol Complex master plan concept can be built only in the Capitol Complex.
- A caution needs to be sounded here. When the time comes to implement this project, it would be absolutely necessary to study all the documents concerning this idea so that the concept could be clearly spelled out, and the Museum of Knowledge, along with its interiors, equipments, and furniture, and furnishings built according to the intended design. Since all the material - design, drawings, etc. - are available with the Department of Urban Planning, Chandigarh Administration, which has the distinct expertise and experience to develop it in all respects, its design must not be assigned to an outside architect regardless of his eminence. This point is crucial and would overlooked only to the serious detriment of Le Corbusier's ultra-modern creative conception.

MARTYRS' MEMORIAL

The Martyr's Memorial was planned in the Capitol Complex by Le Corbusier. This was conceived when the Government of the erstwhile Punjab state decided to erect a Memorial to honour the memory of those who had laid down their lives in the struggle of freedom of the country culminating in Independence in 1947. The Memorial comprises three components:

- Architectural with mythological symbols
- Sculptures like Lion, Snake, and Man
- Debris



Existing Structure

The architectural components of the Memorial and the symbols have already been constructed as also the sculptures of lion, snake, and man have been cast in bronze. A major component of the memorial comprising debris depicting the fall of the Foreign Rule in India and the resurgence of India as a free Nation is still to be executed.

SCULPTURES FOR THE MARTYRS' MEMORIAL LIE FABRICATED SINCE LONG BUT ARE YET TO BE INSTALLED



The Debris symbolises the Fallen British Rule



The Snake Sculpture



The Lion Sculpture



One of the many Martyrs

POTENTIAL PRESSURES

- * In the High Court Building, lack of space has resulted in overcrowding and reduction of the open areas. There is already a demand for the construction of multi-storey additional administrative block and it is envisaged that due to the manifold increase in the number of courtrooms from the original 9 to 68, the demand for additional usable built space for the ever-increasing needs may further result in additional buildings which will mar the overall concept.
- In case of Secretariat and Assembly, space constraint due to additional demand of space and users tends to reflect in the form of violations affecting the internal and external environment.

PERIPHERY AREAS AROUND THE CAPITOL COMPLEX

- There is a potential danger that the backdrop of the Capitol Complex will soon have multi-storeyed and high-rise buildings since there is now no height restriction on the constructions in the neighbouring state. It is proposed that the issue needs to be urgently taken up with the state of Punjab otherwise the entire concept of the plan will be jeopardised.
- Security of the Capitol Complex, including the official residences of the Chief Ministers of Punjab and Haryana states, is being looked after by CISF, Punjab Armed Police, and Haryana Police. The three agencies together are occupying around 30 acres of space and the structures, permanent and semi-permanent, put up thereon present a picture of a cantonment. This vitiates the visual appeal of this world-famous creation recognised to be greatest of the 20th Century. In order to restore the Capitol Complex to its pristine glory, it is recommended that the security arrangement be rationalised and appropriate land developed for accommodating them on the Capitol Complex in such a way that they do not create any visual blight.

PROPOSALS

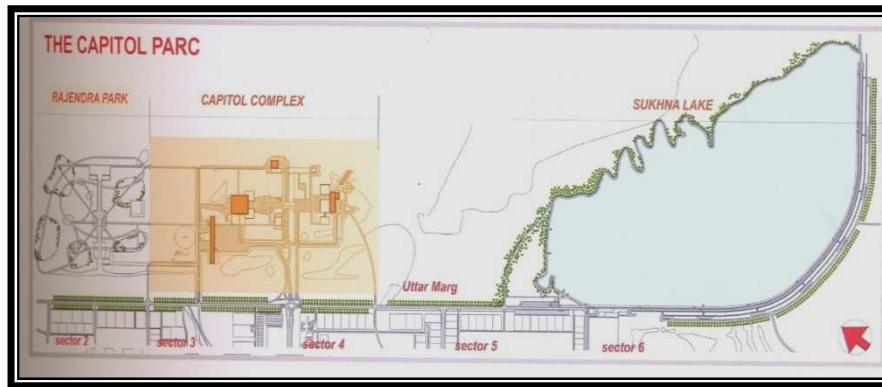
IMMEDIATE

- The violations such as balcony covering, provision of grills should be put an end to with required executive firmness.
- Cleaning and restoration of concrete surfaces with the latest techniques should be carried out every three years or so.
- Coordinated approach for security of the complex as a whole needs to be worked out with the latest techniques being used world over in such high security zones.
- Proper Landscaping in consonance with the original concept should be undertaken.
- No additional buildings, which are not in the original plan, should be sanctioned to be built under any circumstances.
- Proper upkeep, maintenance, and management should be assigned to a central authority.

LONG-TERM ACTION PLAN

- Completion of Museum of Knowledge, Martyrs Memorial, and Geometric Hill should be ensured.
- Revitalisation of plaza area should be done by inviting ideas from students of architecture and art.
- Campus lighting to highlight building edifices during the night should be made an integral part of environmental planning and design.

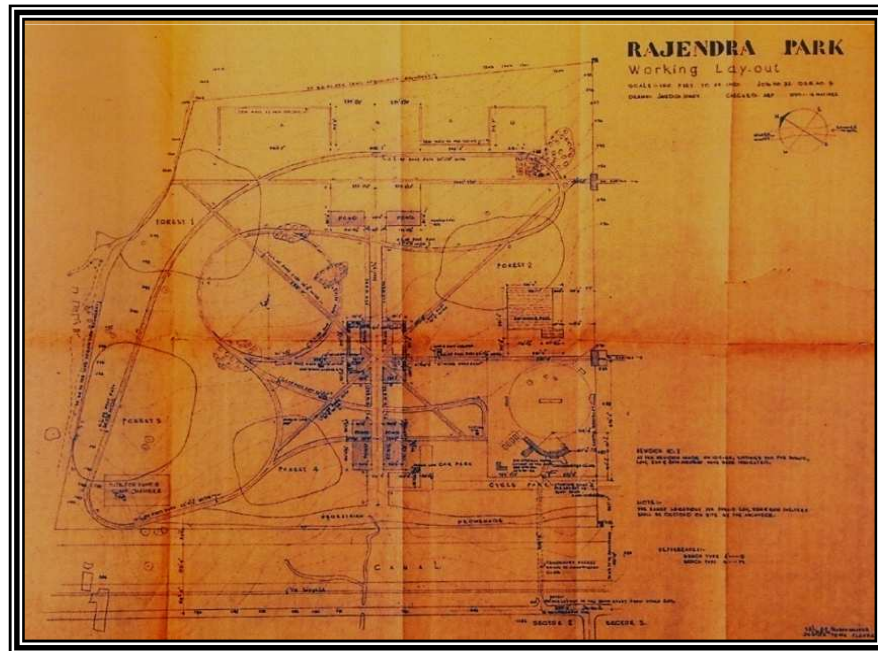
RAJENDRA PARK



Plan of the Capital Parc



Due to incomplete implementation at present the Park is being used as a Helipad



Plan of the Rajendra Park

Rajendra Park: Spread over a sprawling area of 400 acres, Rajendra Park lies adjacent to the Secretariat building. The landscape of this park is designed by Le Corbusier himself. Trees with round canopies and evergreen foliage have been planted here. The park is at present being used as a helipad. This fabulous park is named after the first President of India who had come here to announce the dawn of Chandigarh city. A woody place with lots of lofty trees like *margosa*, *amla*, and *Bauhinia purpurea*, the park also houses attractive mangrove plantations. **The original landscaping proposal should be completed and security barracks removed.**

SUKHNA LAKE

Sukhna Lake was a gift to Chandigarh citizens for peace and tranquillity, and the area was declared as a 'Silence Zone'. The ambience of the promenade, original design of the entrance gate, the bandstand, watch-tower, commemorative cube, security-posts, promenade footlights, and landscaping should be retained and any further development strictly restrained.



Entry to the Lake from Uttar Marg



Pedestrian promenade along the Lake



View of the Lake and its natural backdrop

LAKE CLUB

- **Lake Club** was designed by Le Corbusier, and its site was consciously depressed with respect to the road-level so as not to obstruct the view of the Shivalik Hills.
- Additional constructions in and around the complex should be restrained.
- Water-tanks and air-conditioning ducts on the exterior of the building are eyesores. Something should be done again to get rid of this ugliness.



MEMORY PARK

Revival of this Project would add to the revitalisation of the Capitol Complex surroundings.



In order to safeguard Le Corbusier's concept of green parkland on the north of the Uttar Marg, the area between the High Court and the Sukhna Lake, the Memory Park was created. It was felt that institutionalising the area was necessary to keep it green and free from encroachments. The area, however, needs to be properly maintained and citizens be made aware of its presence.

ROCK GARDEN

Rock Garden, by its organic forms and non-geometric layout, offers an apt counterpoint to Chandigarh's stylised architecture. Even though it is a product of the creative climate generated by the city itself, the Rock Garden has added a noteworthy aspect to Chandigarh's world-renowned stature. However, the garden's striking innovativeness, which lay in its first phases until mid-1980s and was its creator's ingenuity in using paltry resources artistically, is no longer perceptible in its expansion which has been more and more repetitive using substantial government funds. It is thus absolutely necessary to freeze its growth at the existing stage to be conserved as a significant work of what has been called "Outsider Art".



Le Corbusier in his concept had indicated that that no major structure other than the Capitol Complex would be constructed on the North of Uttar Marg. However, the Rock Garden came up clandestinely, and was initially considered a gross violation. But by virtue of its creative excellence the garden has been accepted and earned worldwide recognition.

CITY CENTRE SECTOR- 17



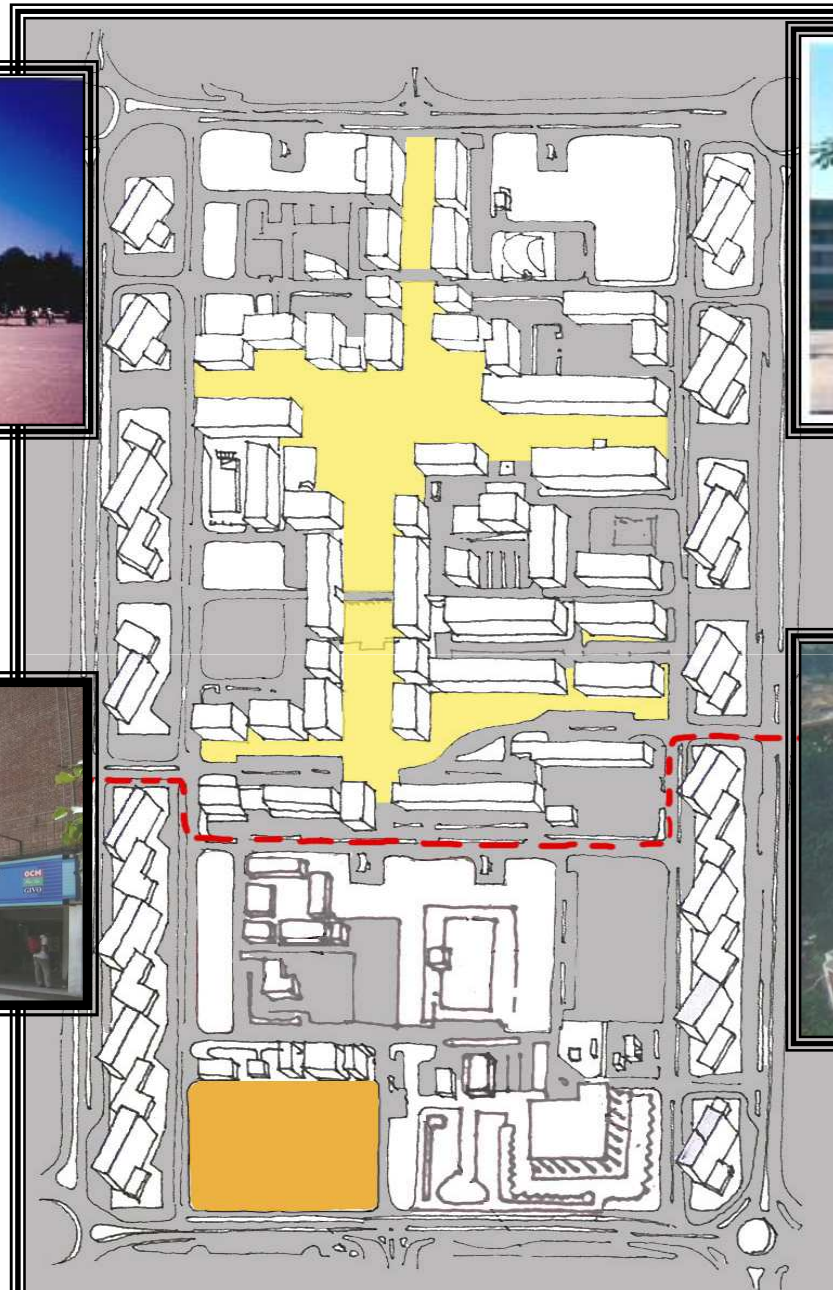
The four-storey blocks in exposed concrete



The Jagat Cinema under built Schematic Design Control



The V4 Shopping with brick façade adds a note of warmth to the ubiquitous concrete structures



The composite seven-storey buildings on the City Centre's periphery

REVITALISATION OF THE PIAZZA



Re-carpeting and provision of benches and planters



Renovation and maintenance of the Bird- Fountain
at the Neelam Piazza

PROBLEMS OF THE CITY CENTRE

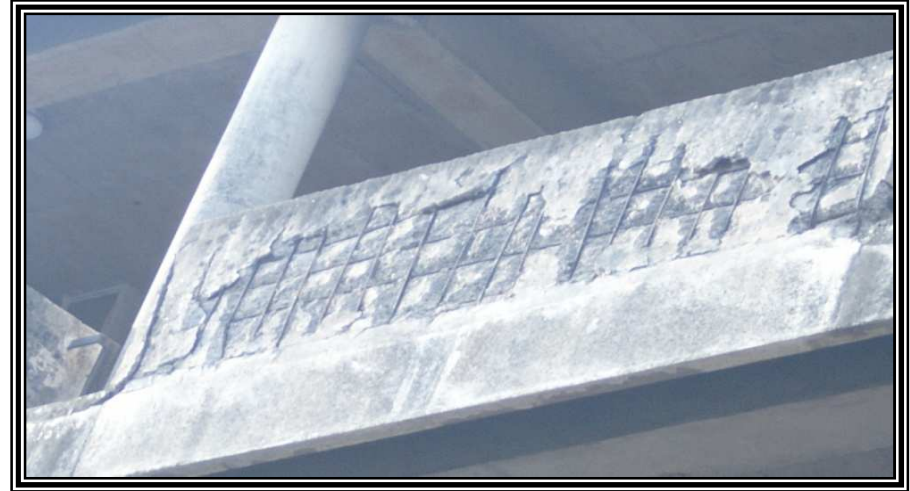


- Laxity in enforcement such as covering of verandahs with glazing
- Violations of building finishes like paint, alum. Composite panels
- Problems of completion
- Concrete de-generation
- Uncontrolled sky line by adding rooms/ services on terrace
- Encroachments of backyard specially on V4 SCOs
- Over spilling of advertisements



PAINTING OF COLUMNS/CLADDING WITH ALUMINUM SHEETS/SOLAR PANELS OUTSIDE THE FRAME...IT'S A FREE FOR ALL KIND OF THRILL AT VIOLATIONS

WEATHERING OF EXPOSED CONCRETE



...EVOKES PITY AT THE WAY WE CARE FOR OUR HERITAGE BUILDINGS AND THE BUILT-ENVIRONMENT



AC DUCTS HANGING OUTSIDE SHOWROOMS



IF THIS *LAISSEZ-FAIRE* GOES UNCHECKED, LIKE IT HAS HITHERTOFORE, CHANDIGARH WOULD SOON BECOME THE WEIRD ENVY OF OTHER MISSHAPEN TOWNS IN THE NEIGHBOURING STATES...



The problems need to be addressed by taking the stakeholders, shopkeepers, etc. on board for which preliminary spadework has already been initiated.

GOVERNMENT PRESS, SECTOR 18

Designed by Maxwell Fry as a “glass-wall” structure, the Government Press building is the only one of its kind in the city and among the first to be built here.

Large portion of the building has been rendered useless due to the change in technology and there is constant pressure to reallocate it to other uses. Already some rooms have been allotted to different offices. There is also a proposal of housing the drug de-addiction centre in this building as a temporary measure.



It should be conserved for its unique architecture and, under no circumstances, any deviations from the original concept should be permitted. However, when repairs become necessary due to ageing, the building should be restored to its original design by re-building the affected portion(s).

CARE OF BODY AND SPIRIT



KIRAN CINEMA - FIRST MOVIE-THEATRE OF THE CITY



Designed by Maxwell Fry along V4 sector 22

The design of the Cinema Hall is so imaginative that even after nearly 60 years of its inception, it still looks modern.

THIS BUILDING SHOULD BE CONSERVED IN ITS EXISTING FORM AND ITS USE RESTRICTED TO THAT OF A CINEMA HOUSE.

FIRST SWIMMING POOL AND *JANG GHAR* OF THE CITY



Jang Ghar Sector 23



Swimming Pool, Sector 23

GOVERNMENT MUSEUM & ART GALLERY – HERITAGE PRECINCT



Designed by Le Corbusier, **Government Museum & Art Gallery** is a magnificent building that forms a prominent landmark on Jan Marg—the major vertical arterial road of the city. Using brick tiles and concrete gutter, which is visible from outside, a very impressive façade has been created. Concrete surfaces and brick façade need restoration. Insensitive additions such as aluminium glazing, and flooring have been made in the interiors which need to be rectified. No additional building is advisable in this complex.



THE MAIN MUSEUM

CONCERNS

Insensitive painting of the brick facade and poor maintenance of the piazza . There is a persistent demand for proper landscaping of the complex

The main Museum's internal exhibition spaces are not being used as planned



Auditorium block needs renovation of the interior, its air-conditioning, lighting, additional exit, increasing the width of the stage, change of the upholstery and maintenance of the building.

ARCHITECTURE FOR EDUCATION

- **Architecture for Education** in the Chandigarh Experiment has thrown up some very fascinating examples, which include schools, colleges, professional and technical institutions to be found in different parts of the city. Education requires a very different atmosphere conducive to healthy learning, although the construction materials and elements of Building Design remain nearly the same. In the case of Architecture for Education in Chandigarh, we notice that campus space concept as a whole vis-à-vis the built-form is very innovative in that varied spaces have been created to generate interaction from large-scale to intimate dialogue so that formal and non-formal education may go on side by side—smoothly and fruitfully.
- Varied use of scale, which has been made in each of the educational institutions, imparts a distinct personal identity to each one of them. It need hardly be stressed that these buildings of the early times of the Chandigarh Experiment demonstrate conscious effort on the part of the architects to address fundamental criteria of Building Design like climate, social custom, and economy. Use of arches and precast battens was extensively made to achieve low-cost Architecture for Education which would yet be aesthetically-satisfying.



Government School, Sector 16



Government School, Sector 18



Government School, Sector 10

Most educational buildings of the city have north-south orientation, and been placed in the near vicinity of the green belts. This attempt to extend the campus space to the expanse of the green belts symbolises that learning in spacious surroundings leads to the expansion of human mind. Sensitive and persistent use of different materials like exposed brick-work, plastered, white-washed surfaces, stone, and concrete has created a new architectural aesthetic. What is most amazing in these buildings is that though built 60 years ago they were consciously designed to create an environment adapted to the special needs of the differently-endowed persons. Not only have some of these buildings been the prototype for developing Architecture for Education in the city but also become landmarks of Building Design for this category in any part of the country. The buildings listed on the basis of these criteria should be conserved in their original form as far as possible, and no deviation be permitted from the original concept unless the situation becomes inevitable. In such a case, the proposal for additions and alterations to the existing building should be got approved by the Heritage Committee.

Original School Buildings in Sectors 10, 11, 15, 16, 18, 19, 21, and 22 as well as Nursery Schools in Sectors 7, 16, 22, and 23 should be preserved, and their further expansion regulated by the Chandigarh Heritage Conservation Committee.

GOVERNMENT COLLEGES FOR BOYS AND GIRLS, SECTOR 11

Government Colleges for Boys and Girls, Sector 11, were among the first educational buildings in the city to be designed by Maxwell Fry. The architect put his long experience of designing architecture for tropical climate to good use in the conception of these buildings. He made an extensive use of courtyards and verandahs and *jaalis*, which are typical elements of tropical architecture, to adapt it to the severe climatic conditions of the region. These buildings are examples of successful Architecture for Education suited to our culture and climate and, therefore, should be conserved in their original form.



Government Colleges for Boys , Sector 11



Government Colleges for Girls, Sector 11

CHANDIGARH COLLEGE OF ARCHITECTURE AND GOVERNMENT COLLEGE OF ART



Chandigarh College of Architecture, Sector 12

Le Corbusier developed this idea for what he called an Audio-Visual Institute. The uniqueness of the building-space concept lies in the fact that work-areas and circulation arteries are built into the same basic cell, which is then multiplied several times over around a central courtyard to form the total building.

The ingenious cell makes the learning process participatory as no space is compartmentalised. The work-areas have north-light illumination and the circulation arteries are lit from the roof.



Government College of Art, Sector 10

Another salient feature of these buildings is that Art [in the form of bas-reliefs and murals] has been facilely integrated into Architecture as a reminiscence of what we in India had been doing for many centuries.

The Indian approach to Building Design was consistently holistic. These buildings reflect creative continuity with our glorious past.

BUILDINGS OF THE PANJAB UNIVERSITY

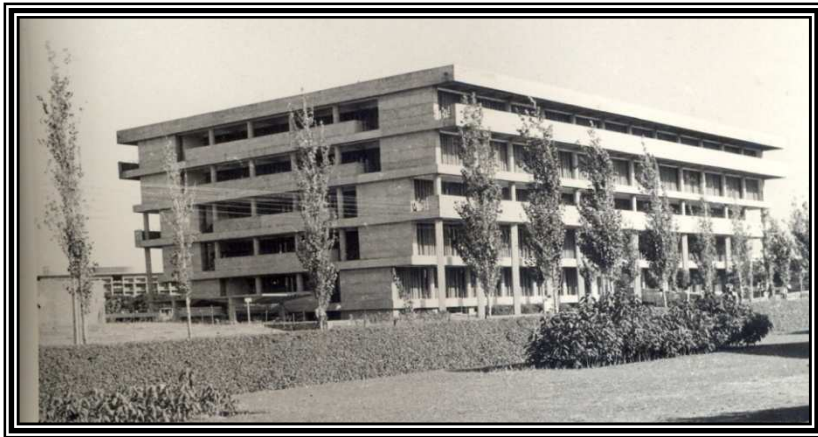
PANJAB UNIVERSITY is a very well planned and prestigious campus. Each building has been designed in harmony with all other buildings of the campus creating an atmosphere of aesthetic charm and contemplative calm. Use of red sandstone and concrete makes its Architecture stand out.

The Administrative Block, Typical Arts Block, Gandhi Bhawan, Science Block, Boys Hostel, Library, and Fine Arts Museum should be given Heritage status. For future planning of the campus a master plan should be worked out with the approval of Heritage Committee.

Gandhi Bhawan, designed by Pierre Jeanneret, is the chief building that gives the Panjab University campus its easily-remembered identity. Its distinct form, usage of white terrazzo finish, in the midst of buildings clad in red sandstone, is reminiscent of Salim Chisti tomb in the mosque complex at Fatehpur Sikri. Its placement in a reflecting pool makes an apt allusion to the lotus-metaphor recurrently encountered in the sacred literature of India, underscoring the fact that the seekers of truth [which made Mahatma Gandhi, after whom it is named, proclaim that "Truth is God"] must lead a life of purity like the lotus that remains uncontaminated despite having sprung from muddy waters, is a masterpiece. This building is in utter state of neglect, its interior and external form should be restored to its pristine glory.



Administrative Block is a major landmark due to its massive scale and centralised administrative function. Concrete facades with projected floors at different levels make it stand out. This building also needs restoration in terms removal of violations in balconies and cleaning up of shuttered concrete.



Administrative Block, Panjab University



Front Elevation of the Administrative Block

AC Joshi Library is a landmark architectural design in which Pierre Jeanneret with exceptional sensitivity worked out each façade to meet the stringent requirements of orientation, lighting, and ventilation to respond to the imperatives of monumental architecture that makes library a Temple of Learning. The Reading Hall is a magnificent space in terms of its scale, lighting, and placement supported by deliberately-subdued spaces for the book-stacks. The beauty of this structure is that the elements of Space, Structure, and Form meld into a single concept of grace and grandeur, synchronising effortlessly Form with Function!



AC Joshi Library, Panjab University

FINE ARTS MUSEUM

This building has a quiet nobility about it. Its modest exterior gives no clue to its magnificent interior whose grandeur is the result of flood-like day-lighting rather than exaggerated scale. This was made possible by the mushroom-column structure that keeps the roof clear of the enclosing walls to admit ample light throughout the day. It is an exhilarating experience to view works of art on display here. The Museum was conceived by the first Tagore Professor of Fine Art Dr Mulk Raj Anand as an extension and augmentation of classroom studies by regularly exposing the students to the diverse artefacts created by India's modern artists. The Museum has a very fine collection of Contemporary Art.



Fine Arts Museum, Panjab University

ARCHITECTURE FOR WORSHIP: Religion is an inseparable part of the Indian psyche. The glory of our entire past is largely a product of our reverence for gods and goddesses. It is not without reason that a modern psychologist like Carl Jung highlighted the indispensability of religious belief in human life. He went to the extent of suggesting that since religion is the most formidable living force in human society we must find appropriate means of exploiting it as a means of building of a healthy future. In terms of Architecture, the special building-types, which figured early in the Chandigarh Experiment, were places of worship. These buildings were thus among the earliest to be built in different sectors and for different communities.

Church in Sector 18, Gurdwara in Sector 22, Mandir in Sector 23, and Mosque in Sector 20 are unique in terms of their historical importance and design concept, besides the fact that they represent different religious groups which constitute the bulk of Chandigarh population: Christians, Sikhs, Hindus, and Muslims. By virtue of their location and distinct architectural forms they have become important landmarks of the city. Conserving these buildings would be to respect the sentiments of the entire citizenry. These buildings should, therefore, be put in the category of Heritage and no additions/alterations be permitted in them without the approval of the Heritage Committee.



Church in Sector 18



Gurudwara in Sector 22

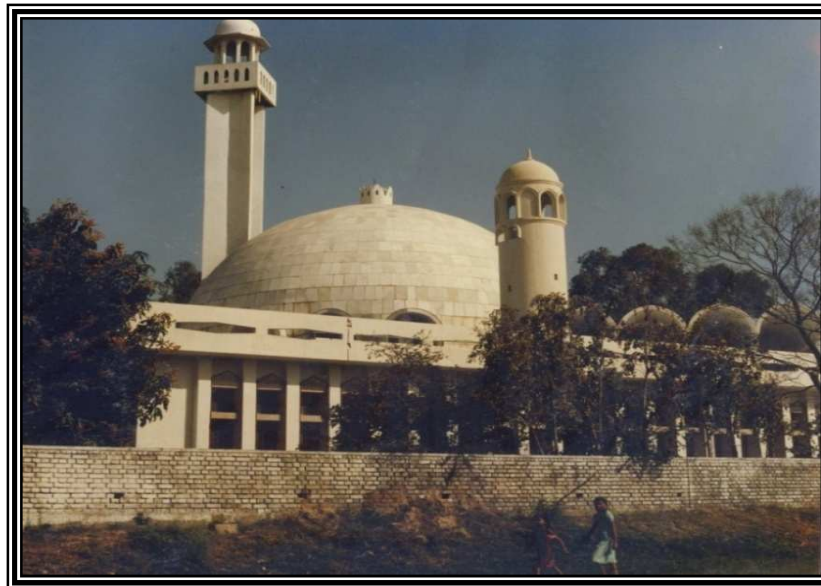
ARCHITECTURE FOR WORSHIP`



Original design of Mandir in Sector 23



Additions and Alterations made by the Management without the approval of the Chief Architect



Mosque in Sector 20

LANDSCAPING



THE LEISURE VALLEY

Landscaping: Landscape Design has been made an integral part of the basic concept of the city, forming as it does an important part of Le Corbusier's planning postulates: Sun, Space, and Verdure.



These three principles cover the broad areas which form the concept of the city: Architecture, Planning and Greenery. Landscape is a noteworthy feature of the city in that it is one of the most carefully-planted modern towns. It is the landscape of the city that gives it its unique identity which one can experience in its healthy air and expansive spaciousness.



Open Spaces, in terms of the original concept of the **Green City**, are the Soul of Chandigarh, and must never be stifled by thoughtless additions of buildings in the future. The three planning postulates of Sun, Space, and Verdure should always remain our directive principle. Verdure or Greenery is where Space is, and Space comes alive only when it is bathed in Sun!

MANAGEMENT PLAN FOR REGULAR UPKEEP OF THE LEISURE VALLEY, CITY GREENS AND PARKS IS ABSOLUTELY NECESSARY.



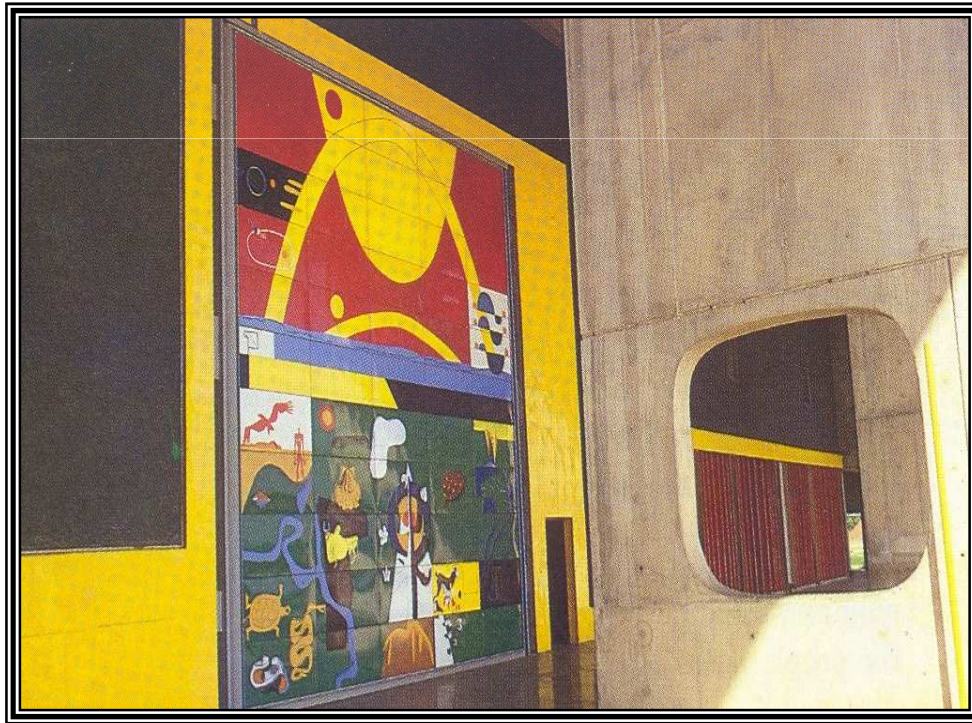
Poor maintenance of Infrastructure is the bane of Chandigarh as Heritage City!



ART



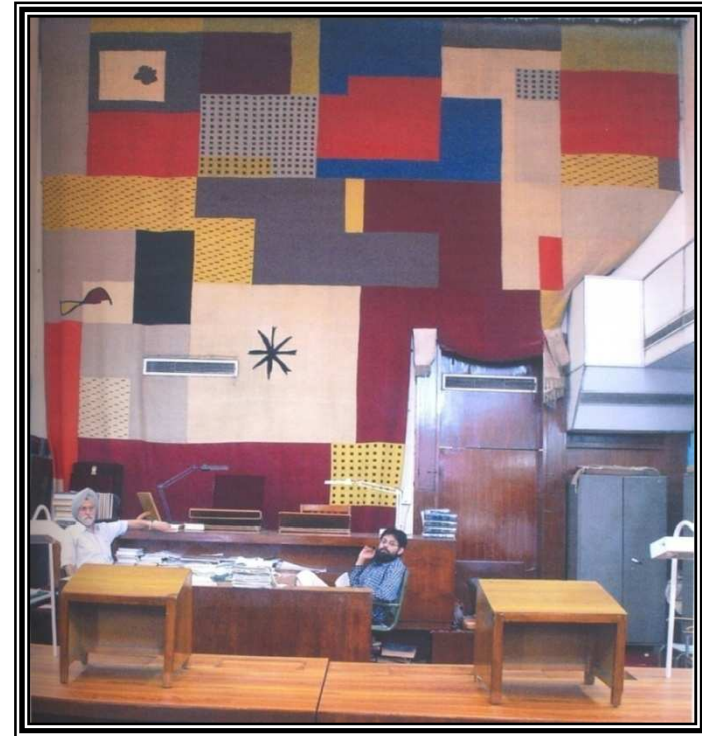
Chandigarh has the distinction of having created many works of Art integral to the conception of architectural design for a variety of buildings. There are also very significant examples in which art-works are deliberately created as independent, free-standing creations. The uniqueness of this experiment lies in the fact that very low-cost and humble building materials have been put to an artistic use by virtue of which they have been elevated to a new aesthetic cult. Notwithstanding its highly farsighted modernism, Chandigarh has produced an Art Heritage which has invisible links with India's magnificent art tradition. All buildings which were built in the country before the introduction of structural arch were largely works of art in that they were icons of artistic ingenuity rather than engineering marvels.



Legislative Assembly Enamelled Door

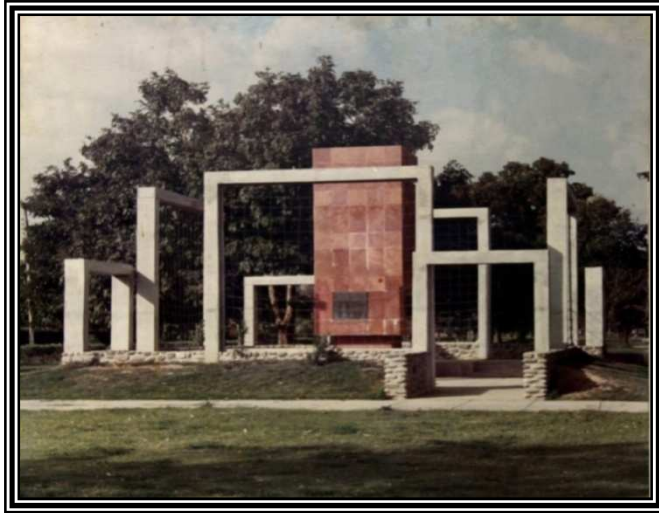
The enamelled door, which measures 25'x25' for the Legislative Assembly building, was personally designed and produced by Le Corbusier and was gifted by the French government to Chandigarh. This is one of the largest and most outstanding works of Chandigarh Art. It features motifs which find recurrent use in Le Corbusier's urban planning and architectural philosophy and also alludes to the symbiotic relation of humans with other forms of life like birds, reptiles and animals.

TAPESTRIES



The design of tapestries was necessitated for providing acoustic treatment to the interiors of the court-rooms. Le Corbusier spent a lot of time working out appropriate designs, largely geometric, incorporating his famous motifs to create an art that would have the aesthetic charm apart from being an effective material for acoustical purposes. These tapestries, which run into several hundred metres, constitute a highly valuable Chandigarh Heritage in the category of Art. Not only is there a need for sensitising and educating people about its historic import but also the imperative of ensuring that no damage of any kind whatsoever is done to these works. Some tapestries have already been damaged beyond repair by fixing air-conditioners in the court-rooms.

COMMEMORATIVE TOWER, SECTOR 9



PLAQUES



Plaques: Plaques, which can be found in different parts of the city, mark historic events in its development such as inauguration by such luminaries of modern India as Pandit Jawahar Lal Nehru, Dr Rajendra Prasad, and others. These should be preserved in their original form and kept in good repair such as reflects our reverence for things of heritage value.

The **Commemorative Tower** marks the place in Sector 9 where a tall wooden structure was temporarily erected for Pandit Jawaharlal Nehru to view the city-site. This spot is thus prenatal to the birth of Chandigarh which was soon to put India on the world-map of modern architecture and town planning, so much so that it would be the Mecca for all genres of creative persons to come to on their professional pilgrimage.

COMMEMORATIVE CUBES AND BAS-RELIEFS



These works of Chandigarh Art, Commemorative Cubes and Bas-Reliefs, are similar to the Plaques with the essential difference that these are three-dimensional objects as well as sculptural. Their preservation and maintenance is all the more important, because, if neglected, they easily become eyesores. Sector 9 foundation stone, inauguration Plaques, etc. are examples.



Bas- Reliefs (cast in shuttered concrete): Le Corbusier studiously observed the rich variety of motifs which have been extant in the tradition of India. As his tribute to the Indian artistic genius he re-did these motifs into his own artistic expressions and made them an integral part of the buildings in the form of bas-reliefs cast in shuttered concrete of buildings designed by him, such as Chandigarh College of Architecture. These bas-reliefs are a unique contribution to Art in Chandigarh Architecture and should be preserved without any additions and alterations, including painting them.

MURALS AND MANHOLE COVER



Murals: Pierre Jeanneret displayed his artistic genius in creating wonderful murals in simple materials like exposed brickwork. These murals adorn the blank end-walls of certain buildings in the city. Among these are MLA Hostel, besides murals in schools based on the theme of subjects of study such as the famous Pythagorean Theorem.



Manhole Cover: Chandigarh Master Plan made part of the manhole cover in cast iron is a unique work of Chandigarh Art in the whole world. This must be preserved.

FURNITURE

Pierre Jeanneret designed many varied pieces of furniture like tables, chairs, tools, which are an integral part of Chandigarh Heritage because furniture and buildings go together. There are still a large number of pieces of furniture available in different government buildings which, for want of knowledge of their Heritage value, are stored as junk and, if left to the whims of the users of the buildings, these are sure to be disposed off as junk like it was done before. Immediate steps should be taken to prevent Heritage furniture from being neglected and disposed off as junk material.

Pierre Jeanneret also designed lampshades and centre tables with cheap materials such as bamboo and cut-up wood logs. Reclining chairs made of wicker work were also designed by him.



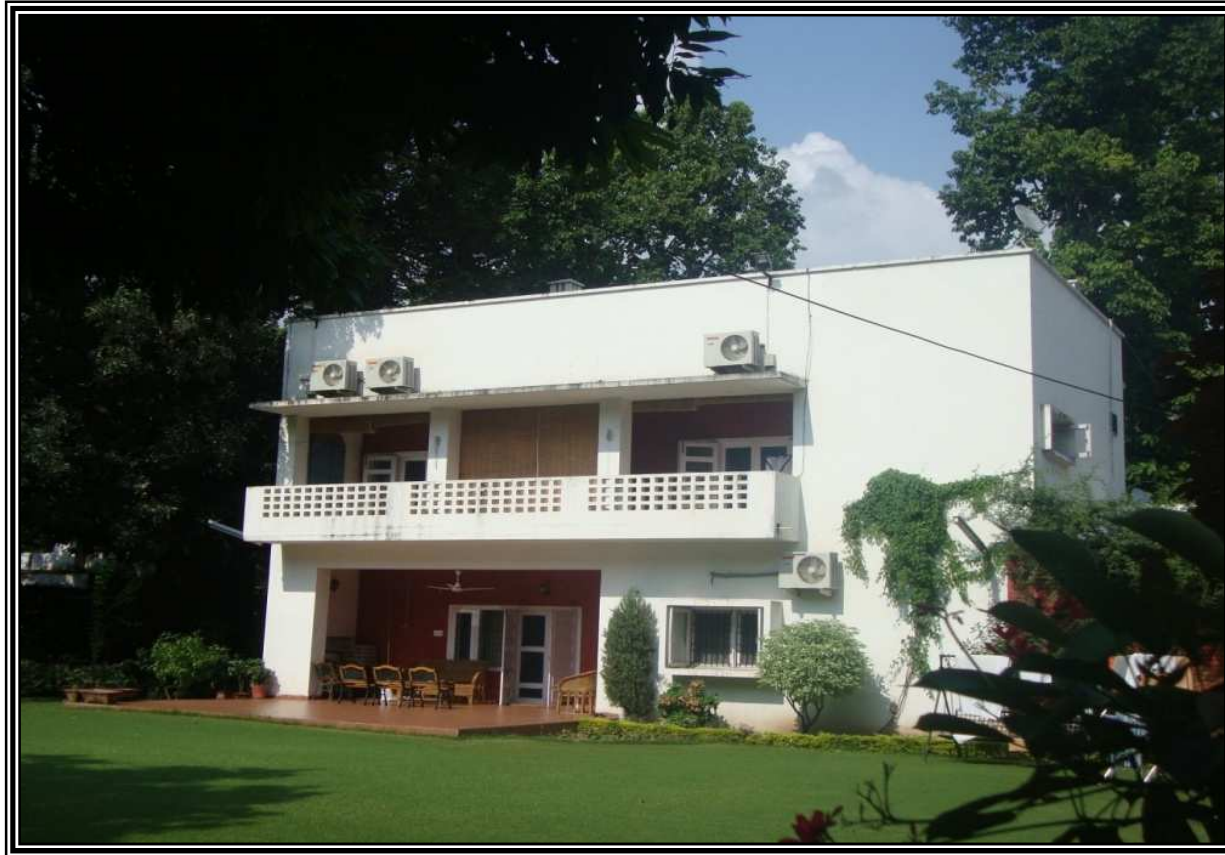
Other Art Objects are Rainwater Spouts, *Brise-soleil*, Porch Design, Filigree Work in *jaalis* of Residential Architecture, Composition of windows and *chhajjas* creating mural effect of the built-mass, treatment of water-bodies, and Undulatory glazings which impart an active visual rhythm to the many and varied architectural forms.

BUTTERFLY PARK



Butterfly Park in Sector 26 is one of the most beautiful Landmarks of the City Beautiful - a befitting example of biodiversity from which students and teachers alike Could learn highly stimulating lessons to cultivate love for Mother Nature. It should be conserved in its original form and maintained with care warranted by a Heritage site.

GOVERNMENT HOUSE TO BE DEDICATED TO THE MEMORY OF **PIERRE JEANNERET**



House No. 56, Sector 4

Report of
Sub-Committee-II

Dr BN Goswami,
Ms Chand Nehru
Sumit Kaur ,Chief Architect, UT

PRIVATE BUILDINGS



HERITAGE STATUS TO PRIVATE RESIDENCES

Four private residences have been designed by the first team of Chandigarh architects . All these four residences are spacious bungalows and have been designed by Pierre Jeanneret.

The list includes:

- House No. 33 - Nirlep Kaur House, **Sector 4**
- House No. 22 - Oberoi House, **Sector 5**
- House No. 28 - PL Varma House, **Sector 5**
- House No, 32 - Gautam Sehgal House, **Sector 5**

Located on Uttar Marg, in the northern most part of the city, they enjoy the advantage of the picturesque view of the Shivalik Hills beyond. Capturing this natural scenic beauty, achieving functional efficiency suited to the owners' requirements and being climate-responsiveness have been the governing design criteria. While the exterior of the houses harmonises with the other Government residences of the city in the use of exposed brick, random rubble, and plastered surfaces, the interiors have richer specifications and detailing .

These houses are exemplary in the articulation of the indoor and outdoor spaces and thus merit Heritage status. However, the consent of the owners would need to be taken. This could possibly be achieved through sensitizing the owners to the desirability of conserving Chandigarh Heritage as also by making available to them appropriate funds if certain norms for maintenance required to be met.

HERITAGE STATUS TO PRIVATE HOUSES/BUILDINGS DESIGNED BY THE FIRST TEAM OF ARCHITECTS



RESIDENCE OF PL VARMA, SECTOR 5



RESIDENCE OF GAUTAM SEHGAL, SECTOR 5

RESIDENCE OF NIRLEP KAUR



Front view –the covering of the front verandah has effected the original elevation of the house .



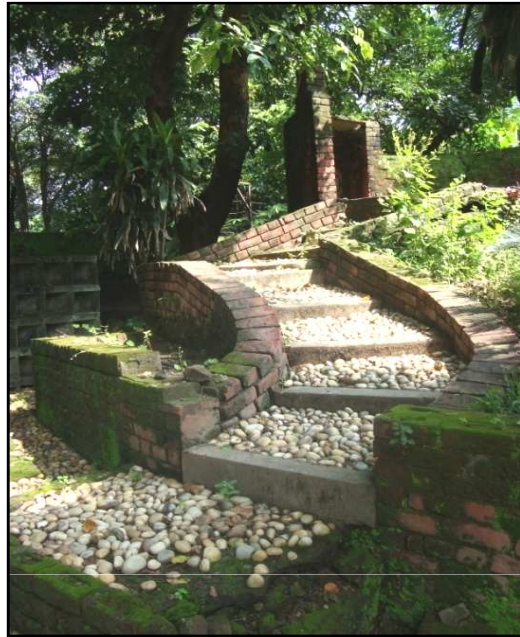
Detail of the staircase



The richly detailed doubled height living room forms the focus of the house



View of the lawn and the swimming pool



Steps in the rear lawn leading to a deck



Detail of the screen at first floor



Detail of the fireplace and wall of living room



Detail of the living room



Detail of cabinet and door cum glazing



Detail of light fixture in the living room



Detail of light shelf



MANI MAJRA FORT



CHANDIGARH'S ENLISTED HERITAGE



HERITAGE ZONES, HERITAGE PRECINCTS AND HERITAGE BUILDINGS

Buildings, Campuses, and Natural Features, which have been shortlisted for Heritage Status are categorized as Heritage Buildings, Heritage Precincts, and Heritage Zones on the definitions given below.

“Heritage Zone” means an area consisting of two or more “Heritage Precincts” (which may or may not include “Heritage Buildings”) of urban design, and/or areas of natural/environmental significance or scenic beauty, including hills, hillocks, sacred groves, water-bodies, seasonal rivulets (and areas around them), open and/or wooded areas.

“Heritage Precinct” means an area comprising Heritage Building/s or related places, which may be areas around a Heritage Building or areas with strong urban and architectural character that share, wholly or partly, certain common physical, social, architectural, cultural, technological significance .

“Heritage Building” means any building of one or more premises, or any part thereof, possessing architectural, aesthetic, historic or cultural values, which requires protection and conservation for historical, architectural, cultural, environmental or ecological purposes, and includes such portion of the land adjoining such building or any part thereof as may be required for fencing or covering or otherwise conserving such building.

GRADING OF HERITAGE ZONES, HERITAGE PRECINCTS, AND HERITAGE BUILDINGS

Grade-I	Grade-II	Grade-III
(A) Definition Heritage Grade-I comprises buildings and precincts of national or historic importance, embodying excellence in architectural style, design, technology and material usage and/or aesthetics; they may be associated with a great historic event, personality, movement or institution. They have been and are the prime landmarks of the region. All natural sites shall fall within Grade-I.	Heritage Grade-II comprises buildings and precincts of regional or local importance possessing special architectural or aesthetic merit, or cultural or historical significance though of a lower scale than Heritage Grade-I. They are local landmarks, which contribute to the image and identity of the region. They may be the work of master craftsmen or may be models of proportion and ornamentation or designed to suit a particular climate.	Heritage Grade-III comprises building and precincts of importance for townscape; that evoke architectural, aesthetic, or sociological interest through not as much as in Heritage Grade-II. These contribute to determine the character of the locality and can be representative of lifestyle of a particular community or region and may also be distinguished by setting, or special character of the façade and uniformity of height, width and scale.
(B) Objective: Heritage Grade-I richly deserves careful preservation.	Heritage Grade-II deserves intelligent conservation.	Heritage Grade-III deserves intelligent conservation (though on a lesser scale than Grade-II and special protection to unique features and attributes).

(C) Scope for Changes: No interventions be permitted either on exterior or interior of the heritage building or natural features unless it is necessary in the interest of strengthening and prolonging the life of the buildings/or precincts or any part or features thereof. For this purpose, absolutely essential and minimum changes would be allowed and they must be in conformity with the original.	No external change is to be permitted, however, only limited internal change is permitted which does not affect the exterior of the building.	Internal changes may by large be allowed. Changes can include extensions and additional buildings in the same plot or compound. However, any changes should be such that they are in harmony with and should be such that they do not detract from the existing heritage building/precinct.
(D) Vistas / Surrounding Development: All development in areas surrounding Heritage Grade-I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-I.	All development in areas surrounding Heritage Grade-II shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-II.	All development in areas surrounding Heritage Grade-III shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-III.

CHANDIGARH'S ENLISTED HERITAGE --- HERITAGE ZONES, HERITAGE PRECINCTS, AND HERITAGE BUILDINGS

HERITAGE ZONE	HERITAGE PRECINCT	HERITAGE BUILDING	GRADING
Heritage Zone-I extends from outer boundaries on the North-West side of Rajendra Park covering all areas along it and extending to the South-East extremities under the administrative control of the Chandigarh Administration. This area is bound on its South-West extremities by Uttar Marg including the green belt which runs along it on lower end. Similarly, extremities of this "Heritage Zone" on the North-East will extend to lower range of the Shivalik Hills covering all natural environmental features and landmarks, notably, the Catchment Area of the Sukhna Lake, Wildlife Sanctuary, etc.	The Rajendra Park The Capitol Complex The Lake Club The Sukhna Lake The Lake Promenade	The Secretariat The High Court The Legislative Assembly The Open Hand Martyrs Memorial Museum of Knowledge Geometrical Hill Tower of Shadows	I I I I I I I I

Heritage Zone-II with its origin in the Shivalik foothills, on the North-East running through the entire city of Chandigarh and extending along the Leisure Valley towards the South-West into Punjab. The width of this Zone of prime importance is demarcated by the Institutional Belt along Jan Marg on the South-East and closing on the junction of Sectors 16, 17, 22 and 23	MLA Hostel and MLA Flats, Sector-3		I
	MLA Hostel and Flats, Sector-4		I
	Government Museum & Art Gallery, Sector-10	Main Museum	I
		City Museum	I
		Science Museum	I
		Auditorium	I
		Government College of Art, Sector -10	I
	The Rose Garden & Shanti Kunj		I

Heritage Zone-III extends across Sector-7			I
Heritage Zone-IV extends across Sector-8			I
Heritage Zone-V extends across City Centre, Sector-17			I
Heritage Zone-VI extends across Sector-22			I
Heritage Zone-VII extends across Panjab University, Sector-14		Gandhi Bhawan AC Joshi Library Fine Arts Museum Administrative Block	I I I I
Heritage Zone-VIII extends along Madhya Marg from PGI to the Sukhna Choe on the South-East and includes the Institutional, Commercial Buildings and the Green Belts along it on its either side. Institutional Belt along Madhya Marg in Sector 15.	Institutional Belt in Sectors 18, 19, and 27. Shopping Centres in Sectors 7 & 26. Government College for Boys & Girls, Sector 11 The Post Graduate Institute of Medical & Education Research, Sector 12		II II II II

Heritage Zone-IX consists of belt of Mango Grove along Purv Marg as demarcated in the drawing			I
Heritage Zone-X stretching NW to SE across Sector 11,10,9,8,7 along V4	Neighbourhood shopping centres, institutional, and residential buildings on either side		II
Heritage Zone-XI stretching NW to SE across Sector 14,15,16,18,19,27, 28 along V4	Neighbourhood shopping centres, institutional, and residential buildings on either side		II

Heritage Zone-XII stretching NW to SE across Sectors 24, 23, 22, 21, 20, 30, 29	Neighbourhood shopping centres, institutional , and residential buildings on either side		II
Heritage zones-XIII along V3s: Vidya Path, Udyan Path, Himalaya Marg, Sarovar Path, Sukhna Path, Chandi Marg, Purv Marg, Vidya Path, Udyog Path, Dakshin Marg.			III

	Architect Original Office, Sector 19 Government Press Building, Sector 18 Chandigarh College of Architecture, Sector 12 Government Houses in Sectors 2, 3, 4, 5, 7, 11, 16, 19, 20, 22, 23, 27 as indicated in Sector Layout Plans House Number 56, Sector 4 Original blocks in the following Government School Buildings: Government High School, Sector 10 Government High School, Sector 15 Government Sr. Sec. School Sector 16 Government Girls High School, Sector 18 Government High School, Sector 19 Government Girls High School, Sector 21 Junior Secondary School, Sector 22 Government Nursery School, Sector 7 Government Nursery School, Sector 16 Government Nursery School, Sector 22. PRIVATE HOUSES PL Varma's House, # 28 Sector 5 Gautam Sehgal House, # 32 Sector 5 Mrs Nirlep Kaur's House, # 33 Sector 4 Oberoi House, # 22 Sector 5		I I I II I II II II II II II II II II II II II II
	Manimajra Fort		II

NATURAL FEATURES, AREAS, AND VISTAS

The site of the city of Chandigarh has many natural features which make them suitable for conservation on account of their environmentally-significant nature and scenic beauty besides their geographical history. These are:

1. Shivalik Hills, as the most outstanding natural landmark which forms the backdrop of Chandigarh, notably, the Capitol Complex
2. Sukhna Lake and its Catchment Area
3. Patiali-ki-Rao Choe
4. Sukhna Choe
5. Leisure Valley with its 8-kilometre-long monsoonal gorge and further extending into the State of Punjab
6. Sukhna Wild-Life Sanctuary
7. N-Choe
8. Protected Forests
9. Forest Areas
10. Green Belts
11. Neighbourhood /Sector Greens
12. No-Construction Zone on the North of the Capitol Complex.

VISTAS

The enlisted Vistas form an intangible part of the Chandigarh Heritage and need to be preserved. No building/development should be carried out that conflict with the following:

- * Uninterrupted view of Shivalik Hills along all roads running NE to SW
- * Uninterrupted view of the Shivalik Hills from the City Greens
- * Uninterrupted Backdrop of the Shivalik Hills in the Capitol Complex
- * Uninterrupted view of Sukhna Lake from the Uttar Marg

EPILOGUE

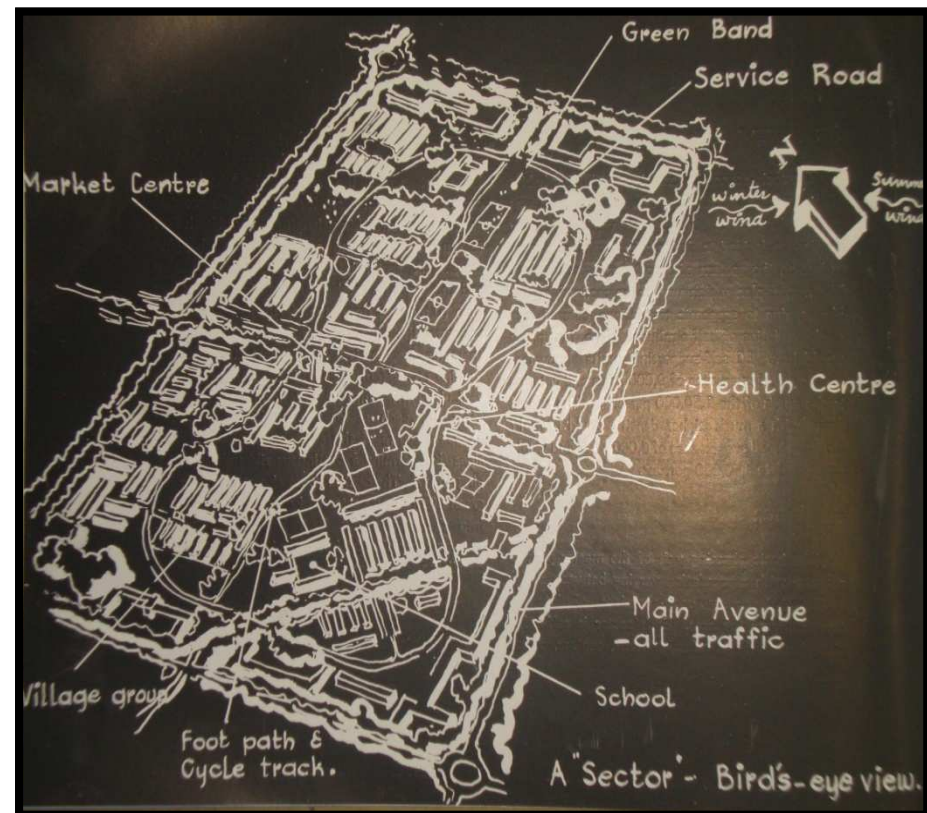
The spiritual dimension of the Chandigarh's Master Plan may be highlighted by tracing the significance of Le Corbusier's planning postulates of "Sun, Space and Verdure" to India's sacred scriptures: Sun is *Satyam* [Truth], Space is *Shivam* [Goodness], and Verdure or Greenery is *Sundaram* [Beauty].

In the sacred Gayatri *mantra*, which is chanted by millions of people throughout the world everyday, Sun is invoked as the creative and preserving power of God. Sun also directs the course of our lives regardless of caste, creed, colour, and ethnic eccentricities. Space symbolises generosity of spirit of which Goodness is an active ethical expression. By this token, Freedom is the Space in which Egos can coexist without conflict and mutual ruination. Verdure or Greenery is the aesthetic means through which Nature's artistry is communicated as Beauty. Greenery is also akin to Nature's inexhaustible productiveness whose counterpart is the fertile human imagination.

There is inviolable interdependence and interrelationship among Sun, Space, and Verdure. In the Built [or Human] Environment, which is the largest single contributor to the making of a city's master plan, it is Space that receives Sun to let Verdure grow. The more the Space is congested by too much of buildings the less there is Sun, with little eventual Verdure. By strict application of these principles, Le Corbusier created Chandigarh we love for its Sunny [i.e. cheerful] temperament, Spacious extroversion [i.e. shared Goodness], and lush Verdure [i.e. soulful Greenery]. And it is by strict insistence on their *status quo* that we can conserve Chandigarh Heritage embodied in what Le Corbusier chose to call the "Green City".

We must never succumb to the temptation of narrowing down the planned open Space (s) by building more structures. It is in this special sense that Le Corbusier's exhortation gains added significance: "The seed of Chandigarh is well sown. It is up to the citizens to see that the tree flourishes". Chandigarh has since long moved out of the jurisdiction of architects and planners to become the most enviable inheritance of Chandigarhians: its beneficiaries as well as its guardians!

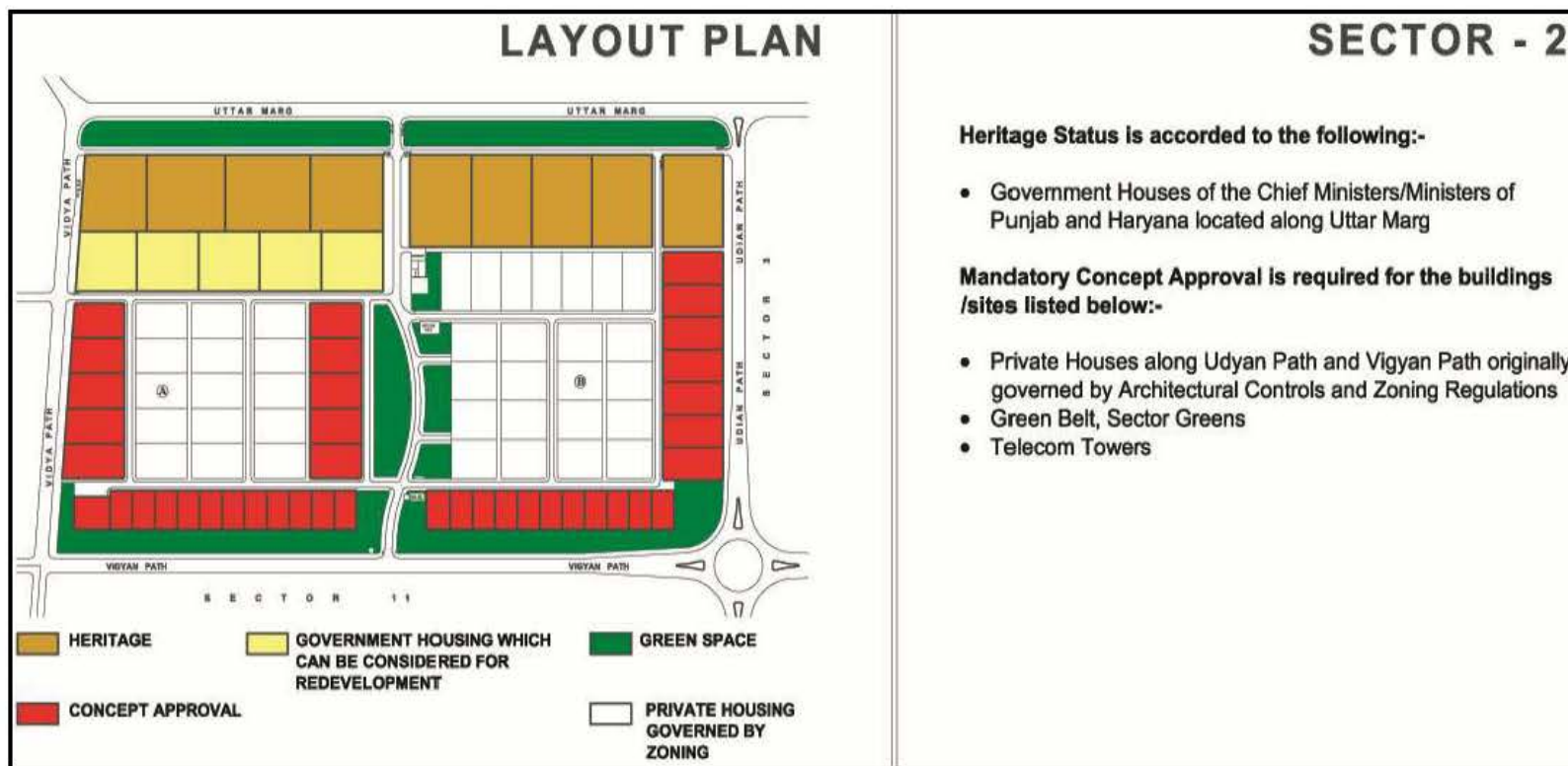
SECTOR WISE PROPOSALS



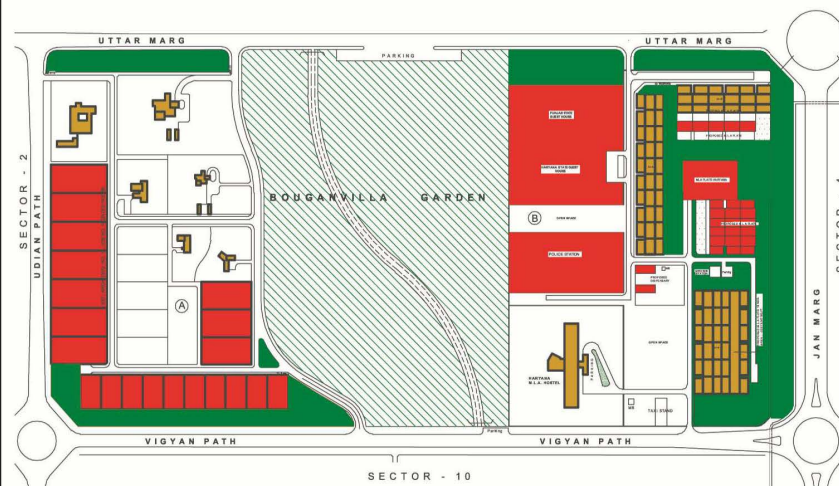
Sector-wise proposals showing locations of buildings enlisted for Heritage Status, areas of mandatory concept approvals, areas which can be considered for redevelopment of First Phase Sectors i.e. Sector 1 to 30, have been detailed out in the layout plans

Following are the parameters for imposing the regulation of prior concept approval on new buildings and/or additions-and-alterations in old ones.

- Experience has shown that since many private buildings fall along these important arteries, namely, V3s and V4s, constituting major part of Chandigarh's urban imageability, there is an urgent need to regulate individualistic/idiosyncratic use of weird forms, senseless geometry, garish colours, and gaudy materials to preserve the original character of the city besides retaining sanity in architectural and urban designs
- The principal objective is to maintain a harmonious urban form of Chandigarh in keeping with the Master Architect's original concept.
- The second criterion is the building's architectural importance and the individual professional standing of the architects who constituted the foreign team headed by Le Corbusier.
- The third parameter is the location of the building, which is crucial because an ill-designed structure can become an intolerable eyesore whereas a sensitive design that respects its architectural legacy would be a landmark asset in many ways.



LAYOUT PLAN



SECTOR - 3

Heritage Status is accorded to the following:-

- Government houses of the Chief Ministers of Punjab and Haryana located along Uttar Marg
- MLA Flats and MLA Hostel along Jan Marg originally designed by Pierre Jeanneret
- Green Belt stretching from Uttar Marg to Vigyan Marg, planned as Bougainvillea Garden, should retain its character. A later addition, however, is "War Memorial" in memory of the martyrs of the region

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Private houses along Udyan Path and Vigyan Path originally governed by Architectural Controls and Zoning Regulations
- Punjab State Guest House
- Haryana Guest House
- Telecom Towers and any other structure
- Security should be rationalized in order to minimize the security barracks which mar the street picture along Jan Marg and Uttar Marg
- Green Belt, Sector Greens
- Mobile Towers

LAYOUT PLAN

SECTOR - 4

Heritage Status is accorded to the following:-

- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
- MLA Hostels and MLA Flats along Jan Marg
- Private Houses: House No. 33 (Nirlep Kaur's house)

Mandatory Concept Approval is required for the buildings /sites listed below:-

- Private Houses along Vigyan Path and Himalaya Marg
- Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens

Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg

LAYOUT PLAN

SECTOR - 4

Heritage Status is accorded to the following:-

- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
- MLA Hostels and MLA Flats along Jan Marg
- Private Houses: House No. 33 (Nirlep Kaur's house)

Mandatory Concept Approval is required for the buildings /sites listed below:-

- Private Houses along Vigyan Path and Himalaya Marg
- Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens

Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg

LAYOUT PLAN

SECTOR - 4

Heritage Status is accorded to the following:-

- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
- MLA Hostels and MLA Flats along Jan Marg
- Private Houses: House No. 33 (Nirlep Kaur's house)

Mandatory Concept Approval is required for the buildings /sites listed below:-

- Private Houses along Vigyan Path and Himalaya Marg
- Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens

Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg

- ## LAYOUT PLAN
-
- SECTOR - 4**
- Heritage Status is accorded to the following:-**
- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
 - MLA Hostels and MLA Flats along Jan Marg
 - Private Houses: House No. 33 (Nirlep Kaur's house)
- Mandatory Concept Approval is required for the buildings /sites listed below:-**
- Private Houses along Vigyan Path and Himalaya Marg
 - Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens
- Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg**

LAYOUT PLAN

SECTOR - 4

Heritage Status is accorded to the following:-

- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
- MLA Hostels and MLA Flats along Jan Marg
- Private Houses: House No. 33 (Nirlep Kaur's house)

Mandatory Concept Approval is required for the buildings /sites listed below:-

- Private Houses along Vigyan Path and Himalaya Marg
- Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens

Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg

- ## LAYOUT PLAN
-
- SECTOR - 4**
- Heritage Status is accorded to the following:-**
- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
 - MLA Hostels and MLA Flats along Jan Marg
 - Private Houses: House No. 33 (Nirlep Kaur's house)
- Mandatory Concept Approval is required for the buildings/sites listed below:-**
- Private Houses along Vigyan Path and Himalaya Marg
 - Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens
- Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg**

LAYOUT PLAN

SECTOR - 4

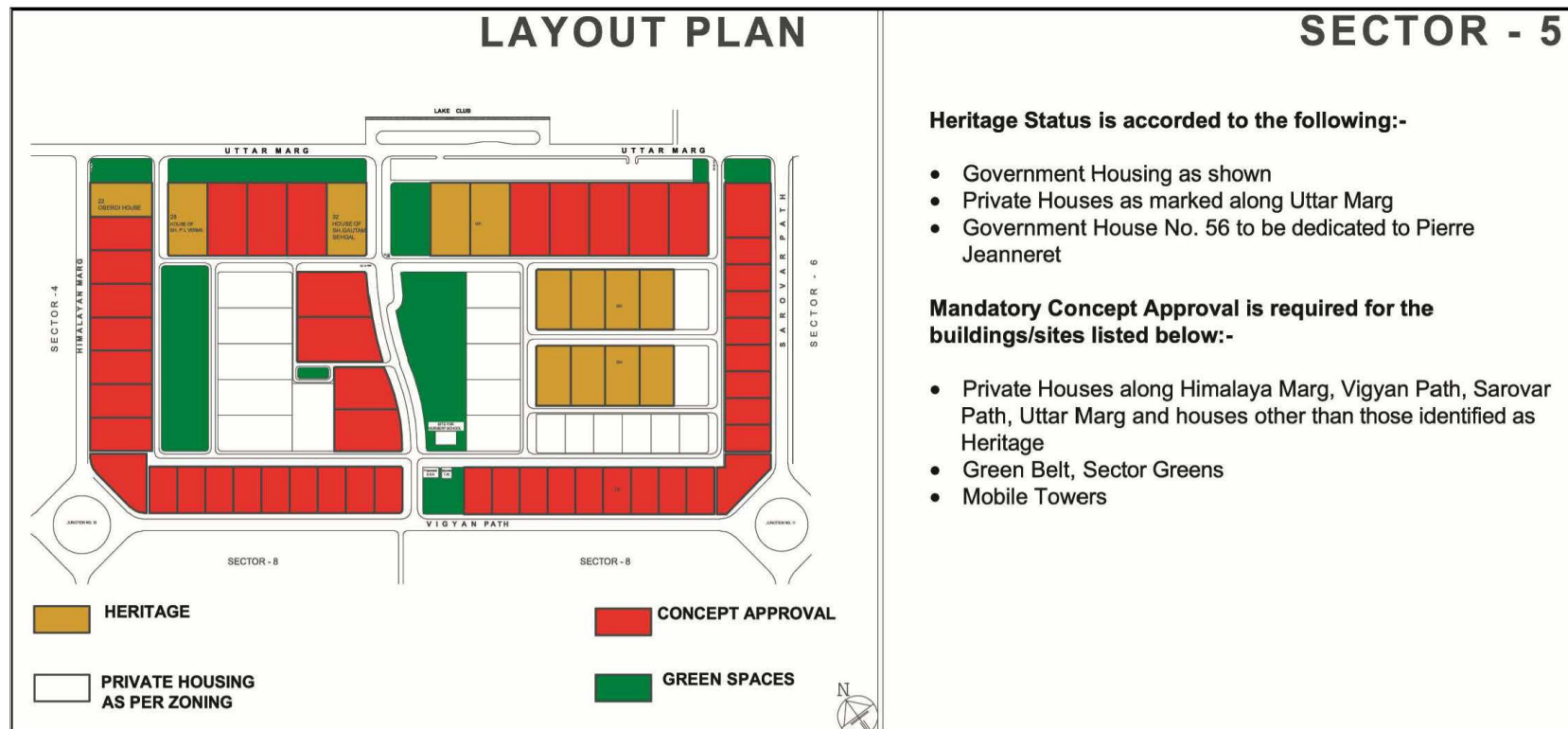
Heritage Status is accorded to the following:-

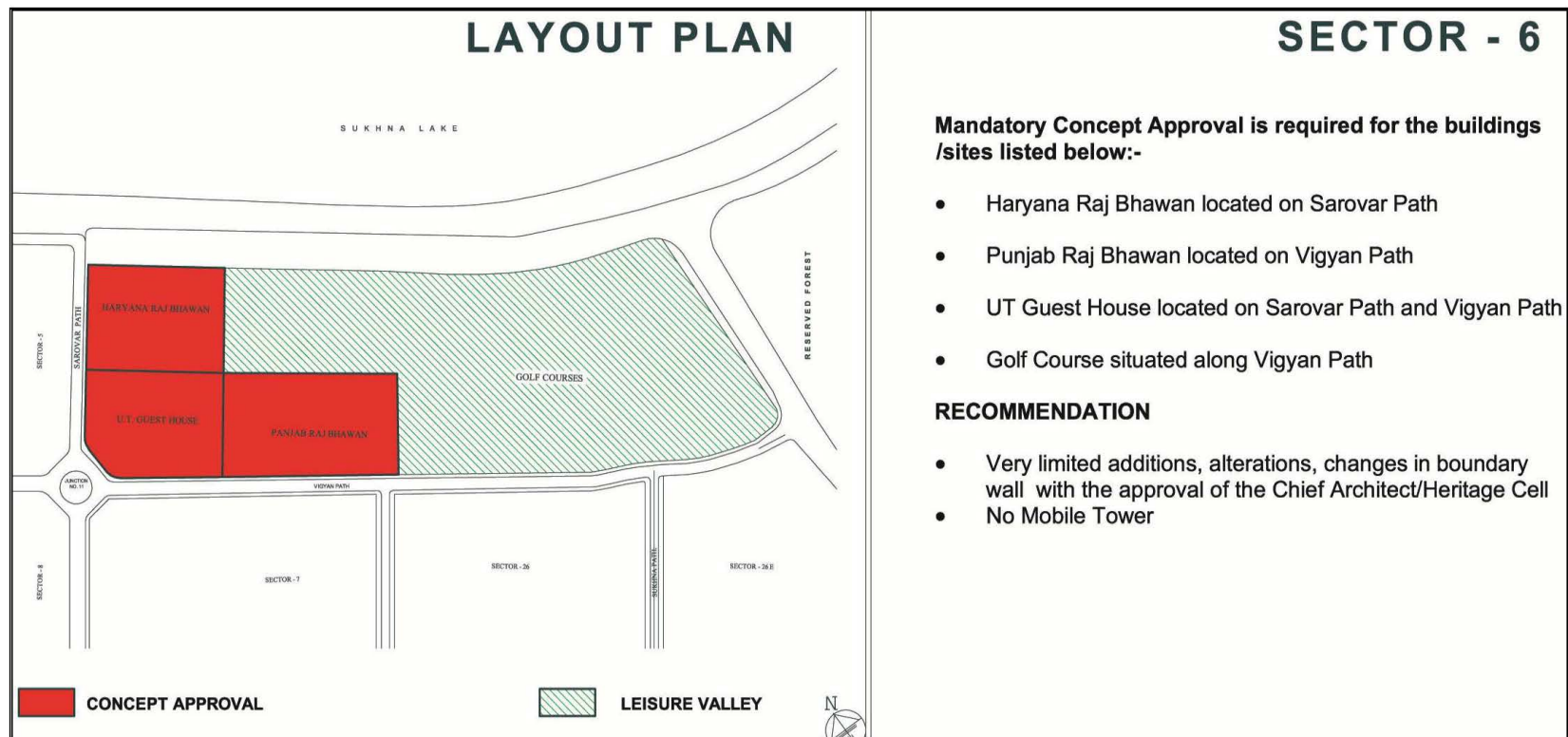
- Government Houses for the High Court Judges, and the Chief Justice designed by first team of Architects
- MLA Hostels and MLA Flats along Jan Marg
- Private Houses: House No. 33 (Nirlep Kaur's house)

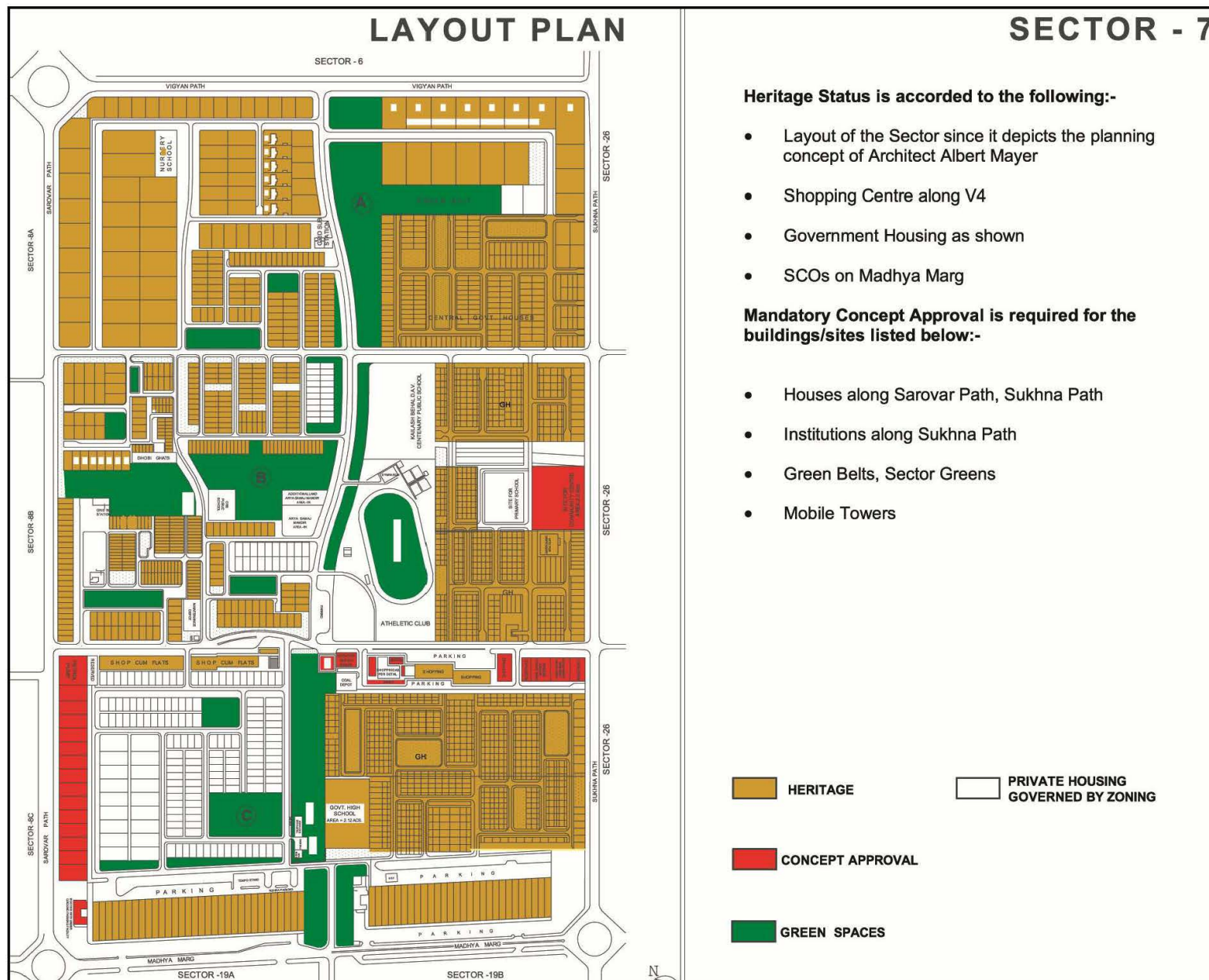
Mandatory Concept Approval is required for the buildings /sites listed below:-

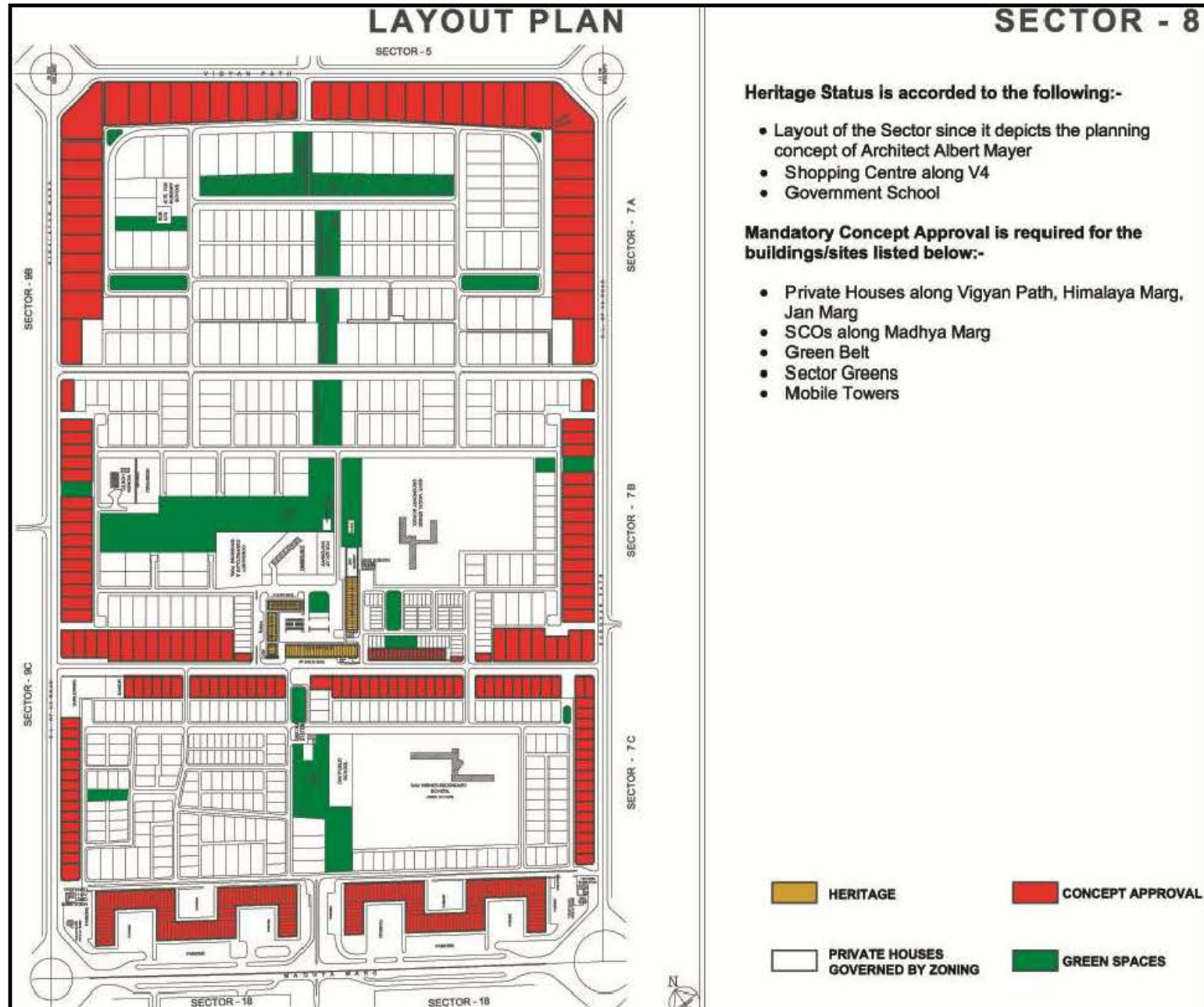
- Private Houses along Vigyan Path and Himalaya Marg
- Green Belts on either side of Uttar Marg and Vidya Path, Sector Greens

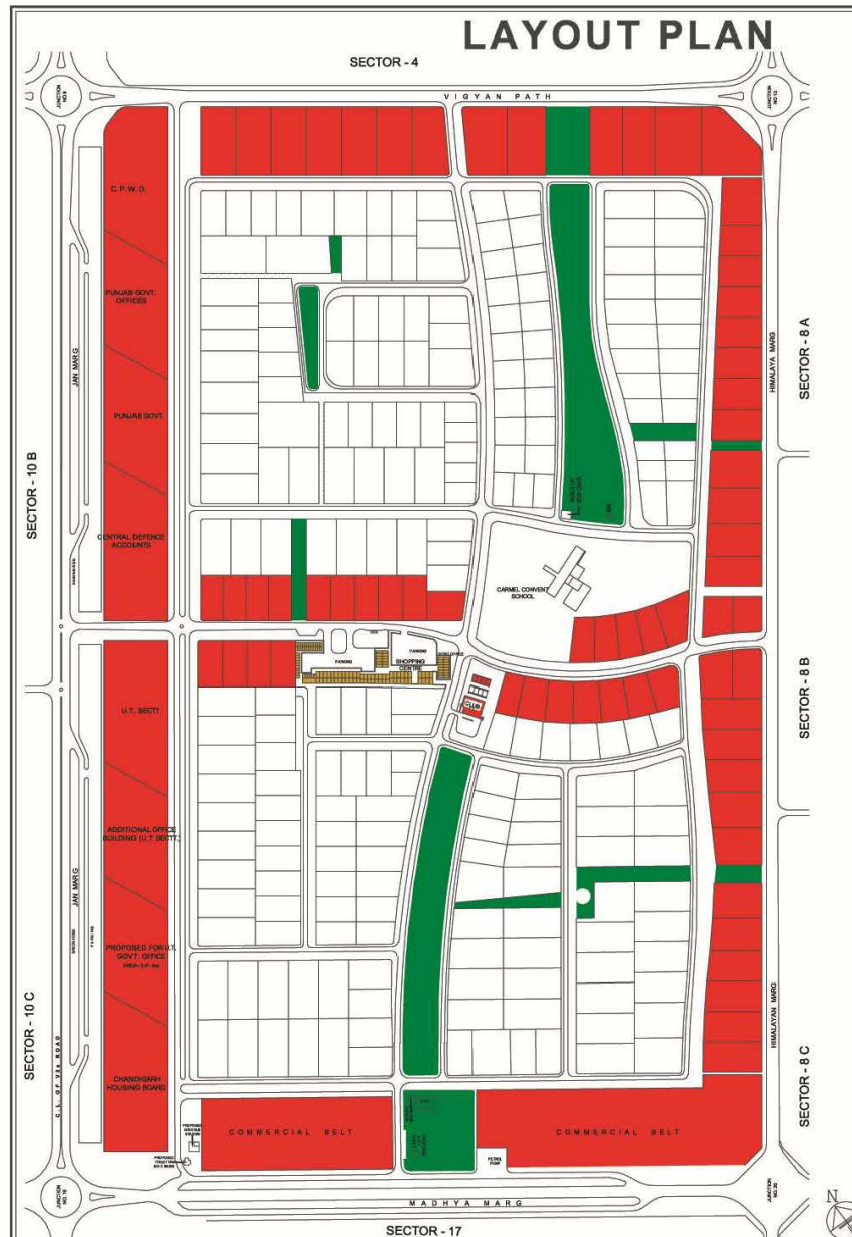
Security should be rationalized in order to minimize the security barracks which mar the street-picture along Jan Marg and Uttar Marg











SECTOR - 9

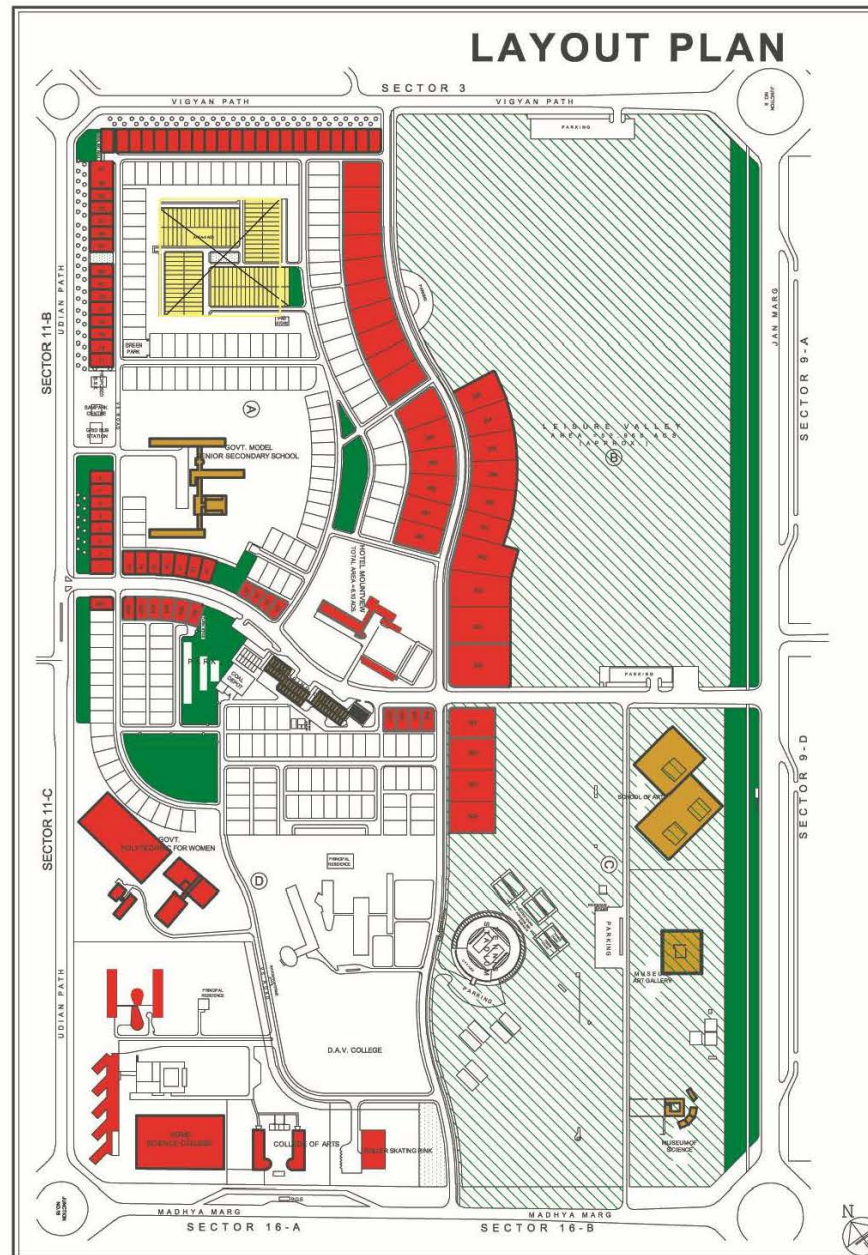
Heritage Status is accorded for the following:-

- Shopping Centre along V4
- SCOs/SCFs
- Commemorative Stone in Jawahar Park

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Private Houses along Himalaya Marg, Vigyan Path
- SCOs along Madhya Marg
- Institutional Buildings to retain Architectural Control
- Green Belt
- Sector Greens
- Mobile Towers





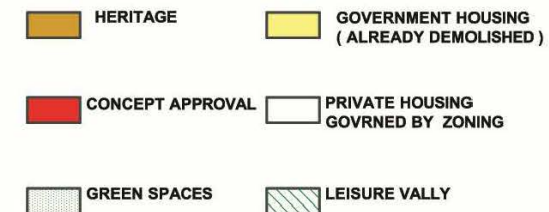
SECTOR - 10

Heritage Status is accorded for the following:-

- Government Museum & Art Gallery campus
- Government College of Art
- Museum of Science
- Government Model Senior Secondary School which functioned as assembly in the initiate stages
- SCFs/SCOs along V4
- Leisure Valley: Fitness Trail, Monsoonal Gorge, Tennis Stadium

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Tennis Courts should retain their earth-sheltered form
- Private Housing along Vigyan Path, Udyan Path, V4 & V5 with back towards Leisure Valley
- Government Polytechnic along Udyan Path
- Home Science College along Udyan Path and Madhya Marg
- Skating Rink along Madhya Marg
- Hostel for Government College of Art on Madhya Marg
- Green Belt, Sector Greens
- Mobile Towers



LAYOUT PLAN

The layout plan is divided into four sectors, each with its own set of roads and buildings. The sectors are labeled as follows:

- SECTOR - 2** (top): This sector contains a large green area, a primary school, and a site port. It is bounded by VIGYAN PATH on the top and left, and MADHYA MARG on the bottom.
- SECTOR - 10A** (right): This sector contains a large green area, a primary school, and a site port. It is bounded by VIGYAN PATH on the top and right, and MADHYA MARG on the bottom.
- SECTOR - 10B** (bottom): This sector contains a large green area, a primary school, and a site port. It is bounded by VIGYAN PATH on the bottom and right, and MADHYA MARG on the top.
- SECTOR - 10** (left): This sector contains a large green area, a primary school, and a site port. It is bounded by VIGYAN PATH on the left and top, and MADHYA MARG on the bottom.

The plan also shows a central area with a large green area, a primary school, and a site port. The plan is oriented with North at the top.

Heritage Status is accorded for the following:-

- Government Housing along Udyan Path
- Government College for Boys along Madhya Marg (original blocks)
- Government College for Girls along Madhya Marg (original blocks)
- SCOs/SCFs along V4
- Government Housing as shown

Mandatory Concept Approval is required for the buildings/ sites listed below:-

- Private housing along Vigyan Path, Udyan Path, Vidya Path & V4
- Karuna Sadan along V4
- YMCA along V4 and Udyan Path
- Police Station along V4 and Udyan Path
- Polytechnic along Udyan Path
- Food & Nutrition Centre along V4 and Vidhya Path
- Concept approval for additional blocks of Government College for Boys and Government College for Girls
- Green Belt, Sector Greens
- Mobile Towers

HERITAGE

CONCEPT APPROVAL

 GREEN SPACES

**GOVERNMENT HOUSING
CAN BE CONSIDERED FOR
REDEVELOPMENT IF
REQUESTED.**

☐ PRIVATE HOUSING
GOVERNED BY ZONING

LAYOUT PLAN



SECTOR -12

Heritage Status is accorded for the following:-

- Chandigarh College of Architecture
- Administrative Block, Punjab Engineering College

Mandatory Concept Approval is required for the Buildings/Sites listed below:-

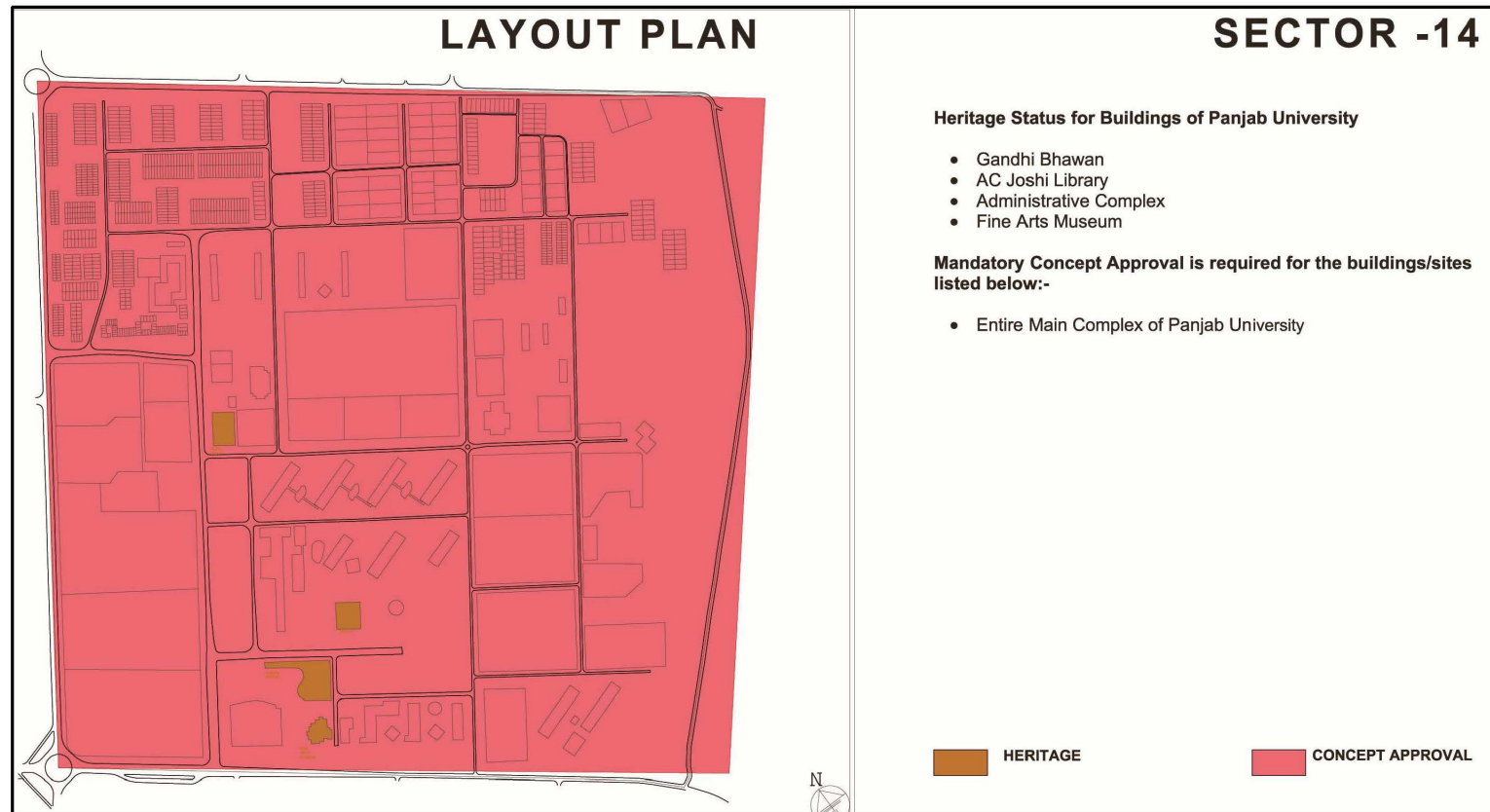
- Post Graduate Institute of Medical Sciences
- Punjab Engineering College
- Green Belt, Sector Green
- Mobile Tower

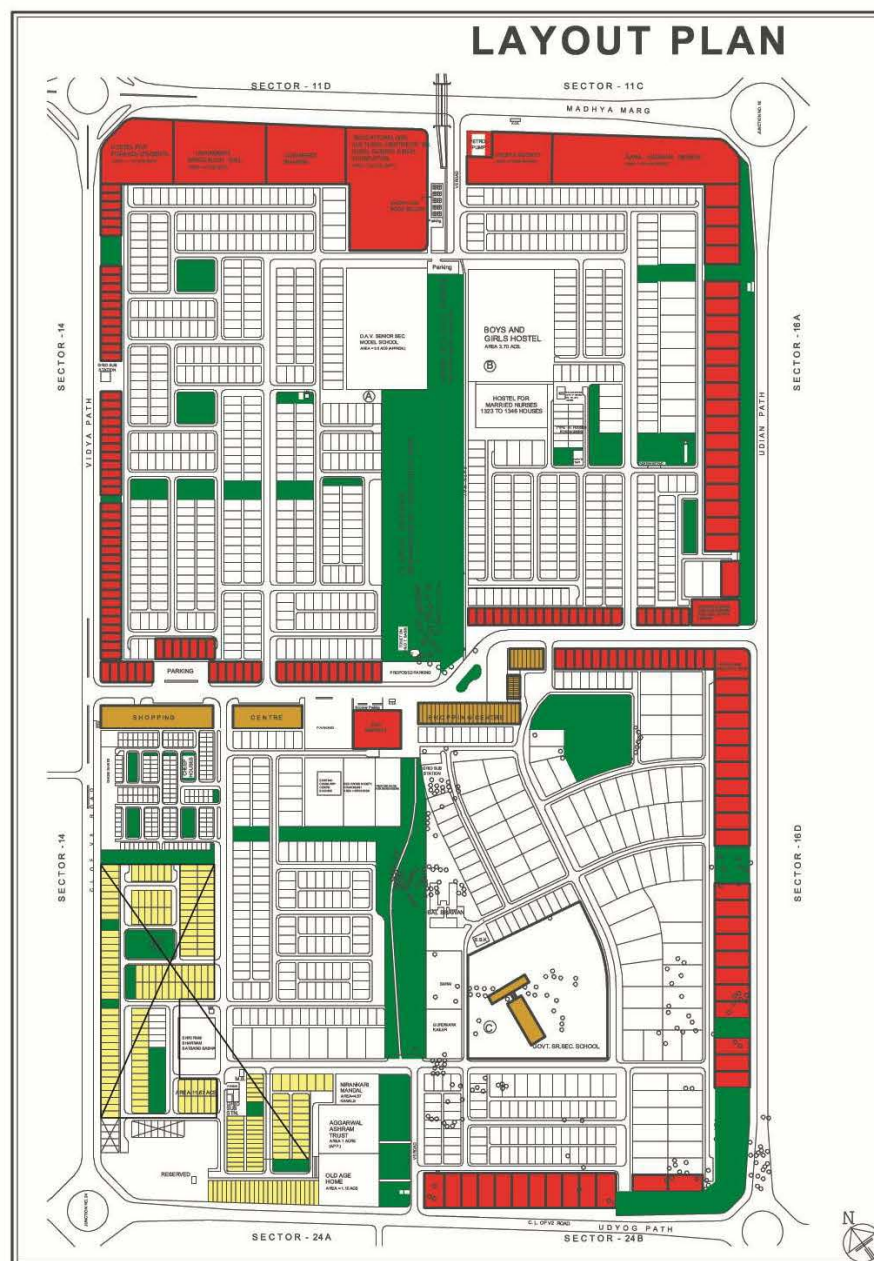


HERITAGE



CONCEPT APPROVAL





SECTOR -15

Heritage Status is accorded for the following:-

- Government School
- SCOs/SCFs along V4
- Government Housing as shown

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Private Housing along V4, Udyan Path, Udyog Path, Vidhya Path
- Institutional Buildings, Bradlaugh Hall along Madhya Marg
- Petrol Pump
- Green Belt, Sector Green
- Mobile Tower

 HERITAGE

 CONCEPT APPROVAL

 GREEN SPACES

 GOVERNMENT HOUSING
CAN BE CONSIDERED
FOR REDEVELOPMENT

 PRIVATE HOUSING
AS PER ZONING

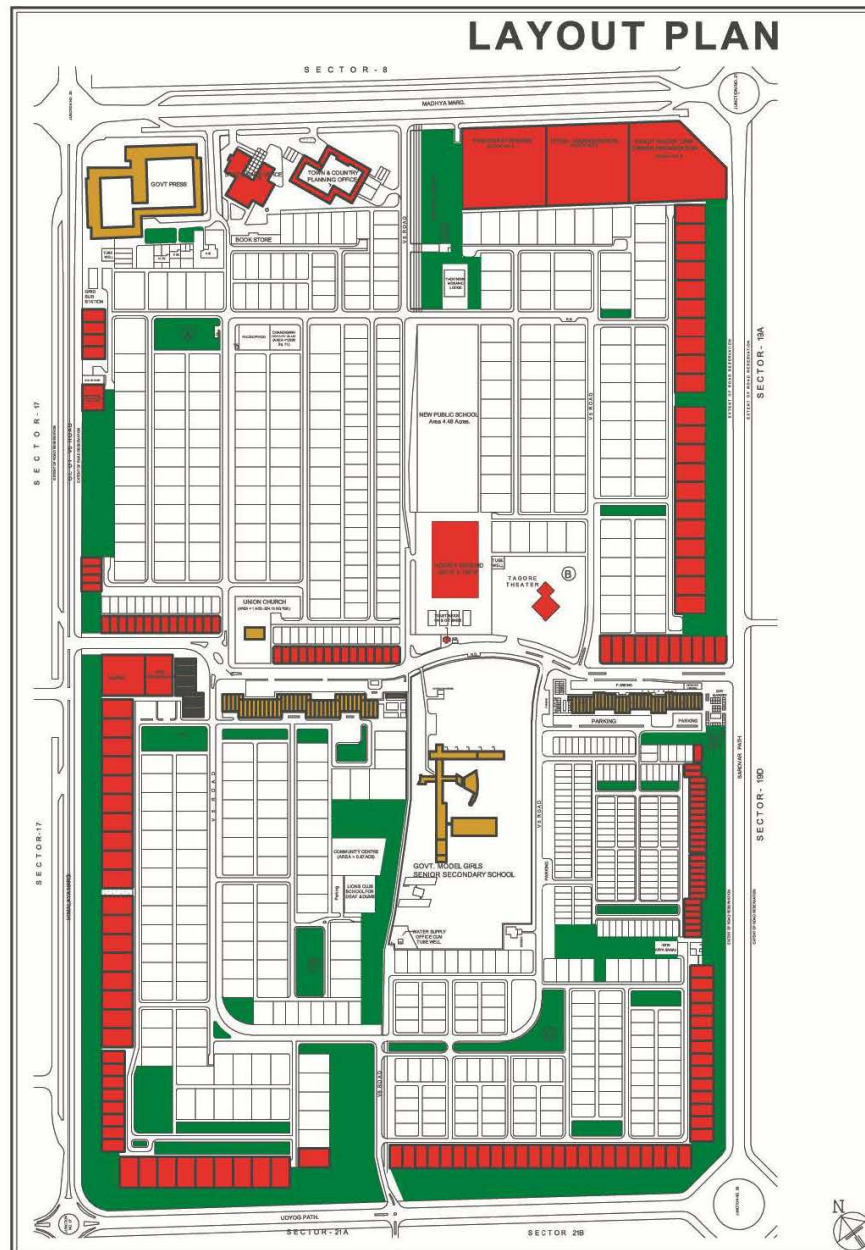
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Heritage Status is accorded for the following:-

- Mandatory Concept Approval is required for the Buildings/Sites listed below:-**

- General Hospital, Sector 16 on Madhya Marg
- Red Cross Building
- Horticulture Museum
- Private houses along Udyan Path, Udyog Path
- Green Belt, Sector Greens
- Mobile Towers

- | | | | |
|---|-------------------------|---|---|
|  | HERITAGE |  | GOVERNMENT HOUSING
CAN BE CONSIDERED
FOR REDEVELOPMENT |
|  | CONCEPT APPROVAL |  | PRIVATE HOUSING
AS PER ZONING |
|  | LEISURE VALLEY |  | GREEN SPACES |



SECTOR -18

Heritage Status is accorded for the following:-

- Government Press Building along Madhya Marg and Himalaya Marg
- Government Senior Secondary/Government Model School (original block)
- SCFs/SCOs along V4
- Church

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Institutional buildings, governed by Architectural Controls along Madhya Marg
- Private Housing along Sarovar Path, Udyog Path, Himalaya Marg
- Green Belt, Sector Greens
- Mobile Towers



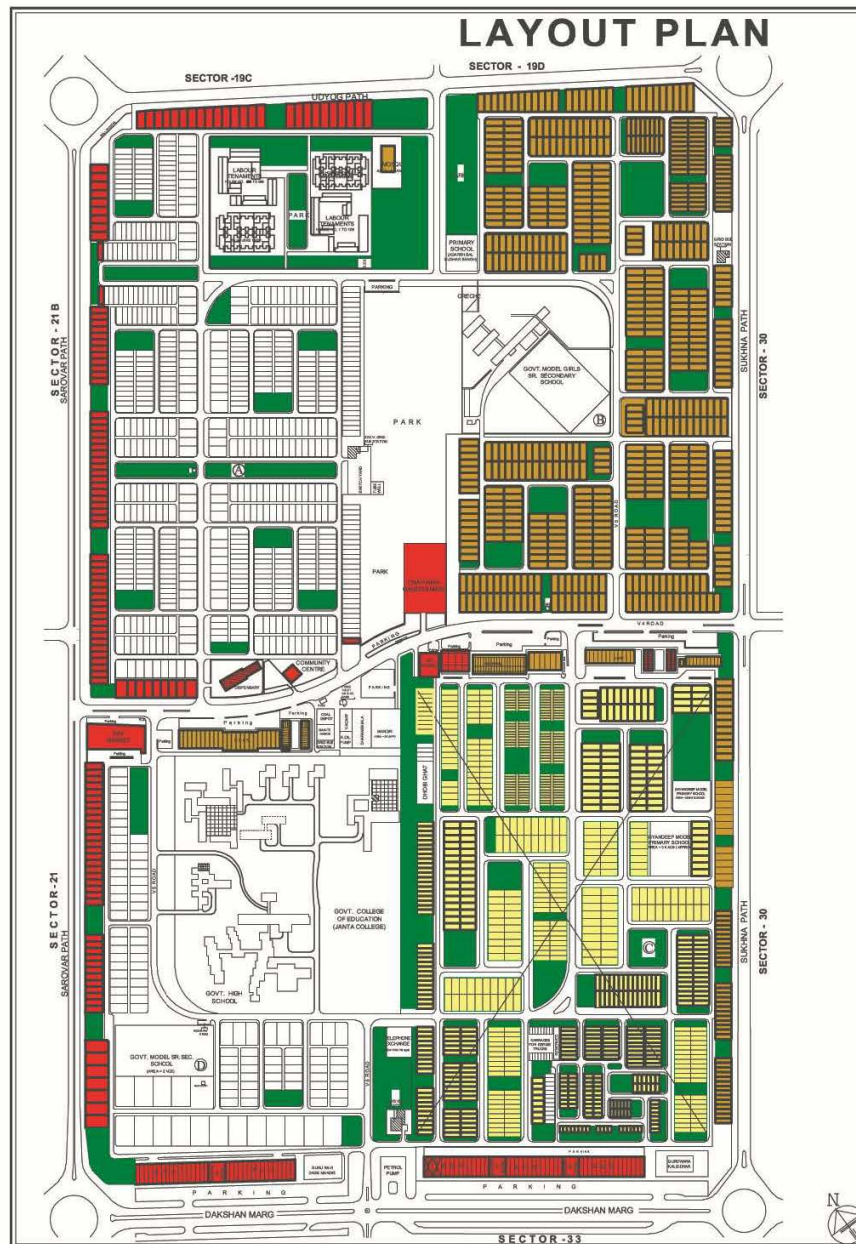
LAYOUT PLAN

The layout plan is divided into four sectors:

- SECTOR -7** (Top): Features a row of red residential blocks along Madhya Marg. A community centre and a school are located in the center.
- SECTOR -18** (Left): Contains a large red residential block and a yellow residential block. A parking area and a bus stop are also shown.
- SECTOR -27** (Right): Features a row of red residential blocks along Sarvodaya Path. A police post and a market are located in the center.
- SECTOR -20** (Bottom): Contains a large yellow residential block and a green residential block. A school and a bus stop are also shown.

Key features and labels include:

- Streets:** Madhya Marg, Sarvodaya Path, Udayog Path, and a central road labeled 'CL. OF 20 ROAD'.
- Buildings:** Residential blocks (red and yellow), Community Centre, School, Police Post, Market, Bus Stop, and various smaller structures.
- Green Spaces:** Large green areas, including a central park and smaller green spaces.
- Other Labels:** 'GOVT. MODEL SENIOR SECONDARY SCHOOL', 'GOVT. MODEL HIGH SCHOOL', 'SRI MA TRUST', 'MAHARAJA MANGAL', 'SHOBI GHAT', 'REHRI MARKET', 'POLICE POST', 'USTR AREA (DABU)', 'MANGALYAT SCHOOL', 'GOVT. MODEL SENIOR SECONDARY SCHOOL', 'GOVT. MODEL HIGH SCHOOL', 'SRI MA TRUST', 'MAHARAJA MANGAL', 'SHOBI GHAT', 'REHRI MARKET', 'POLICE POST', 'USTR AREA (DABU)', 'MANGALYAT SCHOOL'.



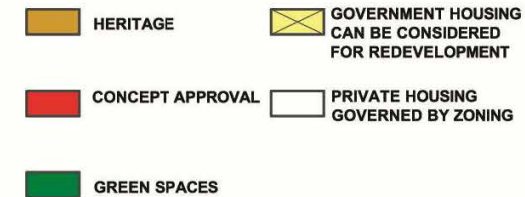
SECTOR -20

Heritage Status is accorded for the following:-

- Mosque
- SCOs/SCFs along V4
- Government Housing as shown

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Private housing Udyog Path, Sarovar Path, V4
- Government Housing along V4
- SCOs along Dakshin Marg
- Green Belt, Sector Greens
- Mobile Towers



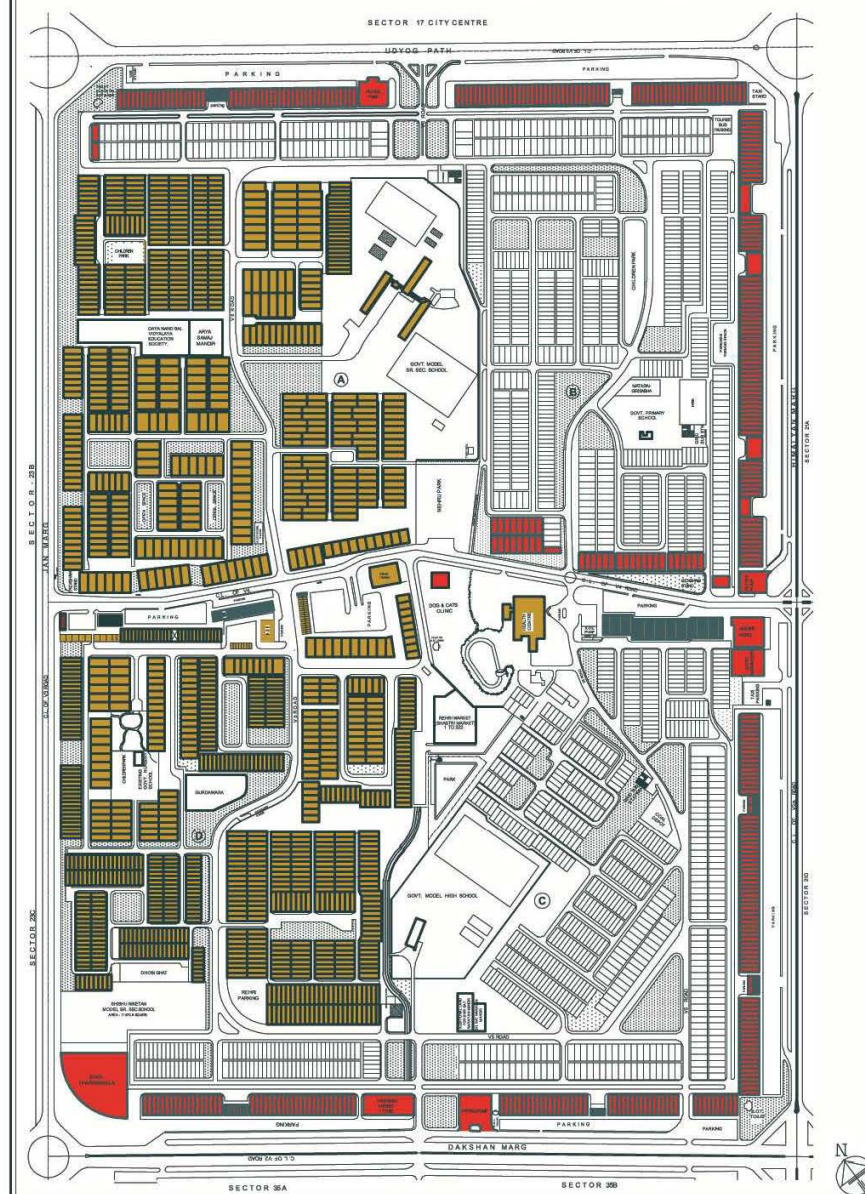
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Heritage Status is accorded for the following:-

- Mandatory Concept Approval is required for the buildings / sites listed below:-**

- HERITAGE
- CONCEPT APPROVAL
- PRIVATE HOUSING GOVERNED BY ZONING
- GREEN SPACES

LAYOUT PLAN



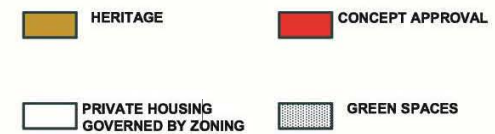
SECTOR -22

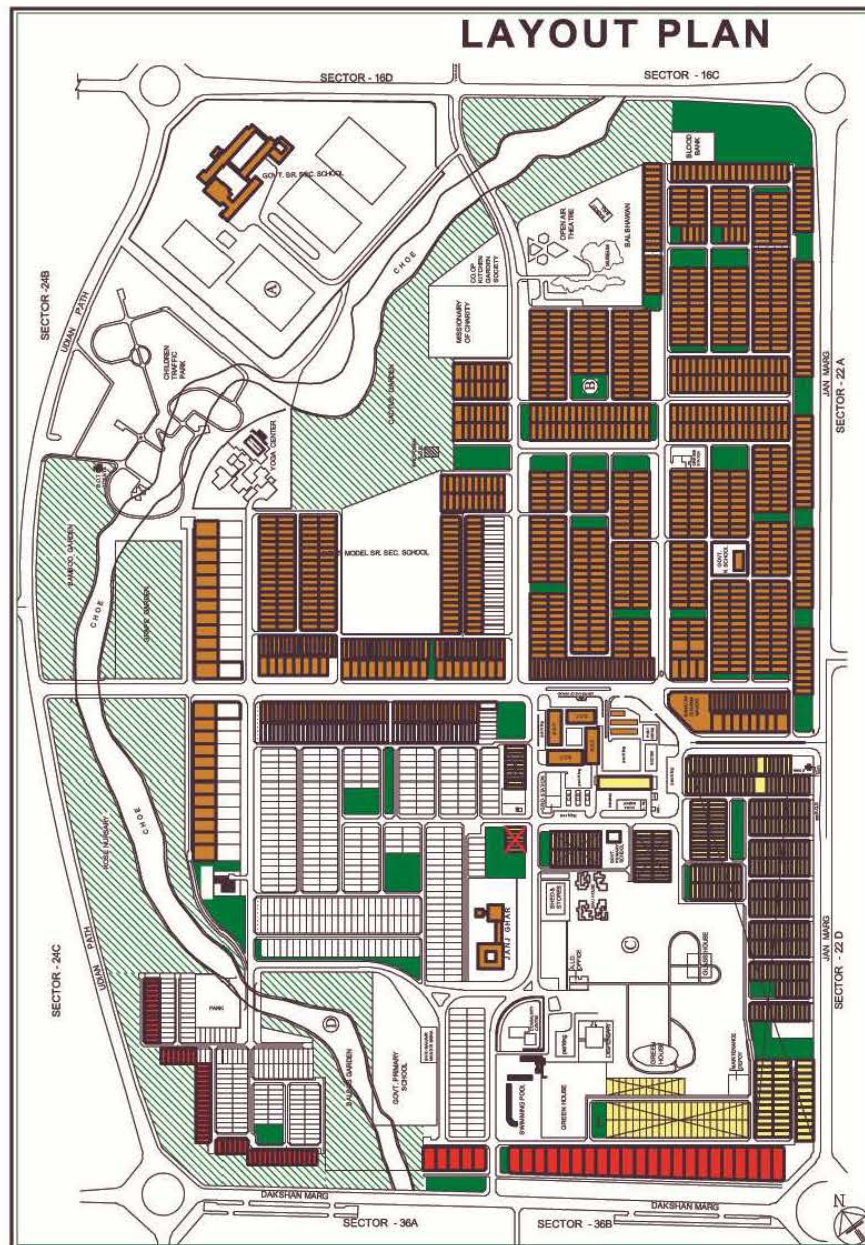
Heritage Status is accorded for the following:-

- Character of the Sector to be retained
- SCFs/SCOs along V4
- Government Junior Model School
- Poly-Clinic

Mandatory Concept Approval is required for the Buildings/Sites listed below:-

- SCOs & private buildings along Dakshin Marg
- Himalaya Marg, Udyog Path
- Green Belt, Sector Greens
- Mobile Towers





SECTOR -23

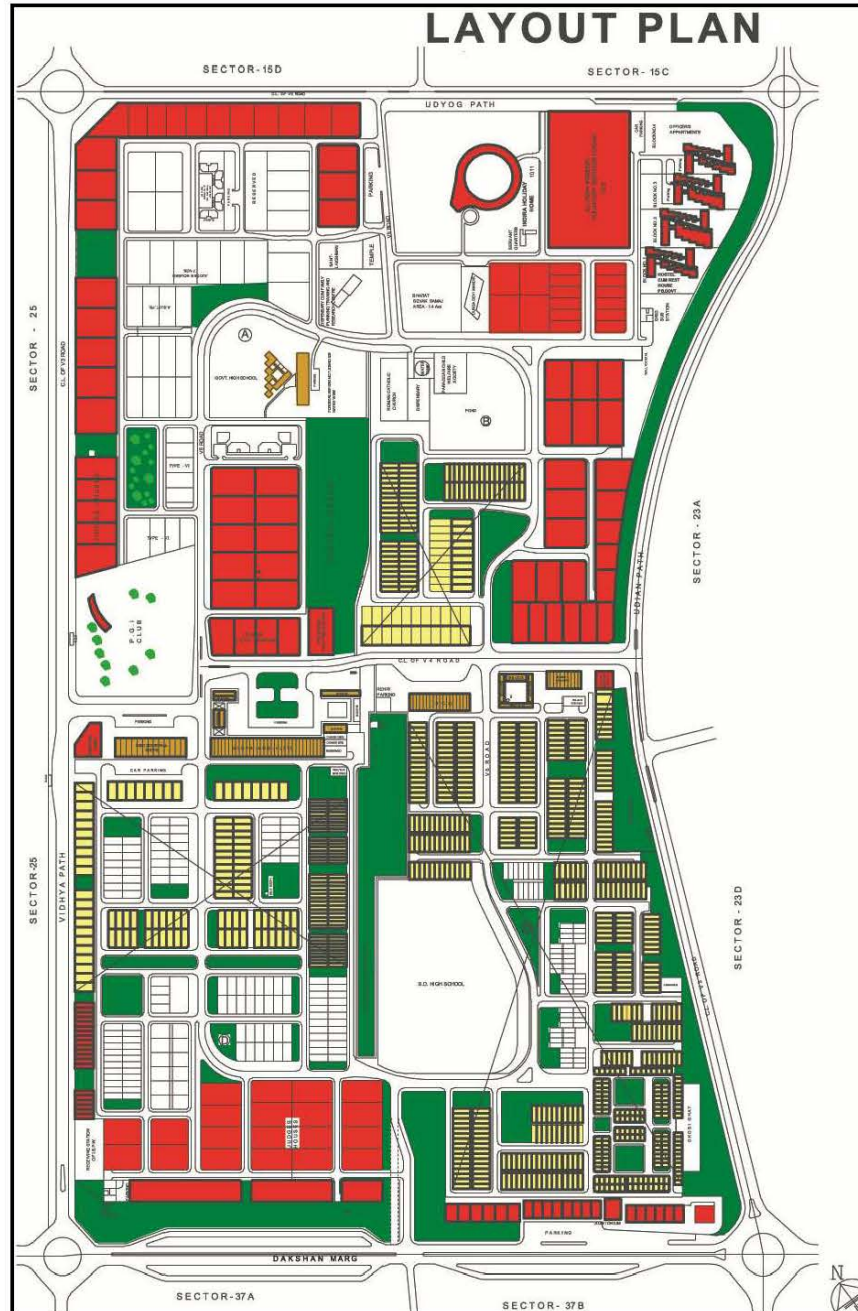
Heritage Status is accorded for the following:-

- Mandir on V4
- Government Buildings along Jan Marg
- Government Houses along Leisure Valley
- Leisure Valley developed as Traffic Park and Bamboo Garden
- Janj Ghar
- Swimming Pool
- SCOs/SCFs along V4
- Sealing Walls
- Government Senior Secondary School
- Government Housing as shown

Mandatory Concept Approval is required for the buildings/sites listed below:-

- Private Houses along Udyan Path, Dakshin Marg
- SCOs along Dakshin Marg.
- Private Housing along V4
- Sector Greens
- Mobile Towers

	HERITAGE		GOVERNMENT HOUSING CAN BE CONSIDERED FOR REDEVELOPMENT
	CONCEPT APPROVAL		PRIVATE HOUSING GOVERNED BY ZONING
	LEISURE VALLEY		GREEN SPACES



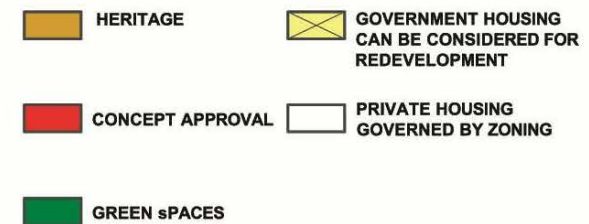
SECTOR -24

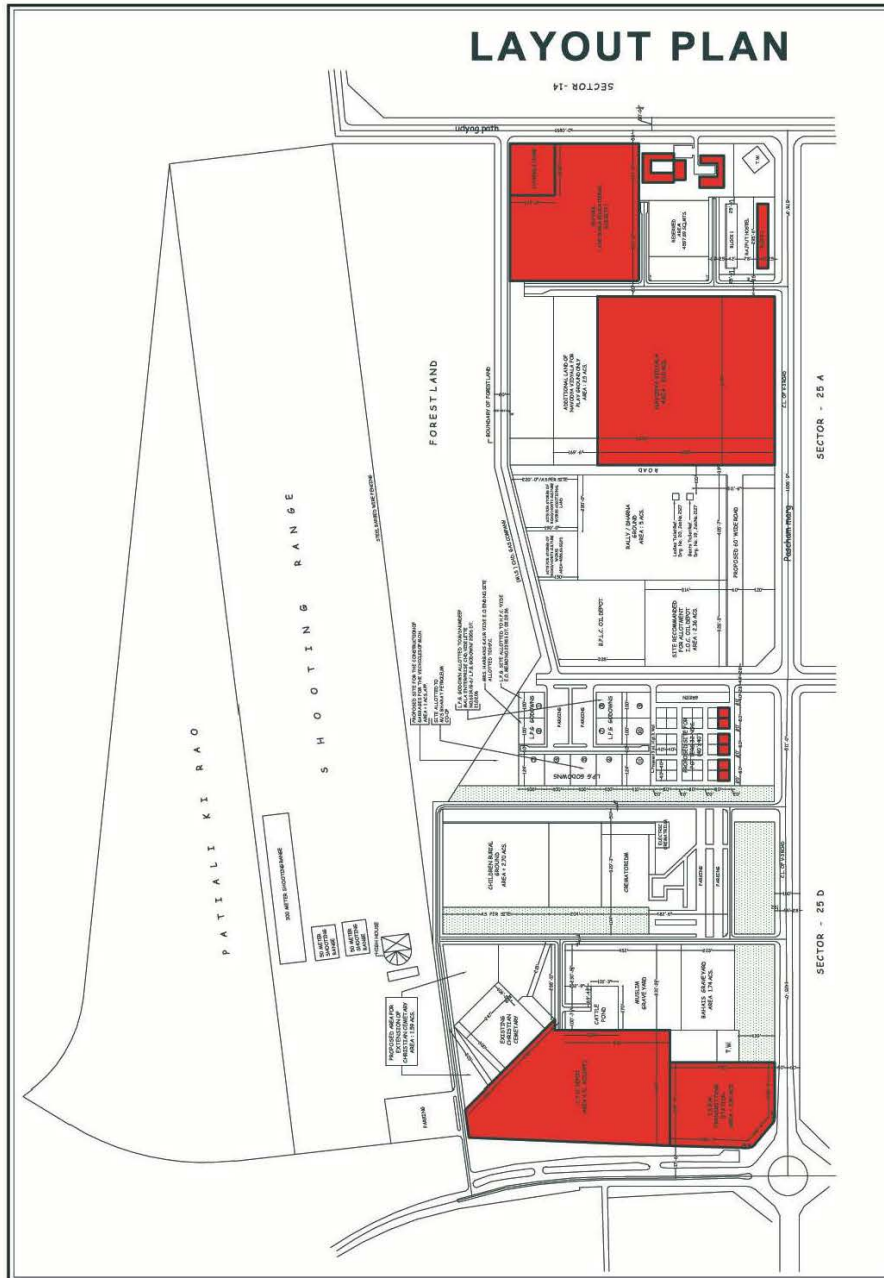
Heritage Status is accorded for the following:-

- SCOs/SCFs along V4
- Government Housing as shown

Mandatory Concept Approval is required for the buildings / sites listed below:-

- Government Housing as shown
- All Institutional Buildings, Government Housing, along Vidhya Path, Udyog Path, Dakshin Path, Udyan Path





SECTOR -25(WEST)

Mandatory Concept Approval is required for the buildings/sites listed below:-

- All Buildings along Pashim Marg
- Sector Greens
- Mobile Towers

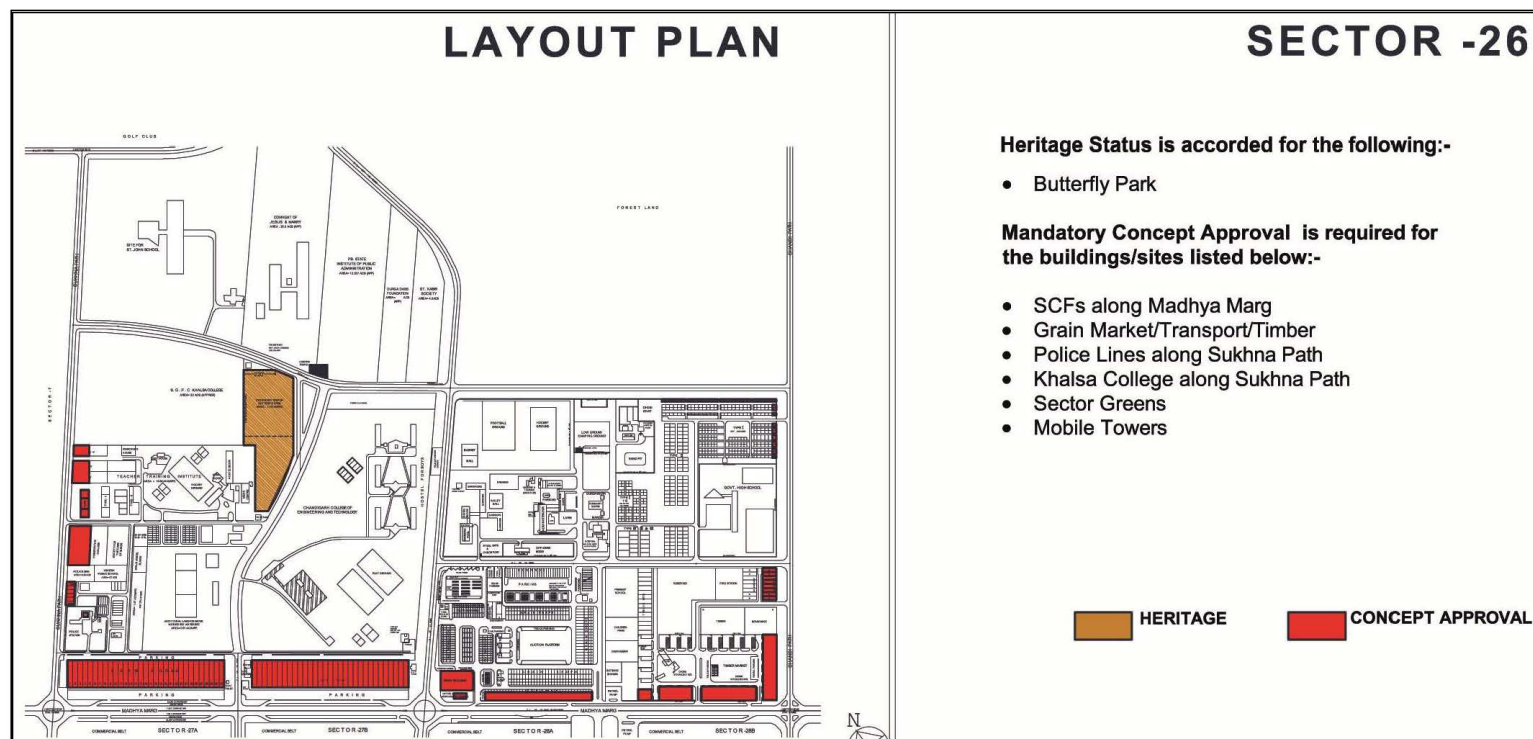
 **CONCEPT APPROVAL**

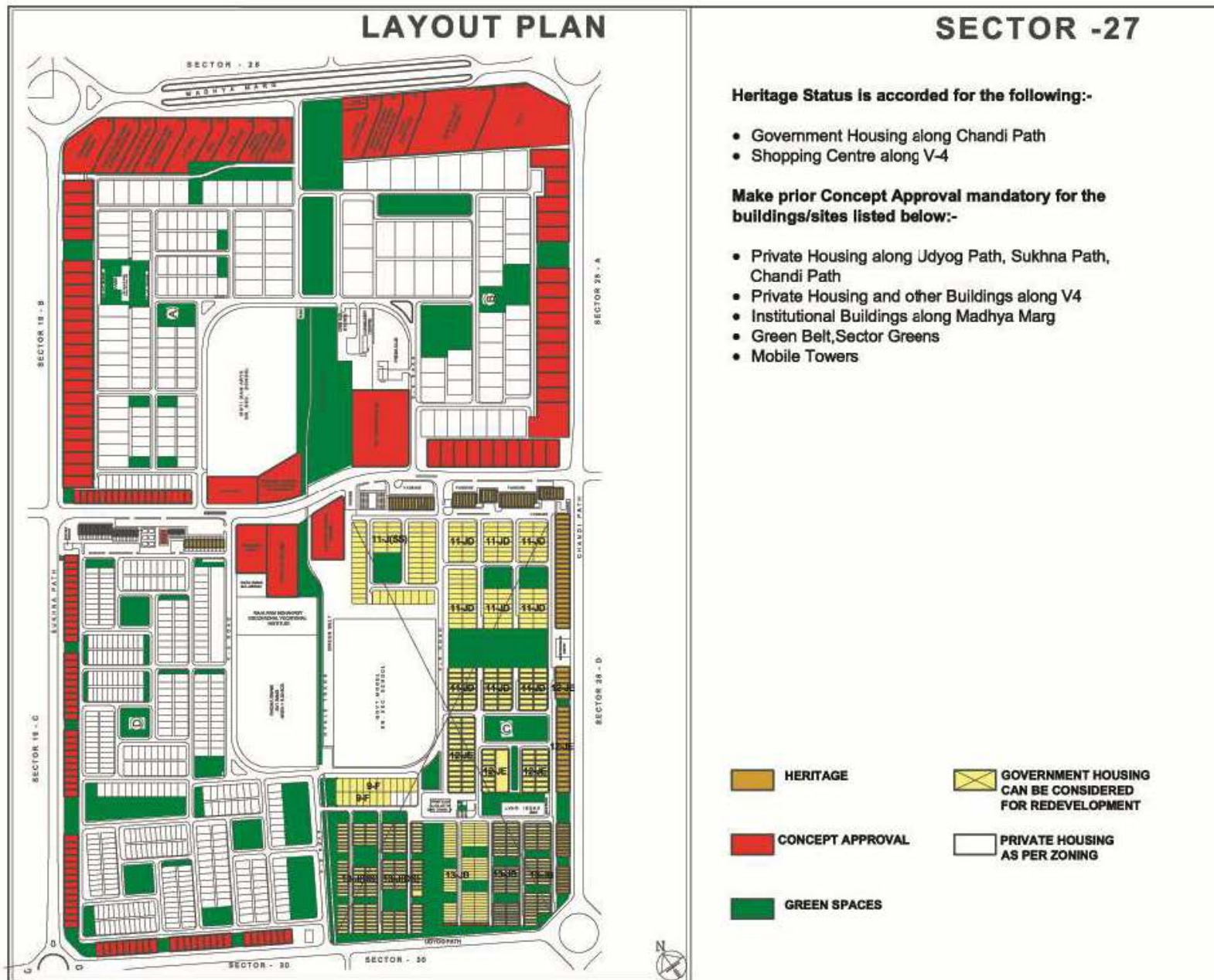
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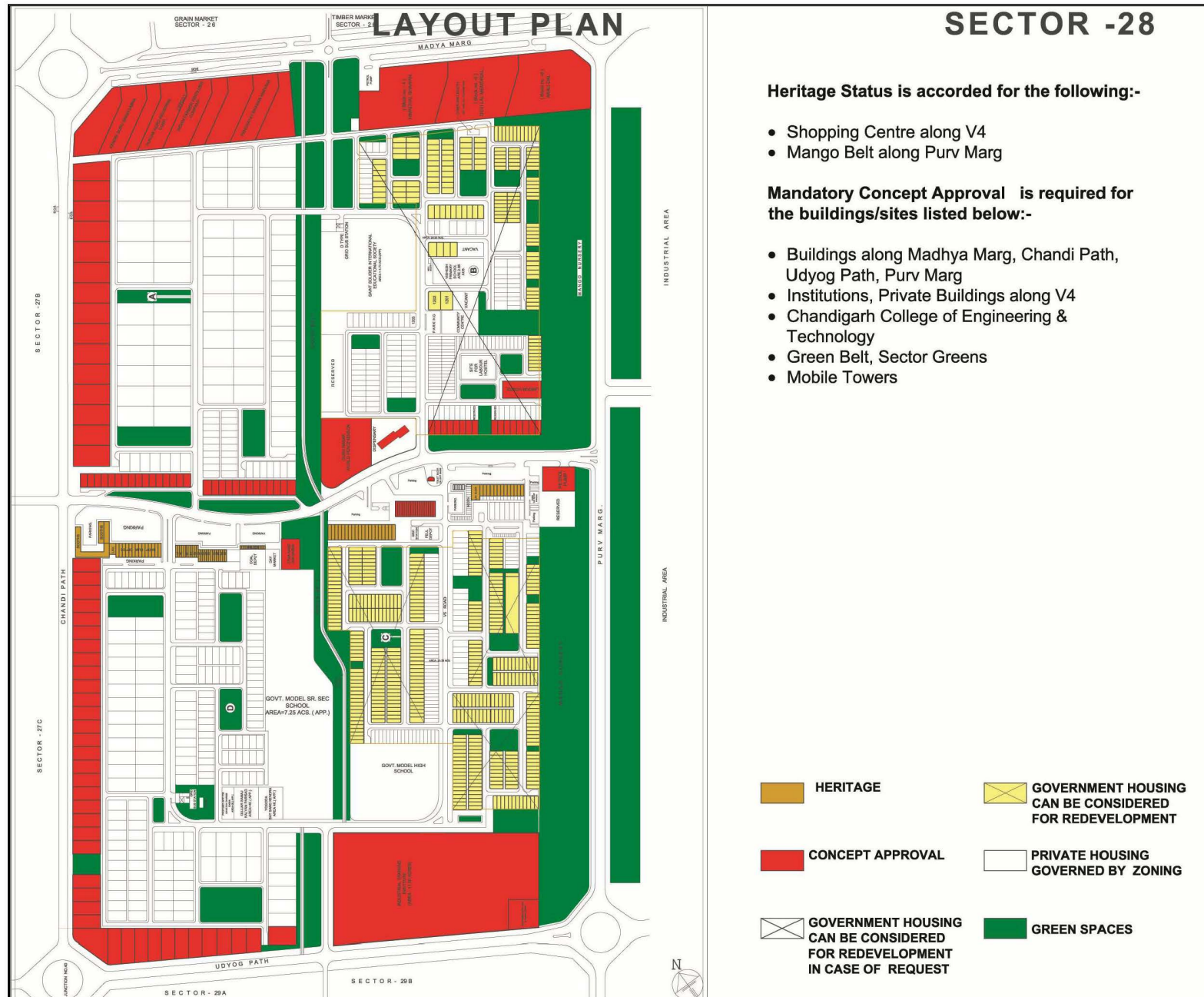
Mandatory Concept Approval is required for the **Buildings/Sites** listed below:-

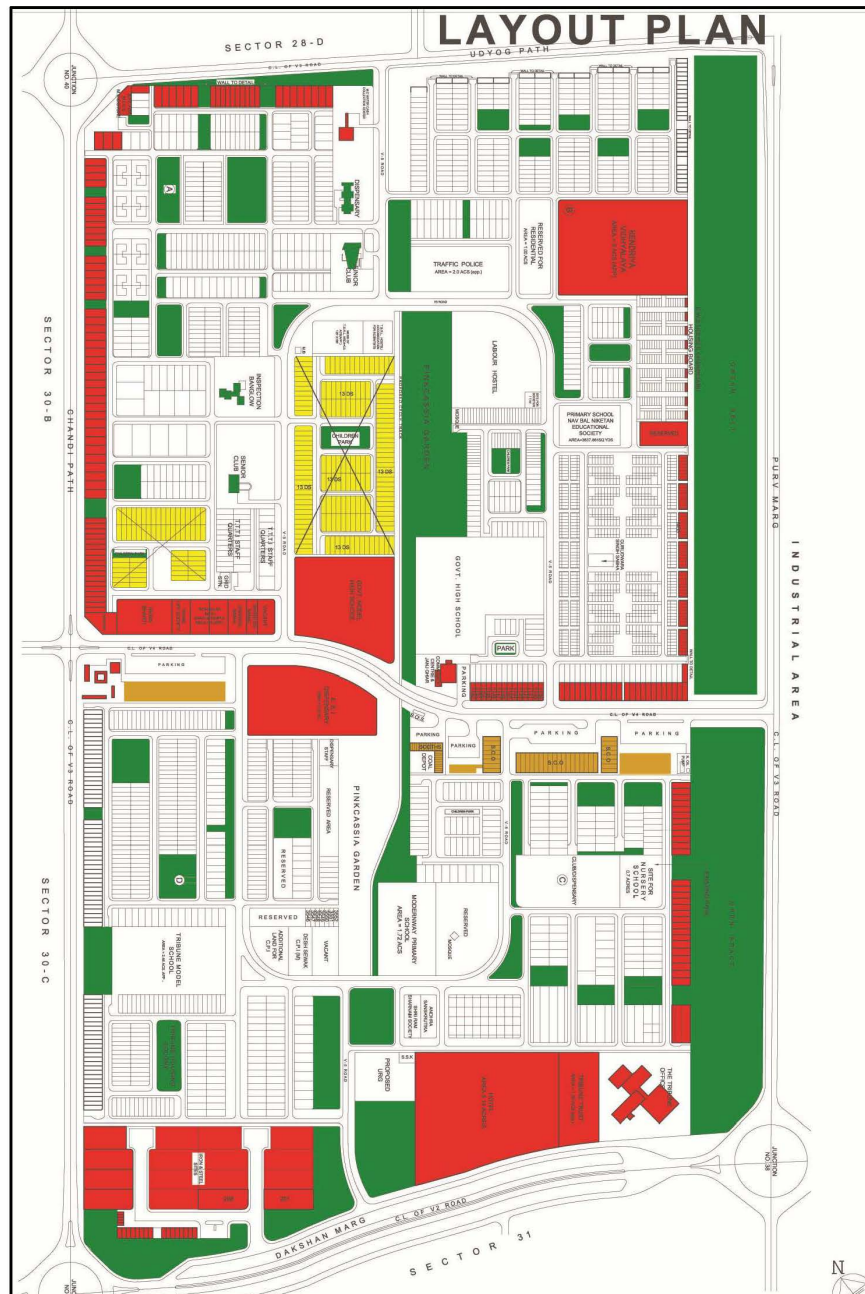
- Institutional Buildings along Dakshin Marg
- Panjab University Extension
- Housing along Pashim Marg
- Sector Greens
- Mobile Towers

 **CONCEPT APPROVAL**









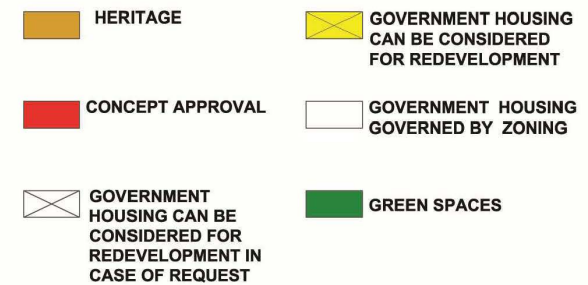
SECTOR -29

Heritage Status is accorded for the following:-

- Shopping Centre along V4
- Mango Belt along Purv Marg on both sides

Mandatory Concept Approval is required for the Buildings/Sites listed below:-

- All buildings along Dakshin Marg, Chandi Path, Udyog Path, Purv Marg and V4
- Green Belt, Sector Greens
- Mobile Towers



EDICT OF CHANDIGARH

This Edict of Chandigarh was prescribed by Mon Le Corbusier, the planner of Chandigarh for its citizens to follow in future.

The objective of this edict is to enlighten the present and future citizens of Chandigarh about the basic concepts of planning of the city so that they become its guardians and save it from whims of individuals. This edict sets out the following basic ideas underlying the planning of the city.

Human Scale

The city of Chandigarh is planned to human scale. It puts in touch with the infinite cosmos and nature. It provides us with places and buildings for all human activities in which the citizens can live a full and harmonious life. Here the radiance of nature and heart are within our reach.

Sectors

The city is composed of sectors. Each sector is ($\frac{1}{2}$ mile x $\frac{3}{4}$ mile) 800 meters x 1200 meters enclosed by roads allocated to fast mechanized transport and sealed to direct access from the houses.

Each sector caters for the daily needs of its inhabitants which vary from 5000 to 25000 and has a green strip oriented longitudinally stretching centrally along the sector in the direction of the mountains. The green strip should stay un-interrupted of the mountains. The green strip should stay un-interrupted and accommodate schools, sports, walks and recreational facilities for the sector. Vehicular traffic is completely forbidden in the green strips where tranquility shall reign and the curse of noises shall not penetrate.

Roads

The roads of the city are classified into seven categories known as systems of 7 Vs as below:

- V-1 Fast roads connecting Chandigarh to other towns.
- V-2 Arterial roads.
- V-3 Fast vehicular sector dividing roads.
- V-4 Meandering shopping streets.
- V-5 Sector circulation roads.
- V-6 Access roads to houses.
- V-7 Foot paths and cycle tracks.

Buses will only ply on V-1, V-2, V-3 and V-4 roads. A wall shall seal the V-3 roads from the sector.

Areas of special Architectural interest.

Certain areas of Chandigarh are of special architectural interest where harmonized and unified composition of building is aimed at. Absolute architectural and zoning control should remain operative. Along V-2 central (Dual carriage-ways, Madhya Marg and Uttar Marg where sky-line heights, character and architecture of buildings as planned shall not be altered. No building shall be constructed north of the Capitol Complex. Along V-2 beyond dual carriage way, areas are reserved for cultural institutions only and shall never have any residential buildings.

City Centre.

The central plaza in Sector-17 was designated by Le Corbusier as “Pedestrians Paradise”. No vehicular traffic will be permitted in the plaza.

Industrial Area

Only such industries as are powered by electricity would be permitted in the Industrial Areas so that atmosphere is saved from pollution.

The Lake

The lake is a gift of the creators of Chandigarh to the citizens to be at one with nature, away from the hubbub of city life. There shall be no commercial exploitation of the lake and its environment and its tranquility shall be guaranteed by banning noises.

Landscaping

The landscaping of this city bases on careful observation of the vegetation of India. Selected ornamental trees, shrubs and climbers have been planted according of colour schemes to beautify it. In future planting and replacement, these principles must be kept in view. There should be no haphazard replacement so that the avenues retain their harmony and beauty. The Leisure Valley, the Rajindra Park and other parks shall be developed as parks only and no building other than already planned shall be permitted.

No Personal Statue Be Erected

The age of personal statues is gone. No personal statues shall be erected in the city or parks of Chandigarh. The city is planned to breathe the new sublimated spirit of art. Commemoration of persons shall be confined to suitably placed bronze plaques. **Truthfulness of Building Materials to be Maintained.** The truthfulness of materials of constructions, concrete, bricks and stone shall be maintained in all buildings and constructed or to be constructed.

“The seed of Chandigarh is well sown. It is for the citizens to see that the tree flourishes”.
Mon Le Corbusier

THE CITY'S

UNDERLYING PHILOSOPHY

has been derived from

Le Corbusier's

THREE

PLANNING PRINCIPLES:

o **SUN**

o **SPACE**

o **VERDURE**

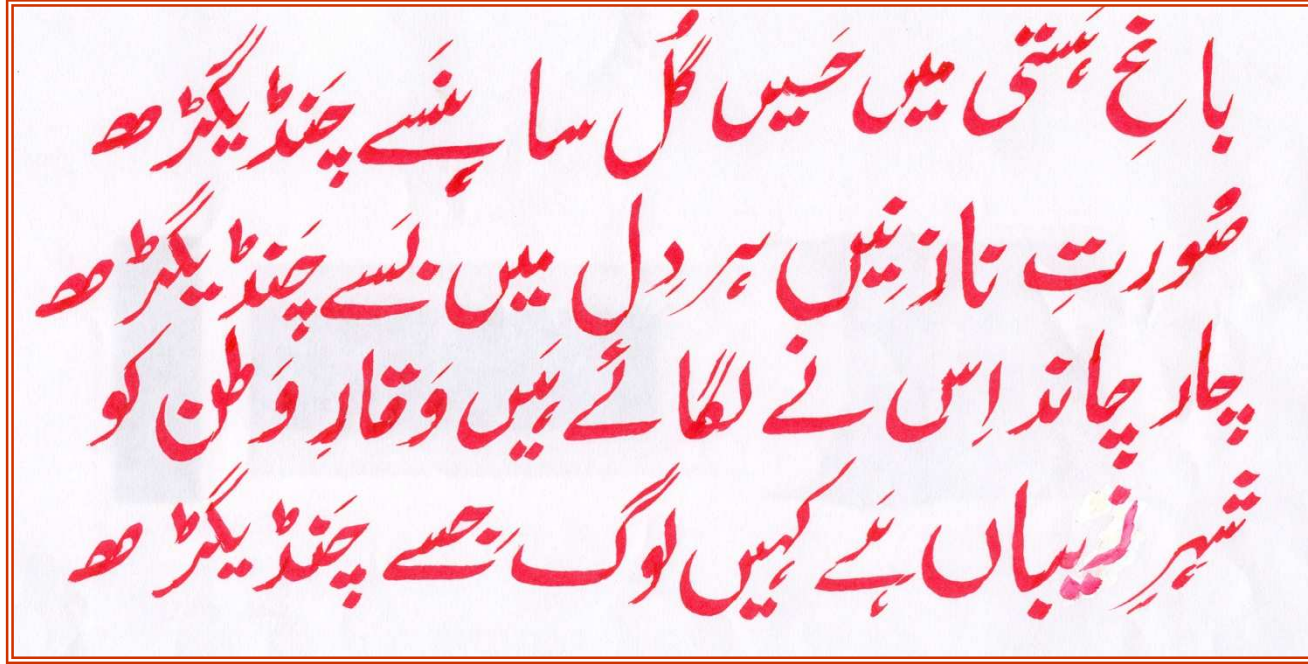


Mixed Media Painting By Dr SS Bhatti

The **THEME Painting** depicts that **Chandigarh** is a **A GLOBAL CITY** of **UNIVERSAL HERITAGE VALUE** ...sprung up from the **Soil of India** as

“The First Flower Of Our Freedom...”

*Bagh-i-hasti mein haseen gul sa hansei Chandigarh
Soorat-i-naazeen har dil mein basei Chandigarh
Chaar chaand is nei lagaaei hain vaqaar-i-watan ko
Shaihr-i-zeibaa hai kahein log jisei Chandigarh*



*Chandigarh blooms in Life's Garden like a Beautiful Flower
As a pampered Beauty dwells Chandigarh in every soul
It has enhanced the country's glory manifold
What people call Chandigarh is, indeed, the City Beautiful*

*Hai tamaddun kee haseen rooh'imaarat iskee
Dil ko ehshaas-i-amiree de sakhaavat iskee
Shaihr-i-zeibaan hai viraasat tamaam aabaadi kee
Farz banta hai karein mil kei hifaazat iskee*

ہے تمدن کی حسین روح عمارت اس کی
دل کو احساس امیری دے سخاوت اس کی
شہر زیبیاں ہے وراثت تمام آبادی کی
فرض بنتا ہے کریں مل کے حفاظت اس کی

**Its very building is the beautiful Soul of Urbanity
Its generosity makes the heart feel a touch of wealth
City Beautiful is the Heritage of entire Humanity
It's our collective duty to protect its aesthetic health**

AN
ODE
TO
CHANDIGARH

“ The City Beautiful ”

Planned with Sun, Space, and Greenery
Chandigarh is Modernism's Quintessence
Upraised by humans, built with machinery
City has a unique planning significance
Sunny is Chandigarh's temperament
And its heart is extremely spacious
It's the brightest star in the firmament
Of Architecture at its most gracious
Corbusier, Jeanneret, Fry, and Drew
Were among the greatest of the century
Of Architects they formed a sagely crew
Their wisdom created with ethical integrity
Chandigarh: the most glorious in human history
An icon of many-layered creative mystery

CHAPTER-I

BACKGROUND

Through a letter dated 15th February, 2010, the Union Home Minister at the instance of the Prime Minister asked for the committee of experts to be constituted to examine both the original concept of the city as well as how the heritage buildings of Chandigarh should be protected, preserved and maintained and in this background, how the problems arising out of the expansion of the city of Chandigarh should be dealt with. In the letter, a reference was made to the vision of Pandit Jawahar Lal Nehru, Le Corbusier as also to the Secretariat and the High Court and to the non-completion of the Capitol Complex. In the letter, the names of the experts and other persons who could be included in the Committee were asked to be sent to the Home Ministry.

The letter is enclosed herewith and marked as **Annexure “A”**.

1.1 In response, through the letter of 8th March, 2010, names of persons who could be included in the Committee were sent to the Home Ministry.

1.2 The letter carrying names of persons is enclosed herewith and marked as **Annexure “B”**.

2. **Constitution of the Expert Committee:**

2.1 Through letter dated 31st May, 2010, the Home Ministry was informed that an Expert Committee for the purpose was constituted to look at both the original concept of the city, as well

as the maintenance of the important public buildings in Chandigarh.

2.2 The Expert Committee was to be headed by the Administrator, UT, Chandigarh, with the Adviser to the Administrator as its Member Secretary. Copy of the constitution of Expert Committee is enclosed as **Annexure “C”**.

2.3 The Members of the Committee included nominees of the Ministry of Culture, Ministry of Urban Development, Ministry of Home Affairs, Dr. S.S. Bhatti (Retd), Chandigarh College of Architecture, Shri Raj Rewal, Architect, Smt. Renu Saigal, former Chief Architect, Department of Urban Planning, Chandigarh Administration, Ms. Madhu Sarin, Architect-cum-Development Planner, Mrs. Chand Nehru, 71, Sector-9, Chandigarh, Shri Jai Singh Gill, IAS (Retd.), Punjab State Electricity Regulatory Commission, Prof. Manoj Datta, Director, PEC, University of Technology, Chandigarh, and Dr. B.N. Goswamy, Art Historian.

2.4 The Chandigarh Administration co-opted Shri M.N. Sharma, Chief Architect, UT (Retd.) in the Committee to make use of his vast experience and concern for the city.

3. **Constitution of Sub-Committees:**

3.1 In the first meeting of the Expert Committee held on 20th June, 2010 a decision to constitute four sub committees was taken.

3.2 The First Sub Committee consisted of the Chief Architect, Chandigarh, Dr. S.S. Bhatti, Smt. Renu Saigal and

Shri M.N. Sharma. This Committee was asked to identify Government buildings requiring conservation in order of priority, methods of rectifying the changes made to the heritage buildings and suggest methods and means to be adopted to achieve the objectives for which the Expert Committee was constituted.

3.3 The Second Sub Committee consisted of the Chief Architect, Chandigarh, Dr. B.N. Goswamy, Smt. Chand Nehru and Shri Jai Singh Gill. It was asked to identify private buildings and precincts which could be considered as heritage buildings.

3.4 The Third Sub Committee consisted of Shri P. Srivastava, Additional Director General, Archaeological Survey of India, Chief Architect, Chandigarh and Ms. Madhu Sarin. It was asked to draft conservation bye-laws for ensuring proper up-keep, maintenance and management of such identified buildings and their precincts.

3.5 The Fourth Committee consisted of Chief Architect, Chandigarh, Prof. Manoj Dutta and Chief Engineer Housing Board. It was asked to suggest how the heritage buildings could be maintained and how the problems of the structures built with concrete, bricks, etc. could be solved.

4. **Work done by the Sub Committees:**

4.1 The Sub Committees discussed the problems and their solutions with others concerned with the heritage buildings. They visited the heritage buildings and discussed their findings in their meetings.

- 4.2 They discussed their findings with the Members of the Expert Committee in meetings held on 20th July, 2010, 15th December, 2010, and 3rd February, 2011.
- 4.3 The First, the Second and the Fourth Sub Committees prepared their reports and submitted the same to the Expert Committee.
- 4.4 The Third Sub Committee is to deal with regulatory framework on preserving the heritage. Its report is not finalized. It has been decided that after the decisions on this Report have been taken by the Government of India (GOI), the report of the Third Sub Committee shall be finalized and submitted to the Government for approval.
- 4.5 The copies of the Reports of the First and Second Sub Committees have been compiled into one report and marked as **Annexure-D** and the Report of the Fourth Committee is marked as **Annexure-E**.
5. **Consideration of Reports of the Sub Committees in the meeting of the Members of the Advisory Council of the Administrator and the Expert Committee:**
- 5.1 It was decided that the Reports of the Sub Committees should be presented to the Members of the Advisory Council of the Administrator and the Members of the Expert Committee and then a Report of the Expert Committee should be prepared in the light of the views expressed by all concerned and sent to the concerned authorities.
- 5.2 For this purpose, a joint meeting of the Members of the Advisory Council and the Expert Committee was held on 27th of February,

2011. In the meeting, the Reports were presented by the Chairpersons of the three Sub Committees. Copies of the Reports were made available to the Members of the two bodies in advance to facilitate examination of the same.

5.3 The minutes of the said meeting are enclosed herewith and marked as **Annexure “F”**.

6. **In brief and in general, points highlighted in the discussions were as follows:**

- A. A holistic approach towards the protection, preservation, and maintenance of the heritage buildings and unique characteristic of the city should be adopted.
- B. Philosophy plans and approach envisioned by Pandit Jawahar Lal Nehru with regard to the new city of Chandigarh should not be lost sight of and kept in mind while taking the steps for the above purposes.
- C. The philosophy, plans, and designs propounded and used by Le Corbusier, while building the city, should not be allowed to be affected and should be kept in mind while protecting, preserving, maintaining and expanding heritage structures and the city.
- D. Le Corbusier wanted the city to have plenty of sun, fresh air and greenery and to enjoy appropriate utilization of space. These concepts are highly relevant for proper development of the city and should be adopted in a meticulous manner.
- E. The city helps to understand the new concepts with regard to urbanization which is taking place in the country and the world.

These concepts and ideas should be used in an authentic and proper manner.

- F. The original plans and designs should not be given up.
- G. The regular upkeep of the city should be done in the light of the norms embodied in the Edict of Chandigarh (as mentioned on Page 142-143 of Sub Committee-I Report).
- H. The cleaning of the buildings of the Capitol Complex should be carried out and completed without delays.
- I. Development of the city should be done in a planned manner. A comprehensive plan for the development of the city should be prepared.
- J. The city of Chandigarh is an Administrative city. This fact should always be kept in mind while using the territory and land available with it.
- K. The city needs to tackle the problems of traffic congestion. This can be done by having underground railway system. It cannot have over bridges as provided in other cities.
- L. The city needs parking places which can also be built underground and at specific places.
- M. The city needs marketing, medical and educational facilities for its residents. These should be built in an imaginative manner.
- N. Slums should not be allowed to be developed.

- O. The city caters to the demands of the Administrative machineries of the GOI, Union Territory of Chandigarh, Punjab and Haryana. These demands should be met on priority basis.
- P. The city was expected to have a green belt of 16 kilometers around it, for which a law was made. The law was called the Punjab New Capital (Periphery) Control Act 1952.
- Q. Two cities, one known as Mohali and the other as Panchkula on the two sides of Chandigarh have developed in the green belt area over the last five decades. These developed cities have affected the original character of Chandigarh and its scope for further development. Some steps need be taken to overcome this difficulty without affecting the public in t
- R. Three cities and allowing the cities to develop further. An Interstate Regional Plan needs to be prepared and implemented. The Inter State Regional Plan should determine the individual plans of the towns falling in the respective states.
- S. After the approval of the Inter State Regional Plan through an appropriate mechanism involving the Governments of Union Territory of Chandigarh, Punjab, Haryana and the Union, it can be implemented, for which legal frame work can be put in place.
- T. Periodically, the developments in the three cities can be monitored to ensure quality and compliance.

CHAPTER-II

SPECIFIC POINTS RECOMMENDED FOR DECISION AND ACTION BY EXPERT COMMITTEE

IN LIGHT OF THE BACKGROUND DISCUSSED IN CHAPTER - I, THE RECOMMENDATIONS OF THE EXPERT COMMITTEE ARE AS FOLLOWS

These are divided into the following categories:

- 7.1 Planning (based on the report of Sub Committee-I)
- 7.2 Urban Design (based on the report of Sub Committee-I)
- 7.3 Architecture (based on the report of Sub Committee-I)
- 7.4 Landscape (based on the report of Sub Committee-I)
- 7.5 Art (based on the report of Sub Committee-I)
- 7.6 Private Buildings (based on the report of Sub Committee-II)

Restoration & Preservation of Building Materials (based on the report of Sub Committee-IV refer 7.3, 2.2.5. Page No. 38-40).

Regulations (based on the report of Sub Committee-III) to be drawn after a view has been taken by the GOI on this Expert Committee Report and other deliberations.

7.1 PLANNING

The Plan - Original concept

The original concept of the Plan based on four main city functions enunciated as Living, Working, Care of Body & Spirit and Circulation should be adhered to.

7.1.1 The salient features of the original Plan include the following:

- Neighbourhood Concept
- Green City Concept
- System of V7s
- Hierarchical Distribution of Population
- Low-Rise Development.

7.1.2 Existing ground realities:

City still retains the integrity of the original concepts

The above mentioned planning concepts have been largely responsible for making Chandigarh one of the most liveable cities of India. The most important fact about it is that so far it has retained the integrity of its original concept of holistic design, which should be reason enough for us not let it go the way of other cities, from the “City Beautiful” to a shanty town like other Indian urban settlements - characterised by uncontrolled, and unplanned growth not commensurate with their infrastructures.

7.1.3 Pressures on the city and the need for regulating its development:

The city today is under tremendous pressure owing to manifold increase of population, traffic-congestion, stress on infrastructure, building violations, limited availability of land, all of which have begun to adversely affect the original concepts, considered sacrosanct.

7.1.4 City Level Recommendations:

7.1.4.1 Retaining the essence of the original Plan

There is a general consensus that efforts should be directed to retain the essence of the original Plan of the city and as such the following is recommended:

- a. Chandigarh shall remain by and large an Administrative City.
- b. Chandigarh shall retain the essential planning postulates of Sun, Space, and Verdure.
- c. Chandigarh shall be a Low-Rise City.
- d. Chandigarh shall be a Green City.

7.1.4.2 **According Heritage Status** to the planning concepts and title of “Corbusian Chandigarh to the First Phase of the City”. Heritage status to be accorded to Sectors 1 to 30 for fulfillment of the concepts of the city.

7.1.4.3 **Heritage Status to Sector 22:**

SECTOR 22, built as the first typical sector on the concept of a neighbourhood unit, should be preserved in terms of land use, planning concept, urban design. The very success of this neighbourhood as an experimental prototype is reason enough for recommending the same. Its revitalization, if it becomes necessary, should be undertaken comprehensively according to the recommendations of the Chandigarh Heritage Committee in the spirit of the recommendations made by the Sub Committee-I in its Report on Page 10.

7.1.4.4 **Heritage Status to Sector 7 & 8:**

Sector 7 & 8, as a tribute to the first architect Albert Mayer, who was commissioned to prepare the initial Plan for the city, which is tripartite in design as against Le Corbusier’s standard/typical Sector which is quadripartite, should be preserved as an example of alternative neighborhood planning concept in terms of land use, urban design, etc.

Recommendation

The concept of a neighbourhood unit should be preserved in terms of broad layout, land use, planning concept, urban design, including the original Shopping Centre. Its revitalization, if it becomes necessary, should be undertaken comprehensively according to the recommendations of the Chandigarh Heritage

Committee in the spirit of the recommendations made by the Sub Committee-I in its Report on Page 11-12.

7.1.4.5 Height restrictions already prescribed should continue:

The city has a high momentum for growth, but no scope for horizontal expansion since its physical boundaries are constrained within its 114 square kilometres due to its landlocked situation and its planned sectoral grids are nearly fully built. If the city is left unregulated the market forces and the real estate prices would tempt replacing the existing low rise buildings with high-rise buildings to gain more covered area/Floor Area Ratio (FAR). It is pertinent to mention that the neighbouring towns are permitting this change and barring a few areas, there are no height restrictions at all which however needs regulation.

In order to maintain low rise character of the city, the public, government and commercial buildings should continue to observe the height-restrictions prescribed in the Architectural controls and zoning regulations.

7.1.4.6 No further enhancement in FAR:

The original plan, architectural controls and building rules ensured that each individual gets adequate share of Sun, Space, and Verdure for good quality of life and healthy living. Many changes have been permitted over the years which have impacted the urbanscape due to enhanced ground coverage and FAR, which are amongst the highest in the country. Doing away with the architectural control/frame control, and allowing changes such as

additional covered area outside the frame in the rear of the houses, flexibility in size and shape of windows, balconies beyond the frame, in the front and rear of houses etc. have done more harm than good to the city's Built-Environment.

On the one hand, no further enhancement of ground coverage and FAR should be allowed to the residential houses of the city and, on the other, the possibility of reversing the notification dated 16.10.2008 be seriously examined for prompt and decisive action.

7.1.4.7 Supplementing the V7 with an Efficient Public Transport System:

The V7 hierarchical circulation system of the city was planned to cater to the requirements of a maximum of 5 lakh population. Wide roads and the grid iron pattern worked very efficiently for a number of decades.

However, the city roads and roundabouts are facing traffic congestion due to the following reasons:

- a. Manifold increase in population.
- b. High dependence on personalized modes of transport.
- c. Highest per capita car ownership in the country.
- d. Limitation to increase the carrying capacity of the existing road infrastructure.
- e. Large intercity vehicular movement.
- f. Large scale urbanization by the neighbouring States in the vicinity of Chandigarh. The vehicular density and inter city

traffic is likely to increase further due to additional towns proposed/being implemented by the neighbouring States.

Recommendations

An efficient public transport system is the need of the hour. It is pertinent to mention that the Chandigarh Administration has already taken pro-active steps in this regard, and a Comprehensive Mobility Plan has been got prepared for the Chandigarh Urban Complex which has taken into consideration the future requirements of the city and of the towns of Punjab and Haryana as well.

The proposed Mass Rapid Transport System is a multi modal system which includes BRTS and METRO to facilitate both intercity and intra city movement in the region. The proposal has been worked out in close coordination with the neighbouring States of Punjab and Haryana. The total length of the proposed Metro is 64.3 kms. and that of the BRT is 145.2 kms. Out of total length of 64.3 kms. of Metro, 44.8 falls in Chandigarh, 6.5 kms. in Panchkula, 13 kms. in Mohali. These lengths have been suggested for implementation in various phases. As regards Metro corridors, 44.8 kms. of Metro is to be implemented in the Phase-I and 19.5 kms. of Metro in Phase-II.

It is brought out that in view of the low-rise and green character of Chandigarh, a conscious decision has been taken by the Chandigarh Administration to have major portion of the proposed METRO within the city go underground so that it does not dominate the environment.

The Chandigarh Administration has now taken up the matter with DMRC for preparation of the Detailed Project Report for the Metro. To facilitate better connectivity with Mohali and Panchkula, additional linkages are being proposed and the existing ones are being upgraded.

7.1.4.8. Execution of the pedestrian footpaths and cycle tracks:

Pedestrian Footpaths and Cycle Tracks formed an integral part of the V7 concept of the Circulation system and were intended to pass through green belts in the NE-SW direction and sector greens, interconnected sector to sector through underpasses beneath intercepting roads to facilitate seamless connectivity. However, the same has not been implemented fully.

Recommendation

There is need to pedestrianise the city by strengthening the pedestrian and cycle network and make it more user friendly by regular upkeep and provision of adequate street furniture, green cover, lighting arrangements etc.

7.1.4.9 Augmenting parking spaces in the city:

The city's phenomenal increase in vehicles on the one hand and the non availability of adequate parking lots has resulted in haphazard parking along the roads, on road berms and pavements and even in the open spaces meant for parks. The problem is severe in the high density sectors having Marla row housing, in the neighbourhood shopping centre, the City Centre and the Industrial Area.

Recommendations

In order not to compromise with the City's open areas and parks which give the city its character, for making provisions of parking, the following is proposed:

- a. Extensive use of basements is to be allowed for provisions of Parking in all government and private buildings.
- b. Construction of underground community parking lots within convenient distance; these can be built under the parks without compromising on the city greens.
- c. Accommodating more parking spaces within the front setback of Marla houses by doing away with the regulation of the front boundary wall.
- d. Reducing car ownership per household by allowing registration of new vehicles subject to meeting the requirement of parking space.
- e. Motivating residents to use public transport system so as to minimize the need for parking.

7.1.4.10. Earmarking play grounds for children:

The developed city parks are not permitted to be used as playgrounds due to the disturbance it causes to the residents and senior citizens and also affects the maintenance. There is persistent demand for earmarking playgrounds within the neighbourhood.

Recommendation

Designating pockets of open spaces in each sector for playgrounds shall be examined. Modalities of opening up the playgrounds of Government schools to children to enable them to use the school playgrounds and infrastructure to play games such

as cricket, hockey, basket ball etc during off school hours shall be worked out.

7.1.4.11. Development of Villages:

The Chandigarh Administration has been constantly upgrading the infrastructure of the villages to bring them at par with the urban areas of the city by providing street lights, concrete roads, covering of open drains, provision of sewerage system etc.

There is however strong need to regulate the development outside the lal dora and to ensure that the built environment of the villages is structurally safe and fit for human habitation.

The incompatible land uses such as godowns, noise and traffic generating commercial and industrial activity is proving detrimental to the living environment of the villages and requires to be regulated in the Master Plan under preparation.

Recommendation

The Chandigarh Administration has taken stock of ground realities and is preparing building rules and regulations which are practical and implementable to ensure good quality of life in the villages on one hand and ensure structural stability, adequate air, light and ventilation on the other. These regulations are required to be notified.

7.1.4.12. Slum rehabilitation:

Slums have come up in the city much against the vision of Pandit Jawahar Lal Nehru to provide good quality of life for the 'poorest of the poor'. However, due to lack of affordable housing,

migrants have squatted in slums in various parts of the city. With a view to uplift the quality of life of the slum dwellers, the Chandigarh Administration has since the 70's been executing various rehabilitation schemes and upgrading infrastructure in the existing colonies.

The city has been awarded the National JNNURM Award for the year 2009 and 2010 for having earmarked nearly 350 acres of land for providing housing to the slum dwellers. However, there is still a lot of gap between the requirement and the supply, hence the problem of slums persists.

Recommendation

Chandigarh is continuing in its pursuit of providing housing for the urban poor. However, in view of the non-availability of vacant land in the city for constructing more housing for the urban poor, the Chandigarh Administration on the directions of the Administrator is now proposing to make it mandatory for all private houses and industrial plots of one Kanal and above who engage servants / labour to make available suitable accommodation for them within their premises.

Provision for EWS housing will also be mandated while redensifying identified pockets of Government Housing as well of private housing. To achieve the Government of India's mandate of Slum Free Cities, it is however felt that the efforts of Chandigarh Administration alone will not suffice and proactive steps towards providing affordable houses for those working in

Mohali and Panchkula should also be made by the States of Punjab and Haryana.

7.1.4.13. Master Plan for Chandigarh 2031 to ensure regulated development of the city:

In order to ensure that the city continues to offer its residents a high quality of life, it has to be a dynamic, moving and living city. It has to systematically plan for the future, as such the Chandigarh Administration has undertaken work on the Master Plan for Chandigarh 2031. While preparing the Master Plan, it shall be ensured that the City's inherent character of a low rise, low density, green and spacious administrative town is not compromised. A public participatory approach has already been adopted by involving the residents and various stakeholders of the city. The plan will be ready shortly subsequent to which it will be put up for public opinion and after incorporating the feedback, the same will be forwarded to the Coordination Committee of Govt for its approval.

Periphery of Chandigarh:

To safeguard the city from unplanned and unregulated growth, an 8-kilometre stretch, which was later extended to 16 kilometres around the urban area, was earmarked as green and agricultural area. In 1966, the area under Periphery was subdivided between the states of Punjab, Haryana and UT Chandigarh, with the city getting only a limited 3% of the area. However, in the early 1970s, the States of Punjab and Haryana built townships of Mohali and Panchkula respectively in the vicinity of Chandigarh.

The peripheral areas of Punjab and Haryana have witnessed large-scale urbanisation, both planned and unplanned, which have affected the concept of the Master Plan and put pressures on city's infrastructure. The city is no longer a stand alone entity that it was planned to be. It is now part of a large urban agglomeration with townships physically interlinked and as such requires close coordination with and support from the neighbouring states of Punjab and Haryana for its sustainability.

In view of the City's limitation of land, its land locked position, and the concern to safeguard the city's original concept, there is need to ensure that the city is not pressurized beyond its holding capacity and the pressure be dissipated in a planned manner onto other growth centres preferably at a distance from the city rather than concentrating in the vicinity of Chandigarh.

Both the States have extensive plans of further urbanisation in this peripheral area and have either already notified or are in the process of notifying the master plans of additional townships within the 16 km periphery. Execution of these plans will result in consuming nearly 80% of the controlled area of 16 kms. in violation of the Punjab New Capital (Periphery) Control Act, 1952. Population in the periphery continues to grow at an alarming pace, surpassing even that of Chandigarh, as has become evident from the census of 2011. The total projected population within the 10 kms periphery area would be approx. 80 lacs by 2031 in the 12 towns being planned around Chandigarh. These plans have been prepared by the respective States without coordination with the Union Territory of Chandigarh.

7.1.4.14 Earlier attempts for Coordinated Development:

It is pertinent to mention that need for the Inter State Regional Plan to ensure coordinated development has been felt ever since 1971.

In the year 1975, a high level Co-ordination Committee headed by the Secretary to Government of India, Ministry of Urban Affairs was constituted by the GOI to monitor the growth of Chandigarh and the urban centers coming up in its neighborhood and to ensure balanced development of the region falling within the influence zone of Chandigarh.

In the year 1977, on the directions of the Co-ordination Committee, a plan for Chandigarh Urban Complex comprising an area of approximately 330 sq.km and for a population of 12.5 lacs was prepared. This includes the developments and planning of Mohali and Panchkula townships.

In the year 1984, the Town and Country Planning Organization, GOI created the Chandigarh Interstate Capital Region (CISCR), 2001 for the total area measuring 2431 sq. km.

In the year 1999, E.F.N Ribeiro, Retired Chief Town Planner was appointed by the Chandigarh Administration as Consultant for the preparation of Chandigarh Interstate Metropolitan Region Plan, 2021 (CISMeR). The plan aimed at dissipating the pressure away from Chandigarh rather than concentrate around Chandigarh and as such the planning area was proposed to be extended over a larger area of 50 kms. all around the administrative boundary of

Chandigarh. The same was presented in the 14th Meeting of the MOUD, GOI Co-ordination Committee held on 7th July, 2000 wherein it was decided to obtain comments from the concerned State Government and Chandigarh U.T. Administration. The comments of Punjab & Haryana governments were obtained and since there was no consensus on the proposals of CISMER plan, the same was not finalized.

Now again in 2010, the Government of India through the Coordination Committee has given directions to the three States of Punjab, Haryana and UT Chandigarh to coordinate and prepare the Inter State Regional Plan in a time bound manner.

Recommendation

In order to ensure the successful preparation, implementation and enforcement of the Interstate Regional Plan, a legal mechanism needs to be put in place as the Chandigarh Administration does not have any jurisdiction to enforce or regulate any kind of development in the periphery of Chandigarh. The GOI may consider the feasibility of enacting a proper legislation for regulated development in the periphery on the pattern of National Capital Regional Planning Board constituted for the capital city of Delhi. The delineation of the area of the Regional Plan should ensure that the pressure on Chandigarh is diverted beyond the 16 km periphery area around Chandigarh.

Bypass around Chandigarh:

The proposed developments around Chandigarh will generate extensive intercity vehicular movements which will further congest the existing roads of the City Beautiful. A bypass road around

Chandigarh is a necessity, however, the city does not have enough land to accommodate the same. A proposal needs to be worked out in consultation with the support of the States of Punjab and Haryana on top priority to construct a bypass road that keeps non Chandigarh destined traffic away from the city thereby ensuring better quality of life and air in the city and also reducing pressure on the city's already congested roads.

7.1.4.15. City Development Plan:

The Chandigarh Municipal Corporation has prepared the City Development Plan to upgrade its infrastructure to not only meet the existing deficiencies in water supply, electricity, storm water, sewage disposal but also to ensure the future sustainability of the city.

The Municipal Corporation is also gearing to supply tertiary water throughout the city for irrigation, car washing etc so as to reduce the consumption of potable drinking water. Decentralized sewerage treatment plants are also being recommended for large campuses so that these campuses can reuse treated water for non potable purposes.

7.1.4.16. Provision of Rain Water Harvesting:

To ensure long term sustainability of water resources in the city, Chandigarh Administration has initiated steps by mandating ground water recharge in public buildings and compulsory rain water harvesting for all plots larger than one Kanal and above in the city. Supply of tertiary water is also being augmented by the Municipal Corporation which is laying dual pipe lines from the existing sewerage treatment plants.

The proposal of mandating decentralised Sewerage Treatment Plant for all large size campuses is also being examined to facilitate use of tertiary water in place of potable water for irrigation, car washing etc and thus reduce the requirement of potable water. Water efficient fixtures and fittings are other measures recommended in this regard.

7.1.4.17. **Solar City:**

Chandigarh having no power generation of its own is totally dependent on the neighbouring states and the Centre for its power needs. The city has been identified by the Ministry of Non-Renewal Energy, Govt. of India to be one of the nodal cities to be developed as a '**SOLAR CITY**' under the National Mission on Solar Energy, India. The Chandigarh Administration has started the process of implementing the Solar City plan through TERI. Initially the city shall have 40MW for solar PV's base power plant which shall act as a backup for the power needs of the city in case of total grid failure.

The Administration has also already prescribed the use of solar water heating systems in all the projects/ buildings larger than one kanal in size. The Administration is also using 'Solar Passive' measures through intelligent modes to reduce energy needs and would promote grid interactive solar generation in all the major projects in the city.

7.2 URBAN DESIGN

A city, *as a social organism and a work of art*, is primarily the creation of three disciplines: Town Plan; Architecture; and Landscape. When they come alive as an organic whole they give birth to Urban Design: *Architecture of the City*, with its distinct urban form and psycho-social imageability.

Chandigarh thus stands apart from other cities by virtue of its order, and harmony of the Built-Environment with rich Landscape Design and carefully-planned arboriculture or roadside tree-plantation, along with other stated factors.

Recommendations

The Urban Design of the important avenues of the City should be preserved as below.

7.2.1. **V2s:**

The Jan Marg, a ceremonial road leading to the Capitol Complex, Madhya Marg linking the Railway Station with the City Centre, Panjab University and the PGI, and the Uttar Marg which runs parallel to the Capitol Complex, along which are situated the important precincts and edifices, have been sensitively designed from the urban image point of view. However, the so-called need-based changes, concerns for security and violations like painting of brick and concrete surfaces, and un-organised advertisements have created visual blight.

The public and government buildings along these major roads contribute to the urban image of city and need to be strictly regulated and controlled.

Recommendation

There is need to regularly monitor the additions and alterations carried out in the buildings flanking this important V2 arteries. Violations such as defacement of the concrete and brick surfaces of buildings by painting and illegal advertisements should be controlled through proper monitoring and enforcement.

The barricaded Uttar Marg road should be opened up to public movement after the security concerns have been addressed satisfactorily.

7.2.2. V3s:

The inter-sectoral dividing roads have been planned to avoid buildings opening onto them. Buildings along these roads, open spaces, sealing walls, signage, street-furniture, and landscaping contribute to the urban image of the city. The rear of the buildings along these roads is important from the urban-design point of view. Ground realities, however, bring out that violations, need-based relaxations of allowing green-rooms, enhancement of FAR, shifting of setback lines and doing away with the Frame Control and Elevation Control of residential buildings, have grossly impacted the streetscape. Poor maintenance and uncontrolled additions and alterations of Government Housing and encroachments on the open spaces have aggravated the problem manifold.

Recommendation

The approval of concept from the competent authority of the Chandigarh Administration of all the private buildings should be made mandatory before any additions and alterations are undertaken.

7.2.3. V4s:

V4 or the shopping street forms the spine running central within each sector. Along it are located the neighbourhood community facilities and the shopping centres. The privately-owned architecturally-controlled Shops-cum-Flats [SCFs], while ensuring uniformity of the architectural expression, were climate-responsive, ensured cost-effectiveness, mandated use of local building materials, and had pre-determined space for advertisements. However, over the years, many violations and additions/alterations have been done resulting in visual disharmony.

Recommendation

The meandering profile of V4s provide the maximum visibility of urban form and thus needs to be sensitively conserved to retain the City's distinct imageability. Due to change in the shopping patterns, lifestyles, and advanced technologies, there is a persistent demand for change in architectural control. It is proposed that limited uniform changes within the existing frame may be permitted on the request of the owners of the entire shopping complex with the approval of the Competent Authority of the Chandigarh Administration.

**7.2.4. Restoration of Architectural Control/Frame Control:
Recommendation**

Architectural Control/Frame Control be restored as a primary step towards the conservation of this urban complex of Universal Heritage Value.

7.2.5. Advertisement Control Order:

All commercial buildings within the city are governed by architectural controls which stipulate the location of standardized advertisement panels. However, due to increase in commercial activity, the SCFs of the three storied neighborhood shopping centres have been allowed conversion of the upper floors, from flats into offices and shops which has led to the emergence of haphazard and unplanned advertisements contrary to the spirit of the Architectural Control Order.

Recommendation

In view of the commercial activity on the upper floors of the Shop-cum-Offices within the City Centre and the neighbourhood shopping centres as well as other commercial establishments in the city, the Chandigarh Administration has reviewed the Architectural Controls of the commercial buildings and earmarked additional locations for advertisement panels.

The same however need to be enforced in light of the Architectural Control Order. The matter has also been taken up with the Chandigarh Beopar Mandal to sensitise the commercial establishments to remove the unorganized advertisements and to comply with the order in letter and spirit.

7.3. **ARCHITECTURE**

The City's monumental Edifices of the Built-Environment, designed by Le Corbusier and his team of Architects, namely, Pierre Jeanneret, E Maxwell Fry, Jane B. Drew, shall be protected, preserved, and conserved as identified and enlisted here under:

7.3.1. **Architects Old Office in Sector 19:**

The Architects Original Office is located in Sector 19 on the Madhya Marg. It is in this building that the Chandigarh Capital Project, as a daring experiment in Modern Urbanism, was launched in 1950. Designed by Pierre Jeanneret, this is the most innovative building in the city in terms of space concept, use of low-cost materials, and indigenous techniques of construction; above all, its environment-friendly architectural design.

Recommendation

The Architects Original Office should be conserved in its original form and no additions and alterations should be permitted. The campus has two blocks out of which one is being used as Le Corbusier Centre. It is recommended that the second block which is presently in use as Offices of the Chandigarh Administration should be got vacated and put to use as Chandigarh Research & Development Centre. All the archival material pertaining to the city's Planning, Architecture, Urban Design, Landscape, Art, and other related aspects can be preserved/displayed here and made available to scholars, Indian and foreign. The building should be got affiliated with Le Corbusier Foundation in Paris for expanding its database to facilitate higher research.

WORKING – One of the four main functions of the City enunciated in the original plan.

THE CAPITOL COMPLEX

The main area of work vis-a-vis Institute of Governance, and planned by Le Corbusier

- 7.3.2. The symbolic 'head' of the city, set against the backdrop of the Shivalik Hills consists of a group of buildings: the Secretariat, the High Court, the Legislative Assembly, and the Museum of Knowledge.

This Complex also has monuments like the Tower of Shadows, Open Hand and Martyrs Memorial, all built on a monumental scale, and is flanked by Rajendra Park and Sukhna Lake. The architecture of the Capitol Complex, the most representative of Le Corbusier's works, is the embodiment of the spirit of exaltation, power and permanence experienced by Indians on acquiring the prerogative of self-governance after a long and bitter struggle for freedom.

The Capitol Complex was designed as a great pedestrian plaza with motorised traffic confined to sunken trenches. The sculpturesque buildings have earned international recognition and this masterpiece of human creative genius needs to be given 'Heritage Building' status of the first order. The location of the Capitol Complex at the highest point of the city-site and at the foothills with the Shivaliks as the backdrop was a conscious decision underlying the concept of Chandigarh's urban design. The placement of buildings of the Secretariat and the High Court

with the longer facades perpendicular to the hills lent an unobstructed view of the foothills.

It is brought out that Chandigarh was planned as an Administrative town as the Capital of the state of Punjab, and functioned very well as such.

However, subsequent to re-organisation in 1966, with the city being accorded UT status, it had to take on the additional responsibility as the Capital of the states of Punjab and Haryana as well.

Due to this changed geo-political scenario, the buildings of the Capitol Complex, which were designed to accommodate the functional requirement of one Administration, have been sub divided amongst three Administrations – Chandigarh, Punjab and Haryana, which has put great pressure on these buildings.

This has resulted in piecemeal ad hoc need based changes such as covering of verandas, additional sheds, additional glazings etc and has severely impacted the overall ambience of the prestigious Capitol Complex.

In addition, poor maintenance, resulting in seepage and leakage of roof terracing, weathering and poor maintenance of shuttered concrete as well as dumping of garbage within the campus has turned these monuments of modern architecture into eyesores.

The Sub Committee-I has given an exhaustive report on the problems and potential pressures both within and in the peripheral

areas around the Capitol Complex, highlighting the long-term as well as immediate measures required to be taken by the Chandigarh Administration and also by the neighbouring States. The report brings out the following:

The maximum pressure is being felt in the **High Court Building** where a large number of court cases are being handled daily necessitating the need to increase the court rooms from the original 9 to 68 alongwith the construction of ancillary buildings.

Over the years the area behind the main High Court has thus seen increase in the built environment in the form of lawyer's chambers, extension block for court rooms, record room etc. Construction of a multi-utility block, a multi-storeyed parking block and an additional floor over the extension block to accommodate 16 more court rooms is in progress and these buildings are likely to be completed soon.

However despite these additions, there is still a deficit of space which is resulting in overcrowding and poor working conditions for the staff and the record.

This site is completely landlocked and now has no scope for additional buildings. Massive damage to the parasol roof of the main High Court building has been done due to the fixing of and thereafter removal of glazing at the terrace-level. The main pedestrian promenade that connects the High Court with the Legislative Assembly, and was intended to be a ceremonial space at the opening of sessions, is being used for vehicular movement

and parking, though its access is denied to people at large. The use of the pedestrian plaza for parking of vehicles of judges has already damaged it, necessitating the re-carpeting of the concrete flooring.

Internal changes: Renovations in all court-rooms, judges lounge and conference hall for judges, in the form of false ceilings, wall-to-wall wooden dais, air-conditioning and partitions, additions and alterations in the office, conversion of cycle- and scooter-stands and garages into offices and ASD Lab into High Court Museum have been carried out in the main building.

In case of the **Secretariat Building**, the requirement of additional space is being reflected in covering of verandas, additions and alterations in and around the building.

In the **Assembly Building** there are no major external changes. However, internal changes in the material of the flooring, addition of partition-walls to accommodate the legislative functions of Punjab and Haryana, false ceilings in rooms and corridors, renovation of toilets with new materials, and the painting of concrete surfaces has been carried out. Addition of aluminium glazing and wooden panelling in the main foyer vitiates the original concept of undulatory glazing with precast concrete mullions and steel T'-Sections.

The Open Hand Monument

The significance of Open Hand is that it conveys the social message of peace and unity that is "open to give and open to receive." The Open Hand is the city's official emblem. It has been designed in the form of a giant hand made from metal sheets that rotates like a weathercock, indicating the direction of wind. This giant hand is 14 metres high and weighs around 50 tonnes. Poor upkeep and misuse of the intended function, with a telecom tower in the backdrop, have marred the beauty of this work of significant art. Urgent repair is called for and recommended.

Recommendations

Holistic planning to address immediate and future requirements

To enable the Executive, Legislature and the Judiciary of the city to perform efficiently, it has become imperative to take a holistic view of the immediate and future requirements of these three administrative functions. As such both the State Governments of Punjab and Haryana and the Hon'ble High Court have been asked to submit their revised requirements of additional space for the next 50 years so that **holistic planning** can be done rather than preparation of ad hoc proposals. It is pertinent to mention that there is no scope for adding additional buildings within the Capitol Complex and future requirements need to be addressed in an alternative location. The violations such as balcony covering, provision of grills should be put to an end.

- Coordinated approach for security of the complex as a whole needs to be worked out with the latest techniques being used

world over in such high security zones while ensuring that the requirements are met without compromising on the overall ambience of the campus.

- The sanctity of the original plan should be maintained. No additional buildings should be constructed other than those in the original plan.
- Proper Landscaping in consonance with the original concept should be undertaken.
- Proper upkeep, maintenance, and management should be assigned to a nodal authority.

7.3.2.2. Completion of the incomplete projects of the Capitol Complex

While topmost priority in the preservation of Chandigarh Heritage would be the immediate repair / upkeep and management of three Edifices of the Capitol Complex: the Legislative Assembly, the Secretariat, and the High Court, it will gain its intended importance in the long run only when the crowning building of the precinct, the Museum of Knowledge, along with its entire landscape, is completed as per the original concept so that it looks as one organic finished architectural whole.

7.3.2.2.1. Completion of Museum of Knowledge

A detailed note on the Museum of Knowledge has been prepared by the Sub Committee-I which highlights the importance and the concept of this project and reads as under:

“At present, this focal point of the Capitol Complex as indicated in the concept master plan is not there and the Capitol Complex appears fragmented. This building was designed as an alternative

to the Palace of Governor and conceived with great foresight as the Museum of Knowledge which would not only be the focal point of the Capitol Complex but also an active centre fully equipped with the State-of-the-Art electronic gadgetry for decision-making as an ongoing process in the three Edifices: the Legislative Assembly, the Secretariat and the High Court. The Museum of Knowledge would be the database to provide information of all kinds drawn from records compactly kept in what he called the “Round Books” (CDs). Le Corbusier rightly believed that prompt access to such information would make the picture clear to High Court.

Le Corbusier’s idea was that this facility will actively assist the decision-makers in terms of precedents, previous decisions, rules and regulations, their amendments, and so forth. It was also meant to guide decision-making by providing statistical information on various aspects of complex situations encountered in the daily operation of the legislature, the executive, and the judiciary, the three pillars of our parliamentary democracy. The Museum would also enable the decision-makers to foresee the results of their deliberations with the help of electronic forecasts.

In the light of the foregoing exposition, it need hardly be emphasized that this Museum of Knowledge is not an ordinary Museum which houses historical material, or artifacts or cultural relics. In fact, a museum of this kind has not been built anywhere in the world. At the time the building was conceived it was a totally revolutionary idea. This Museum, when put in place, will

bring out the aesthetic charm of the masterly Capitol Complex design, which the American architect Paul Rudolph described as the greatest of the 20th century way back in 1960. Even five decades ago they could foresee the worldwide spread of electronic gadgetry which we now find rampant in the form of IT [Information Technology].

To build this Museum to house artifacts of any other kind than the stated ones would be both contradictory and a waste of public money. All other kinds of museums can be built anywhere in the city - in fact, they already are there: Government Museum & Art Gallery, Fine Arts Museum at Panjab University - or, for that matter, in any other city of the country. But the Museum of Knowledge is an integral part of the Capitol Complex plan concept and can be built only in the Capitol Complex.”

That to gain intended importance, the crowning building of the precinct, the Museum of Knowledge, along with its entire landscape is completed so that it looks like one organic finished architectural whole.

The Administration is very keen to take up the project with the vision that this should be a state of the art, intelligent building with the latest technology. The sketches of the building are available with the Department of Urban Planning, on the basis of which the detailed drawings are to be prepared for executing the building. The total covered area of the project works out to approximately 85,000 sq ft. The detailed estimates of the project will be worked out and submitted for approval.

7.3.2.2.2. **Completion of the Martyrs' Memorial**

Martyrs' Memorial, as planned in the Capitol Complex, was conceived when the Government of the erstwhile Punjab State decided to erect a Memorial to honor the memory of those who had laid down their lives in the freedom struggle of the country culminating in Independence in 1947.

The Memorial comprises three components i.e. Architectural with mythological symbols, Sculptures like the Lion, Snake and Man, and Debris. The architectural components of the Memorial and the symbols have already been constructed as have the sculptures of the Lion, Snake and Man cast in bronze.

A major component of the memorial comprising debris, depicting the fall of the Foreign Rule in India and the resurgence of India as a free Nation, is still to be executed for which the process shall soon be initiated.

In addition to these incomplete projects, it is also brought out that the other monuments of the Capitol Complex, i.e. Tower of Shadows, Geometric Hill with Sun dial also need to be completed as per the original concept for which too, the necessary action will be initiated.

Recommendation

Completion of the Museum of Knowledge, Martyrs Memorial, Tower of Shadows, Geometric Hill with Sundial are important for the ambience of the Capitol project and the same ought to be taken up on priority.

7.3.2.2.3. **Revitalization of the plaza** between the High Court and the Legislative Building needs to be addressed by proper landscaping.

7.3.2.2.4. **Campus lighting and illumination to highlight building edifices** during the night should be made an integral part of environmental planning and design.

7.3.2.2.5. **Preservation, conservation and maintenance:**

Topmost priority in the preservation of Chandigarh Heritage would be the immediate repair / upkeep and management of three Edifices of the Capitol Complex: the Legislative Assembly, the Secretariat, and the High Court - the restoration and preservation would require repair and rehabilitation works.

There is a consensus that as a first step, cleaning and scrubbing of the buildings of the Capitol Complex should be carried out to take care of the blackening concrete surfaces and removal of algae growth. This process would bring to light the rehabilitation / repair work required. The Sub Committee IV has observed that to have a realistic assessment of the extent of repairs/rehabilitation works required in these buildings, there is need to have a detailed Condition Survey by a renowned Institute of the level of Central Building Research Institute, Dehradun/ Rurkee. The Committee has also recommended that preservation of these buildings should be based on practices being followed internationally.

This is to request the Government of India for sanctioning Rs. 75 lacs for cleaning and Condition Assessment of the buildings of the Capitol Complex. Out of this Rs. 75 lacs, Rs. 33.35 lacs is estimated for cleaning and defects ascertaining and a further sum of Rs. 40 lacs is estimated for undertaking detailed Condition Surveys. It is brought out that detailed estimates for repair and rehabilitation will be worked out subsequent to the Condition Surveys and the same will be submitted to the Government of India for approval.

The maintenance of the prestigious precincts and buildings of the city will be a continuous process and the Government of India is requested for earmarking dedicated funds for the purpose.

7.3.2.2.6 Augmentation of Housing for the Executive, Legislative and the Judiciary

In addition to the requirements of additional space for carrying out the administrative functions of the city, commensurate housing requirements also need to be addressed for which suitable sites have to be identified. This exercise has already been initiated.

7.3.2.2.7 Developments in the peripheral areas around the Capitol Complex:

As per the Edict there should be 'No Construction in the North of the Capitol Complex'. However, due to the large scale urbanization by the neighboring states, there is a potential danger that the backdrop of the Capitol Complex will soon have multi-storeyed and high-rise buildings since there is now no height

restriction on the constructions in the neighbouring state.

Recommendation

It is proposed that the issue of high rise developments by the neighbouring states in contravention of the Edict of Chandigarh needs to be urgently taken up with the neighboring States; otherwise the entire concept of the plan will be jeopardized. The area north of the Capitol Complex falls within the notified catchment area of Sukhna Lake and also is in close vicinity to the Sukhna Wild Life Sanctuary. It is important that development in and around these important eco-sensitive areas is regulated in keeping with the Government of India Acts and Guidelines. Coordinated effort with the neighbouring States is required for notifying the Eco Sensitive Zone around the Wild Life Sanctuary.

7.3.2.2.8. GOVERNMENT PRESS, SECTOR 18:

Designed by Maxwell Fry as a “glass-wall” structure, the Government Press building is the only one of its kind in the city and among the first to be built here.

Recommendation

It should be conserved for its unique architecture and under no circumstances should any deviations from the original concept be permitted. Whenever repairs become necessary due to ageing, the building should be restored to its original design by re-building the affected portion(s).

7.3.3. **CARE OF BODY AND SPIRIT-** one of the four main functions of the city as enunciated in its original form:

7.3.3.1. **Government Museum & Art Gallery:**

Designed by Le Corbusier, Government Museum & Art Gallery is a magnificent building that forms a prominent landmark on Jan Marg, the major vertical arterial road of the City. Using brick-tiles and concrete gutter visible from outside, a very impressive façade has been created.

Recommendations

Concrete surfaces and brick façade need restoration. Insensitive additions such as aluminum glazing and flooring have been made in the interiors which need to be rectified. No additional building is advisable in this complex. The interior design and allocation of spaces to various sections/artifacts needs to be holistically and sensitively addressed in keeping with the original character of the complex.

7.3.3.2. **First Swimming Pool and Janj Ghar of the City**

Recommendation

The buildings of the Swimming Pool and Janj Ghar in Sector 23 are recommended for Heritage Status, Grade III.

7.3.3.3. **Architecture for Education:**

Most educational buildings of the City have north-south orientation and been placed in the near vicinity of the Green Belts. This attempt to extend the campus space to the expanse of the

Green Belts symbolises that learning in spacious surroundings leads to the expansion of human mind. Sensitive and persistent use of different materials like exposed brick-work, plastered, white-washed surfaces, stone and concrete has created a new architectural aesthetic. What is most amazing in these buildings is that though built 60 years ago they were consciously designed to create an environment adapted to the special needs of the differently-endowed persons. E. Maxwell Fry put his long experience of designing architecture for tropical climate to good use in the conception of these buildings.

7.3.3.4. Government College of Art:

Le Corbusier developed this idea for what he called an Audio-Visual Institute. The uniqueness of the building-space concept lies in the fact that work-areas and circulation arteries are built into the same basic cell, which is then multiplied several times over around a central courtyard to form the total building.

The buildings short-listed for Heritage Status include Government School, Sector 10, Government Colleges for Boys and Girls, Sector 11, Government College of Art in Sector 10 and Chandigarh College of Architecture in Sector 12.

7.3.3.5. Buildings of the Panjab University:

Gandhi Bhawan, Administrative Block, A.C. Joshi Library and Museum of Fine Arts have also been recommended for Heritage Status due to their unique architectural style and detailing. It is proposed that concept approval of all buildings in the Campus be

made mandatory in order to retain the overall character of the University.

7.3.3.6. Architecture for worship:

Church in Sector 18, Gurudwara in Sector 22, Mandir in Sector 23 and Mosque in Sector 20 are unique in terms of their historical importance and design concept besides the fact that they represent different religious groups which constitute the bulk of Chandigarh population: Christians, Sikhs, Hindus and Muslims. By virtue of their location and distinct architectural forms they have become important landmarks of the city.

Recommendation

Conserving these buildings would be to respect the sentiments of the entire citizenry. These buildings should therefore be put in the category of Heritage and no additions/alterations be permitted in them without the approval of competent authority.

7.3.4. LIVING - one of the four main functions of the city as enunciated in its original form.

7.3.4.1. Government Housing:

There are 14 types of houses for different income-groups. The team of architects created very interesting spaces, forms, shadows, patterns and textures with local materials and indigenous construction methods, giving birth to a new style of architecture which came to be known as Chandigarh Architecture. Chief characteristics of this distinguished Architecture are Order and Harmony.

Recommendation

Certain streets and clusters of Government Housing have been recommended for Heritage Status as indicated in the sector wise proposals.

7.3.4.2. Criteria for identifying Government Housing for Heritage Status:

Government houses as enlisted above have been recommended for Heritage Status. There is a large stock of Government Housing which has been designed by the original team of architects. After conducting site visits of the various pockets spread across the city, a few rows/clusters /individual houses have been identified. The criteria for identifying the Government houses have been to ensure that a minimum of one cluster each of the 14 categories of houses designed by the first team of Architects is preserved. While identifying these houses the committee has taken care that the houses which are important from the urban design point of view due to their location on important roads such as V3s and V4s thus forming part of the public realm are retained. These houses however have undergone many external and internal changes over a period of time and most of them are also in an utter state of neglect and require immediate maintenance and attention.

7.4 LANDSCAPE:

Landscape Design has been made an integral part of the basic concept of the city. This has made Chandigarh one of the most carefully-planned modern towns. It is the landscape of the city

that gives it its unique identity which one can experience in its healthy air and spaciousness. Dr. M.S. Randhawa, as Chairman of the Landscape Advisory Committee, was responsible for making Chandigarh the “Green City” and thus fulfilling the vision of the architect planner. He accomplished this gargantuan task with religious zeal.

7.4.1. Rajendra Park:

Spread over a sprawling area of 400 acres, Rajendra Park lies adjacent to the Secretariat building. Trees with round canopies and evergreen foliage have been planted here. This park should be developed as a proper green and may be landscaped as a garden.

Recommendation

Rajendra Park should be completed as per the original concept and the security barracks and helipad be relocated at an appropriate site.

7.4.2. Sukhna Lake:

The Lake was a gift to the citizens of Chandigarh for peace and tranquillity and the area was declared as a ‘Silence Zone’.

Recommendation

The ambience of the promenade, original design of the entrance gate, the bandstand, watch-tower, commemorative cube, security-posts, promenade footlights and landscaping should be retained and any further development strictly restrained.

7.4.3. **Lake Club:**

The Lake Club was designed by Le Corbusier and its site was consciously depressed with respect to the road-level so as not to obstruct the view of the Shivalik Hills.

Recommendation

Additional constructions in and around the complex should be restricted. It should be ensured that no structures interfere with the visual connection of the hills in the backdrop.

7.4.4. **Memory Park:**

In order to safeguard the concept of green parkland on the north of the Uttar Marg, the area between the High Court and Sukhna Lake - the Memory Park was created.

It was felt that institutionalising the area was necessary to keep it green and free from encroachments.

Recommendation

The area, however, needs to be properly maintained. Similarly, citizens need to be made aware of its presence. The citizens of Chandigarh are presently unaware of the concept and presence of the park and the same needs to be publicised widely.

7.4.5. **Leisure Valley:**

Management plan for regular upkeep of the Leisure Valley, city greens and parks is absolutely necessary.

7.4.6. Open Spaces in terms of the original concept of the Green City are the Soul of Chandigarh and must never be stifled by

thoughtless additions of buildings in the future. The three planning postulates of Sun, Space and Verdure should always remain our directive principle.

7.5 **ART**

Chandigarh has the distinction of having created many works of Art integral to the conception of architectural design for a variety of buildings. There are also very significant examples in which art-works are deliberately created as independent, free-standing creations. The uniqueness of this experiment lies in the fact that very low-cost and humble building materials have been put to artistic use by virtue of which they have been elevated to a new aesthetic cult. Notwithstanding its highly farsighted modernism, Chandigarh has produced an Art Heritage which has invisible links with India's magnificent art tradition. All buildings which were built in the country before the introduction of structural arch were largely works of art in that they were icons of artistic ingenuity rather than engineering marvels.

7.5.1. The identified ART includes:

- * Legislative Assembly Enamelled Door
- * Tapestries
- * Plaques
- * The Commemorative Tower
- * Commemorative cubes and bas-reliefs
- * Bas- Reliefs Murals
- * Manhole Covers

Refer details of the Report of the Sub Committee-I (Page 88-94).

Recommendation

The above ART should be preserved in its original form and kept in good condition reflecting our reverence for heritage.

7.5.2. **Furniture:**

Pierre Jeanneret designed many varied pieces of furniture like tables, chairs, tools, lampshades, etc which are an integral part of Chandigarh Heritage, as furniture and buildings go together. Pierre Jeanneret also designed **Other Art Objects** like Rainwater Spouts, *Brise-soleil*, Porch Design, Filigree Work in *jaalis* of Residential Architecture, Composition of windows and *chhajjas* creating mural effect of the built-mass, treatment of water-bodies, and Undulatory glazings which impart an active visual rhythm to the many and varied architectural forms.

Recommendation

Not only is there a need for sensitising and educating people about their historic import but also the imperative of ensuring that no damage of any kind whatsoever is done to these works and that neither are they disposed off due to ignorance. The Chandigarh Administration is in the process of preparing a comprehensive inventory of the items associated with the first team of architects duly authenticated by a Committee of Experts. The Departments of the Administration have been instructed to maintain a proper register, conduct annual checks and not to dispose off the heritage material. Digitization, repair, maintenance and conservation of heritage items have also been initiated. It is pertinent to mention here that the Government of India has extended the Terms of Reference of the Expert Heritage Committee (**Annexure-G**) and included the same. This aspect has been put up to the Expert Committee. Report on the same will be submitted to MHA subsequently.

7.6 PRIVATE BUILDINGS

7.6.1. City Centre, Sector 17:

Designed as the vibrant Heart of the City and as a pedestrian paradise, the City Centre is today experiencing problems such as violations of building finishes like paint, composite panels, degeneration of cement concrete, uncontrolled skyline by adding rooms/services on rooftops, encroachments of backyard specially on the V4 SCOs, over-spilling of advertisements, parking woes and traffic congestion which are all detrimental to the overall ambience of the Centre. The city centre is not functioning as intended as per the original plan. The focus was supposed to be on the square opposite the town hall and the State Library Building which has instead shifted to the Neelam Plaza where there is concentration of commercial activity. The main square which is surrounded by government offices and government buildings gets deserted after office hours and needs to be revitalized. Similarly the southern end of the sector also needs to be activated.

Recommendation

The problems prevailing in the City Centre need to be addressed by taking the stakeholders, shopkeepers, etc. on board for which preliminary spadework has already been initiated. Revitalisation of the Northern and the Southern part of the city centre are also recommended after weeding out the Government offices, especially those which operate from the Ground floor of SCOs in

the northern part of the sector and were placed there only temporarily at the initial stages of development of the sector.

Similarly the buildings which are not compatible with the function of the City centre can be relocated so as to enable the entire sector to be a vibrant whole rather than just as a portion of it. A detailed study/analysis in this regard would be required before finalising it. There is also a need to invigorate the sector with incidental shopping, earmarked street vending zones, food courts and amphitheatres.

The deficit of parking in the City Centre is to be met by constructing multi level underground parking at designated areas.

A detailed proposal of cleaning up the facades should be worked out on the basis of the recommendations of Sub Committee IV and by activating participation of the shopkeepers/owners of the properties. Government buildings within the city centre too will be preserved and maintained on the basis of the report.

- 7.6.2. **Kiran Cinema** [first movie-theatre of the city]: The architectural design of the Cinema Hall is so imaginative that even after nearly 60 years of its inception, it still looks modern.

Recommendation

According Heritage Status to Kiran Cinema is recommended. The same shall be done in dialogue with the owners. A policy of incentives for all private buildings requiring conservation shall be evolved based on best practices in the world.

7.6.3. **Shop-cum-Offices (SCOs) and Shop-cum-Flats (SCFs) along V4:** These architecturally controlled buildings are in a state of neglect and warrant attention. The detailed status and recommendations have already been highlighted while discussing Architectural Controls – commercial buildings at Page 23-24 of Report of Sub Committee-I.

7.6.4. **SCOs along Madhya Marg:** The detailed Status and Recommendations have already been highlighted while discussing Architectural Controls on Page 19 of Report of Sub Committee-I.

7.6.5. **Architecturally controlled institutional buildings along Madhya Marg and Jan Marg.** The detailed Status and Recommendations have already been highlighted while discussing Architectural Controls on Page 17-19 of Report of Sub Committee-I.

7.6.6. **Private Housing:**

Private Housing constitutes a large portion of the housing stock of the city. Due to urban design considerations, Architectural controls and Zoning regulations were imposed on the private housing. The smaller houses of Marla category and upto 1 kanal were governed by Frame Controls, whereas the larger houses of 1 kanal and above through Zoning. In addition, architectural control was also imposed on housing along certain important avenues of the city. Over a period of time, a large number of need based changes have been allowed to the private housing in terms

of additional covered area and more flexibility in the architectural character of the city, the Architectural controls and Frame controls have been replaced by Zoning. Experience has shown that the changes allowed have adversely impacted the streetscape and order in the built environment.

Recommendation

It is recommended that no further enhancement of ground coverage and FAR be allowed and the possibility of reversing the notification dated 16.10.2008 be seriously examined for prompt and decisive action.

7.6.6.1. Heritage status to private residences:

The Sub Committee-II comprising of Mr. B.N. Goswami, Ms. Chand Nehru and the Chief Architect, UT, constituted for identifying private buildings and precincts which merit Heritage Status have identified four private residences which have been designed by the first team of Chandigarh architects. All these four residences are spacious bungalows and have been designed by Pierre Jeanneret. The list of private houses with names of owners follows:

- P.L. Varma, House No. 28, Sector 5
- Gautam Sehgal, House No. 32, Sector 5
- Nirlep Kaur, House No. 33, Sector 4 and
- Oberoi House, No. 22, Sector 5.

Located on Uttar Marg, in the northern-most part of the city, these residences enjoy the advantage of the picturesque view of the Shivalik Hills beyond. Capturing this natural scenic beauty, achieving functional efficiency suited to the owners' requirements

and being climate-responsive are the governing design criteria. While the exterior of the houses harmonises with other Government residences of the City in the use of exposed brick, random rubble, and plastered surfaces, the interiors have richer specifications and detailing.

Recommendation

These houses are exemplary in the articulation of the indoor and outdoor spaces and merit Heritage Status. The same shall be done in dialogue with the owners. A policy of incentives for all private buildings requiring conservation shall be evolved based on best practices in the world.

CHAPTER-III

CHANDIGARH'S ENLISTED HERITAGE

The buildings, campuses and natural features, which have been shortlisted for heritage status, form part of the enlisted heritage of Chandigarh and need to be holistically preserved have been categorized into:

8. Heritage Zones, Heritage Precincts, Heritage Buildings, Natural Features, Area and Vistas

8.1 Definitions:

- “Heritage Zone” means an area consisting of two or more “Heritage Precincts” (which may or may not include “Heritage Buildings”) of urban design, and/or areas of natural/environmental significance or scenic beauty, including hills, hillocks, sacred groves, water-bodies, seasonal rivulets (and areas around them), open and/or wooded areas.
- “Heritage Precinct” means an area comprising Heritage Building/s and precinct/s thereof or related places, which may be areas around a Heritage Building or areas with strong urban and architectural character that share, wholly or partly, certain common physical, social, architectural, cultural or technological significance.
- “Heritage Building” means any building of one or more premises or any part thereof, possessing architectural, aesthetic, historic or cultural values, which requires protection and conservation for historical, architectural, cultural, environmental or ecological purposes and includes such portion of the land adjoining such building or any part thereof as may be required for fencing or covering or otherwise conserving such building.

8.2.

GRADING:

The Enlisted Heritage Zones, Heritage Precincts and Heritage Buildings have been identified and graded as Grade-I, II & III depending upon their importance:

Grade-I

Heritage Grade-I comprises buildings and precincts of national or historic importance, embodying excellence in architectural style, design, technology and material usage and/or aesthetics; they may be associated with a great historic event, personality, movement or institution. They have been and are the prime landmarks of the region. All natural sites shall fall within Grade-I. The enlisted heritage in Grade-I deserves careful preservation.

It is recommended that no intervention be permitted either on exterior or interior of the heritage buildings or natural features unless it is necessary in the interest of strengthening and prolonging the life of the buildings/or precincts or any part or features thereof. For this purpose, absolutely essential and minimum changes would be allowed and they must be in conformity with the original.

All development in areas surrounding Heritage Grade-I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-I.

Grade-II

Heritage Grade-II comprises buildings and precincts of regional or local importance possessing special architectural or aesthetic merit, or cultural or historical significance though of a lower scale

than Heritage Grade-I. They are local landmarks which contribute to the image and identity of the region. They may be the work of master craftsmen or may be models of proportion and ornamentation or designed to suit a particular climate.

The enlisted heritage in Grade-II deserves intelligent conservation.

No external change is to be permitted. Only limited internal change is permitted which does not affect the exterior of the building.

All development in areas surrounding Heritage Grade-II shall be regulated and controlled, ensuring that it does not mar the grandeur of or view from Heritage Grade II.

Grade-III

Heritage Grade-III comprises building and precincts of importance for townscape; that evoke architectural, aesthetic, or sociological interest though not as much as in Heritage Grade-II. These contribute to determine the character of the locality and can be representative of lifestyle of a particular community or region and may also be distinguished by setting or special character of the façade and uniformity of height, width and scale. The enlisted heritage in Grade-III deserves intelligent conservation though on a lesser scale than Grade II and special protection to unique features and attributes.

Internal changes may by and large be allowed. Changes can include extensions and additional buildings in the same plot or compound. However, any changes should be such that they are in harmony with and not detracting from the existing heritage building/precinct.

All development in areas surrounding Heritage Grade-III shall be regulated and controlled, ensuring that it does not mar the grandeur of or view from Heritage Grade III.

8.3. **HERITAGE ZONES, HERITAGE PRECINCTS AND HERITAGE BUILDINGS**

The heritage zones which have been recommended along with their grading are detailed as under:

Heritage Zone-I extends from outer boundaries on the North-West side of Rajendra Park covering all areas along it and extending to the South-East extremities under the administrative control of the Chandigarh Administration. This area is bound on its South-West extremities by Uttar Marg including the green belt which runs along it on its lower end. Similarly, extremities of this “Heritage Zone” on the North-East will extend to lower range of the Shivalik Hills covering all natural environmental features and landmarks, notably, the Catchment Area of Sukhna Lake, Wildlife Sanctuary, etc.

The heritage precincts in this zone include Rajendra Park, the Capitol Complex, the Lake Club, Sukhna Lake and the Lake Promenade. The Heritage buildings shortlisted are the Secretariat, the High Court, the Legislative Assembly, the Open

Hand, the Martyrs Memorial, the Museum of Knowledge, the Geometrical Hill and the Tower of Shadows. All these buildings have been recommended in Grade I status.

Heritage Zone-II with its origin in the Shivalik foothills on the North-East running through the entire city of Chandigarh and extending along the Leisure Valley towards the South-West into Punjab. The width of this Zone of prime importance is demarcated by the Institutional Belt along Jan Marg on the South-East and closing on the junction of Sectors 16, 17, 22 and 23. The Heritage Precincts within this zone include the MLA Hostel and the MLA Flats, Sector-3 and Sector-4, the Government Museum & Art Gallery, Sector-10, Rose Garden & Shanti Kunj. The Heritage Buildings of this zone include Main Museum, City Museum, Science Museum, Auditorium and Government College of Arts, Sector-10. These buildings have been recommended for Grade I status.

Heritage Zone-III extends across Sector-7 (to be conserved as at Para 7.1.4.4).

Heritage Zone-IV extends across Sector-8 (to be conserved as at Para 7.1.4.4).

Heritage Zone-V extends across City Centre, Sector-17 (to be conserved as at Para 7.6.1)

Heritage Zone-VI extends across Sector-22. (to be conserved as at Para 7.1.4.3)

Heritage Zone-VII extends across Panjab University, Sector-14. The buildings proposed for Heritage status include Gandhi Bhawan, AC Joshi Library, Fine Arts Museum and the Administrative Block and have been recommended for Grade I status.

Heritage Zone-VIII extends along Madhya Marg from the Post Graduate Institute of Medical & Education Research, Sector 12 PGI to the Sukhna Choe on the South-East and includes the Institutional, Commercial Buildings and the Green Belts along it on its either side and Institutional Belt along Madhya Marg in Sector 15. These precincts have been recommended for Grade II status.

Heritage Zone-IX consists of the Mango Grove belt along Purv Marg and has been recommended for Grade I status.

Heritage Zone-X stretching NW to SE across Sector 11, 10, 9, 8, 7 along V4 and includes neighbourhood shopping centres and institutional and residential buildings on either sides of the road. These precincts have been recommended for Grade II status.

Heritage Zone-XI stretching NW to SE across Sector 14,15,16,18,19,27,28 along V4. The heritage precincts of this Zone include neighbourhood shopping centres and institutional and residential buildings on either side. These precincts have been recommended for Grade II status.

Heritage Zone-XII stretching NW to SE across Sectors 24,23,22,21,20,30,29 and include neighbourhood shopping centres and institutional and residential buildings on either side. These precincts have been recommended for Grade II status.

Heritage Zones-XIII along V3s: Vidya Path, Udyan Path, Himalaya Marg, Sarovar Path, Sukhna Path, Chandi Marg, Purv Marg, Vidya Path, Udyog Path and Dakshin Marg. These precincts have been recommended for Grade III status.

8.4 **Natural Features, Areas, and Vistas:**

The site of the city of Chandigarh has many natural features which make them suitable for conservation on account of their environmentally-significant nature and scenic beauty besides their geographical history. These are:

1. Shivalik Hills, as the most outstanding natural landmark which forms the backdrop of Chandigarh, notably, the Capitol Complex.
2. Sukhna Lake and its Catchment Area
3. Patiali-ki-Rao Choe
4. Sukhna Choe
5. Leisure Valley with its 8-kilometre-long monsoonal gorge, further extending into the State of Punjab.
6. Sukhna Wild-Life Sanctuary
7. N-Choe
8. Protected Forests
9. Forest Areas
10. Green Belts
11. Neighbourhood /Sector Greens
12. No-Construction Zone on the North of the Capitol Complex.

Vistas

The enlisted Vistas form an intangible part of the Chandigarh Heritage and need to be preserved. It is recommended that no building/development should be carried out that conflicts with the following:

- Uninterrupted view of Shivalik Hills along all roads running NE to SW.
- Uninterrupted view of the Shivalik Hills from the City Greens.
- Uninterrupted Backdrop of the Shivalik Hills in the Capitol Complex.
- Uninterrupted view of Sukhna Lake from the Uttar Marg.

8.5 Heritage Precincts and Buildings at a Glance:

8.5.1. Government Buildings

8.5.1.2. Institutional

- Capitol Complex, Sector 1
- Government Museum & Art Gallery campus, Sector 10
- Central State Library, Sector 17
- Town Hall Building, Sector 17
- Government Press Building along Madhya Marg and Himalaya Marg, Sector 18
- Few of the Architectural Controls of Institutional Buildings along Jan Marg and Madhya Marg.

8.5.1.3. Educational

Panjab University, Sector 14

- Gandhi Library
- A.C. Joshi Library
- Administrative Complex
- Fine Arts Museum.

Colleges

- Government College of Art, Sector 10
- Government College for Boys along Madhya Marg (original blocks), Sector 11
- Government College for Girls along Madhya Marg (original blocks), Sector 11
- Chandigarh College of Architecture, Sector 12
- Administrative Block, Punjab Engineering College, Sector 12

Schools

- Government Model Senior Secondary School, Sector 10 which functioned as Assembly in the initial stages.
- Government School, Sector 15
- Government Model Senior Secondary School, Sector 16
- Government Senior Secondary School / Government Model School (original blocks), Sector 18
- Government Model Senior Secondary School (original blocks), Sector 19
- Government Senior Secondary School, Sector 21
- Government Model Senior Secondary School, Sector 22-A
- Government Model High School, Sector 22-C
- Government Senior Secondary School, Sector 23

Health

- Poly-Clinic, Sector 22

Cultural

- Lake Club, Sector 5
- Janj Ghar, Sector 23
- Swimming Pool, Sector 23

8.5.1.4. Government Housing

- Government houses of the Chief Ministers /Ministers of Punjab and Haryana located along Uttar Marg, Sector 2 and Sector 3

- Government Houses for the High Court Judges and the Chief Justice, Sector 4.
- MLA Flats and MLA Hostels along Jan Marg originally designed by Pierre Jeanneret in Sectors 3 and 4
- Government House No.56, Sector 5 to be dedicated to Architect Pierre Jeanneret
- Identified Government houses in Sectors 5,7,11,16,19,20,23,24, as shown in sector layouts
- Few of the Architectural Controlled SCOs/SCFs

8.5.1.5. **Green Belts/Parks/Gardens**

- Rajendra Park, Sector 1
- Sukhna Lake, Sector 5
- Rock Garden, Sector 5
- Memory Garden, Sector 5
- Leisure Valley; Stretching from Uttar Marg to Vigyan Marg planned as Bougainvillea Garden, Sector 3
- Leisure Valley, Fitness Trail, Monsoonal Gorge, Tennis Stadium, Sector 10
- Leisure Valley consisting of Rose Garden, Shanti Kunj, Sector 16
- Leisure Valley developed as Traffic Park and Bamboo Garden, Sector 23
- Commemorative stone in Jawahar Park, Sector 9
- Mango Belt along Purv Marg, Sectors 28 and Sector 29
- Butterfly Park, Sector 26
- Parrot Park, Sector 21.

8.5.1.6. **Architectural Elements**

- Sealing Walls, Sector 22 and Sector 23

8.5.2. **Private Buildings**

8.5.2.1 **Cultural**

- Kiran Cinema, Sector 22

8.5.2.2. **Religious**

- Church on V4, Sector 18
- Mosque, Sector 20
- Gurudwara on V5, Sector 22
- Mandir on V4, Sector 23.

8.5.2.3. **Commercial**

- Architectural Controls of SCOs/SCFs, Sector 17
- SCOs along Madhya Marg, Sector 7 and 26
- SCOs along Dakshin Marg, Sector 22
- SCO's/SCF's along V4, Sector, 7, 8, 9, 10, 11, 15, 16, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, and 30.

8.5.2.4. **Private Residences**

- Private house # 33 - Nirlep Kaur's House, **Sector 4**
- Private House # 22 - Oberoi House, **Sector 5**
- Private house # 28 – P.L. Varma's House, **Sector 5**
- Private House # 32 - Gautam Sehgal's House, **Sector 5**

8.5.2.5. **Fort**

- Manimajra Fort

CHAPTER-IV

SECTOR WISE PROPOSALS

9. SECTOR-WISE PROPOSALS

Sector-wise proposals showing locations of buildings enlisted for Heritage Status, areas of mandatory concept approvals, areas which can be considered for redevelopment of First Phase Sectors i.e. Sector 1 to 30 have been detailed in the layout plans in the Report of the Sub Committee-I on Page 112-141.

9.1. Prior concept approval:

Following are the parameters for imposing the regulation of prior concept approval on new buildings and/or additions-and-alterations in old ones.

Since many private buildings fall along important arteries, namely, V3s and V4s, constituting major part of Chandigarh's urban imageability, there is an urgent need to regulate individualistic/idiosyncratic use of weird forms, senseless geometry, garish colours and gaudy materials to preserve the original character of the city besides retaining sanity in architectural and urban designs.

The principal objective is to maintain a harmonious urban form of Chandigarh in keeping with the Master Architect's original concept.

The second criterion is the building's architectural importance and the individual professional standing of the architects who constituted the foreign team of architect.

The third parameter is the location of the building, which is crucial because an ill-designed structure can become an eyesore whereas a sensitive design that respects its architectural legacy would be a landmark asset in many ways.

Similarly the development /additions and alteration of green belts should be done sensitively and in the same spirit as that of the original plan.

Location of Mobile towers is very important from the Urban design point of view and as such this too has been recommended for prior concept approval.

9.1.2. Redensification of pockets of government housing:

There is a large stock of Government housing designed by the original team of architects in Phase 1 of the city. The architects had prepared standard designs which had been replicated in various pockets and sectors. Most of the Government housing is single storeyed or at the most double storeyed. It is not considered viable to declare the entire housing stock as heritage. After detailed site visits, pockets of housing which need to be preserved were identified. The remaining housing stock has been proposed for redensification.

The pockets identified for redensification are in the interior of the Sectors 10, 11, 15, 19, 20, 23, 24 and have been

shown in the Layout Plans of these Sectors in the Report of the Sub Committee I. Most of these load bearing brick structures are more than six decades old and in a poor state of neglect, while occupying prime land in the land starved city. It is reiterated that while recommending the same it has been ensured that a cluster/block /row of each category of house has been earmarked as 'Heritage'.

The redensification exercise will however need to be conducted very sensitively so as not to disturb the socio-economic structure of the city but rather to rectify the imbalances and make the city inclusive.

The basic principle of all planning which is inherent in the concept of Chandigarh also is to anticipate change so that designs which are accommodative of such change are developed regularly from time to time. Technological devices, new materials and space requirements all are thus subsumed in the process of architectural design.

These aspects will thus be taken care of while carrying out redensification/redevelopment of the proposed pockets. The new built environment should be designed to be energy efficient, with zero discharge, adequate parking facilities, low rise and of an architectural character in sync with the Chandigarh Style of Architecture.

It would also be essential to augment the infrastructure /services of these sectors prior to taking on the redensification exercise being proposed.

CHAPTER-V

CHANDIGARH HERITAGE CONSERVATION COMMITTEE

10. Constitution of the Chandigarh Heritage Conservation Committee

It is proposed to constitute a Chandigarh Heritage Conservation Committee to advise the Chandigarh Administration on the matters related to identification, protection, conservation and maintenance of Chandigarh's Heritage.

The committee will also assist in the preparation of a Conservation Management Plan for Chandigarh and in framing of special regulations, design guidelines and conservation principles related to Heritage Zones, Heritage Precincts and Heritage Buildings, artifacts and natural features.

10.1. The proposed Composition of the Committee is as under:

The Chandigarh Heritage Conservation Committee shall be appointed by the Chandigarh Administration and shall comprise of

i)	Adviser to the Administrator, UT, Chandigarh	Chairman
ii)	The Secretary, Urban Planning	Member
iii)	Finance Secretary	Member
(iv)	Commissioner, Municipal Corporation	Member
(v)	Estate Officer	Member

(vi)	Eminent professional having at least 10 years experience	
	a) Urban Designer	Member
	b) Conservation Architect	Member
(vii)	Structural Engineer having experience of ten years in the field and membership of the Institution of Engineers, India	Member
(viii)	Environmentalist having in-depth knowledge and of experience 10 years of the subject.	Member
(ix)	Art/Architectural Historian having knowledge of the region having 10 years experience in the field	Member
(x)	Chief Architect, Department of Urban Planning, Chandigarh Administration	Member Secretary
(xi)	Representative of State Archaeological Department	Member

CAPITOL COMPLEX

SITE EVALUATION REPORT

ABHA NARAIN LAMBAH ASSOCIATES
CONSERVATION ARCHITECTS AND HISTORIC BUILDING CONSULTANTS
SEPTEMBER 2017

INTRODUCTION

Built over sixty years ago, the buildings of the Capitol Complex are a testimony of the robust construction materials used and of a perhaps alien architectural quality and material composition that have since embraced the local environment through their design features and compatibility. However, increased foot fall and usage, ravages of time, additions, alterations of original finishes and inevitable deterioration has resulted in a dilution of the original features in terms of weathered facades, inappropriate repairs and changed perception of interior spaces. In spite of this, the underlying strong “sense of pride” amongst the users and stakeholders, and robust construction has been a veritable driving force towards the sustenance of these eternal edifices and their communal areas.

The premise of this report is to define the core areas that the buildings need intervention in terms of repairs and restoration. In a sense, it is meant to be a guiding section for the next step, which outlines the conservation plan and for future works at the Complex. A note on past repairs also presents a pertinent case study of what has been undertaken in the past and if an alternative conservation methodology needs to be adopted for such important and challenging architectural, structural and material fabric.



1. State of conservation of the existing buildings

The three monuments of the Capitol Complex, in general, are in a fair state of repair and constant upkeep has result in an overall well kept condition. Good governance, due diligence in terms of monitoring and responsibility towards their protection has resulted in regular maintenance works and initiation of projects geared towards the sustenance of the buildings. However, dealing with an alien concept of exterior finishing, sans paint or surface treatment, and repair of rough cast extensive areas of concrete was found to be rather challenging, resulting in perhaps patch work experimental repairs. Absence of guiding principles for restoration of a modern material has led to often disjointed conservation measures that do not span the entire complex. Moreover, increased usage and technological demands have meant introduction of obtrusive service additions and sub-division of interior spaces. These changes, stemming from the fact that it is living and vibrant complex, while acceptable perhaps for other monuments are inappropriate towards the quality of buildings under consideration.

Hence, the broad issues plaguing the site are those of inappropriate repairs and absence of a conservation methodology, insensitive additions and alterations, and usage pressures and needs. Each of these buildings is assessed individually based on visual inspection surveys, which would provide a basis for future conservation measures.

1.1 Condition of the Secretariat

Around 7,500 employees, with nearly 2,700 visitors, use the Secretariat on a daily basis making it most trafficked and used building in the Capitol Complex¹. Originally planned to accommodate 6,000 employees and visitors, this building is faced with an increased footfall and pressures of space usage and optimisation, resulting in sub-division of spaces, use of balcony areas for additional offices and their enclosure, as well as introduction of services due to needs of the employees. This has led to installation of air conditioning units on the articulate facades of the building, presenting a disharmonious frontage and disrupting the beautiful geometric lines as conceived by Corbusier. Enclosing balconies and creation of additional porches, with rudimentary shelters, on the north western facade has led to severe alteration of this priceless architectural composition. To alleviate the issue of shortage of funds an on-site improvisation of fixing glazing on the rough cast openings was undertaken by the Capitol Project team and an almost musical sequencing of architectural glazing was conceived. However, this has been severely hampered by introduction of additional glazing elements. The fringes of the Secretariat, especially at the western corner, display dumping of waste material and a general reduced level of maintenance than the other sections of the Complex, which needs to be addressed immediately.

¹ Source: The Management Plan

To counter contemporary standards of working environment, large scale alteration of original finishes and elements has been undertaken at the Secretariat in terms of replacement of most of the flooring finishes, sub-division of internal spaces and gradual replacement of the original furniture pieces designed by Pierre Jeanerette. Inappropriate light fixtures and illuminants have also contributed to the malaise of the structure being treated as just another office building of no special value. The installation and placement of the Verna dispensing machine and stall is also obtrusive and needs to immediate intervention. The general patina of age and slight air of neglect, due to the sheer volume of users, has marred the quality of the interior spaces, which shows so much potential considering the almost sculptural quality of the space afforded by the planning and design. However, the receptive nature of the employees, stakeholders and caretakers, upholding the WHS status, has meant that these alterations, service needs and maintenance lapses have been acknowledged and are being actively dealt with on site as well as within the Management Plan.

Other generic issues that plague the Secretariat as well as other structures of the Capitol Complex are those of exterior staining of concrete and repairs done to rectify any damage to exterior faces. Staining is observed wherever air-conditioning units have directly led to water percolation, which has consequently caused algae and moss deposits and stains. This is also observed at quite a few places of rain water ingress. As a general maintenance methodology, wherever the concrete faces have weathered or have spalled or cracked, patch work repairs have been undertaken. While such measures are perhaps technically sound, they do not conform to the visual appearance of the structure since they present a disjointed face. Conservators the world over, since concrete buildings are now over 50 years old, are slowly coming to terms with the challenges of restoring exposed concrete. While issues of brick and stone are fairly recognised and manageable the technical and aesthetic aspect of exposed concrete are largely unexplored, akin to the monolithic rock-cut monuments which perhaps pose similar visual concerns. Hence, the job of the custodians at the Capitol Complex is somewhat complex and unenviable. The embedded steel also poses problems of internal steel corrosion, which can be insidious and detected after much deterioration has already set in. Fortunately, in case of the Secretariat the structural issues are minimal and it is only the visual concerns that need to be addressed. Several instances of efflorescence and black soot-like stains are visible along the undersides of the sun shading devices.

Due to limitations in lifting and pouring techniques, lift or cold joints are visible on the outer face of the structure. While these joints are integral to the character of the site and in essence define the spirit of the construction and time it was built, these joints or raised surface lines have also been found to be vulnerable for surface deposits and staining. In case of the Secretariat, these are visible along the not so prominent faces, where stains are severe and need to be urgently addressed to curtail future problems of water ingress. Mechanical failure of

concrete is visible near the expansion joint of the north western facade, which runs vertically along several storeys of the building and is susceptible to water seepage.



Considered one of the most critical components of Le Corbusier's 5 points of architecture and as endemic to his design as perhaps the *pilotis*, is the roof garden. What started out as a technical solution for a climatic and structural issue, became an important design feature and extension of his spatial planning from the inside to the outside and beyond. Often experimenting with nature and landscape, the roof garden afforded the valued integration of building and environment and in turn, of the occupant with nature. Currently, the Secretariat roof is used for temporary housing, to locate excesses of service equipment, storage and everything but the purpose for which it was conceived. Original drawings and photographs portray the carefully chosen trees and vegetation cover, both pleasing to the eye and forming a balance with the hard concrete plains and lines, with softening lawns and foliage. Similarly the cafeteria was conceived as a space for interaction, but is gradually exhibiting signs of visual deterioration. The carefully planned spaces now face dilution of features due to insensitive additions and generic furniture design and placement. It is the aim of the management plan to revive both these spaces into areas of respite, recreation and contextual education.

1.2 High Court issues

Second only to the Secretariat in terms of the usage, the High Court is privy to 3,920 employees, 68 judges and around 5,000 daily visitors². This has led to issues of additions right from its inception, within the structure and progressively around it. Near obliteration of the fine sight lines and vistas to and from the buildings is the bane of the High Court at its rear, with the construction of the Lawyers Chambers, judicial record-room, Advocate General's block and multi-level parking, amongst other temporary and permanent establishments. A holistic plan is

² Source: The Management Plan

being prepared, which should be judiciously considered as any further construction, on the already saturated site would completely dissolve the studiously generated vistas. Instead, an alternative proposal for relocation of some of the functions of the High Court is urged and needs to be explored. Unmitigated and incongruous additions in the form of eateries and kiosks are evident near Gate no. 2 and 3, which need to be urgently addressed.

Large-scale renovations have already been undertaken in all the court rooms and judges' chambers. While changes are required, it needs to be ensured that the original defining elements, in the form of furniture, lighting and ventilation systems, are preserved. In fact, such interior projects could be used to streamline service operations and restore original features as part of the tendering process. Several of the priceless tapestries are in need of urgent restoration.

One of the other issues, is the concrete spalling near the expansion joint of the parasol roof. Not only is it visible in the form of stains, but also large sections of the concrete cover has eroded and steel rebar exposed. This indicates water ingress at this section that needs to be urgently addressed.

In the absence of a conservation methodology for repairs to exposed rough cast concrete, the nature of past repair work was undertaken in the form of patch-work repairs in situ, which might be structurally adequate but are extremely disruptive aesthetically. Hence, a better restoration approach needs to be adopted which has been set out in the following section.



Other visual disruptions are location of a honey comb infestation on the parasol roof and paint residue left on the roof after painting of the columns was undertaken, sans masking of the surrounding. Some of the *brise soleil* sun shade devices exhibit blackish stains and deposits, which could be indicative of water collection and presence of organic growth. The electrical wiring on the exterior covered spaces and inside needs to be urgently addressed, to resolve any fire hazard issues. Incongruous paint application in the form of blue oil distemper on the inside of an access staircase needs to be immediately tackled. Insensitive but essential barricading of the main entrance needs to be treated in a proactive manner through better design intervention. Also, seating under the porch on the main front of the High Court needs to be re-designed.

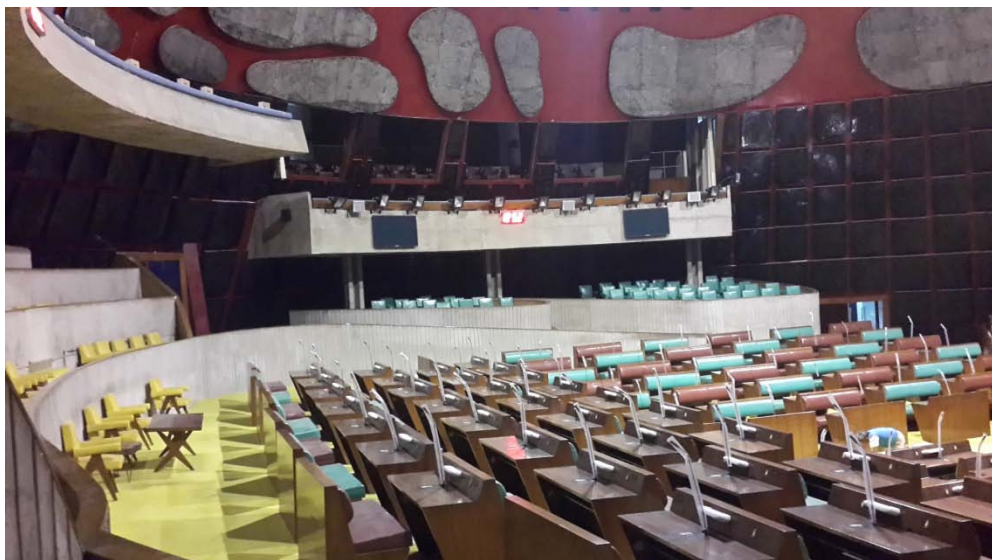
1.3 Status of the Assembly

With the lowest number of employees (337 Punjab and 322 Haryana with 35 number of daily visitors³) and visitors in the entire complex, the Assembly does not face issues of inadequate usage such as those at the High Court and Secretariat. However, its complex structural loading patterns and inherent design features make it highly vulnerable to concrete issues of aesthetic and technical nature.

Internal changes that are most disruptive to the evocative form are false ceilings and partitions. Addition of aluminium glazing and timber panelling in the main foyer violates the original features incorporated by Le Corbusier in the form of undulatory glazing with precast concrete mullions and steel stanchions. The invaluable tapestries are in dire need of repair and several are frayed and sections cut out to accommodate service needs. Inappropriate illumination devices, replacement of original flooring finishes and cladding of columns, along of insensitive paint finishes visible along the primary ceremonial entrance on the inside are other issues that need to be urgently addressed. Other issues are broken glass skylights and a broken glass pane near the celebrated assembly enamel door.

At several sections of the under carriage of the umbrella roof, water staining, concrete spalling and exposure of steel rebar is evident. As in the case of the High Court, this vulnerable area needs to be urgently investigated further to rule out major issues of structural and chemical nature. Cracking patterns akin to those of alkali silica reactivity or commonly referred to as “concrete cancer” are also visible at some parts and this can be only ascertained through further laboratory testing as specified in the conservation plan.

³ Source: The Management Plan



Towards the outer side at the base of the drum inside the Assembly building are found several instances of bat infestation, which although not of a serious nature are somewhat indicative of poor maintenance; a feature that should not be associated with a World Heritage Site of this international stature and repute. However, it is a minor issue that can be quickly resolved. The poignant issue is that of a horizontal separation crack that extends along most of the base, which needs to be further investigated to ascertain if active or dormant in nature. Staining and efflorescence is observed under several sections of the ceilings, signifying water ingress. Other issues are those of dislodged glass panes that could convey water to the interiors of the building and cracked water spouts at the terrace level. These areas also show organic matter and plant growth, especially ficus, which is deep rooted. The expansion joint at the north-west face also exhibits ficus growth.

One of the most visually disruptive interventions is the painting of the triangular roof atop the Assembly. Although undertaken several years ago, this whitewash has faded to some extent but is still visible despite the patina of age and dust. Such initiations need to be immediately curtailed as the spirit of the monuments is to display their original exposed facades unless originally painted as part of the colour palette. Another exercise to bring back the previous finish of the painted section needs to be undertaken.

2. State of conservation of the monuments, pedestrian areas and landscape

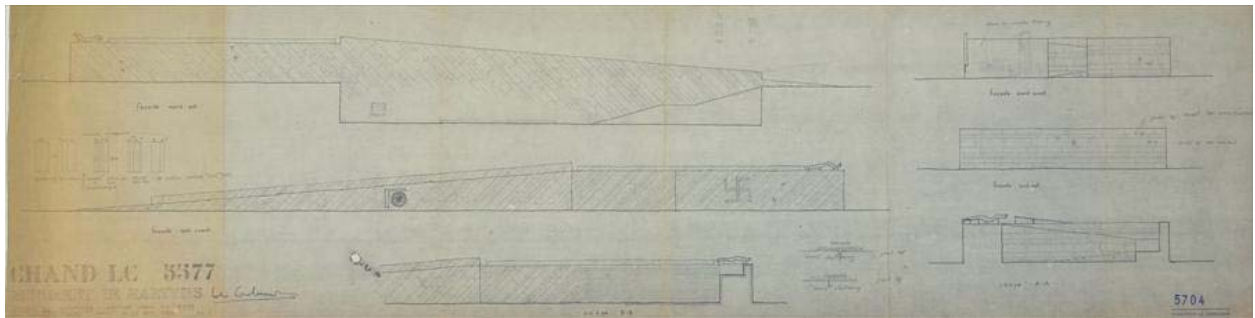
The three major buildings along with the monuments are brought together and are made a part of the urban scale, related with the user, by means of the pedestrian plaza which at once seems endless, but at the same time efficiently connects the three major corridors between the buildings. To some extent, the unrealised elements within the grand scheme of plans for the Capitol project affect the visual integrity of the space and are attended to as part of the planning guidelines, but each has a unique role to play in the drama that unfolds in the many layers and plains that are presented to the pedestrian at the promenade level of the esplanade. Such is the impact of the monuments, that is perhaps more imperative that this plaza be raised to a higher level of importance, purely on the basis of the setting it provides and the views it affords. Since the esplanade is one of the most public spaces in the Capitol Complex with maximum visibility, the level of maintenance needed should also be increased.

Several sections of the esplanade exhibit signs of disrepair in the form of vegetation growth around the joints. Worn pavers and location of water tankers, barricades and CISF shelters along some sections are also pressing issues.

With regard to the Open Hand monument, its socio-political message and emblematic form convey its importance. Its visual impact as a free-standing monument has been affected to a large extent by the citing and location of telecom towers in the view corridors. Rust stains and deposits are also observed on the metal sections.

Water staining, indicative of roof seepage is observed throughout the internal ceiling of the Tower of Shadows. Incongruous rain-water downtake pipes completely obliterate the undeniably scientific plains of this veritable solar classroom. Inappropriate cement patchwork repairs have been undertaken at several instances that are clearly visible and the workmanship does not necessarily portray high quality.

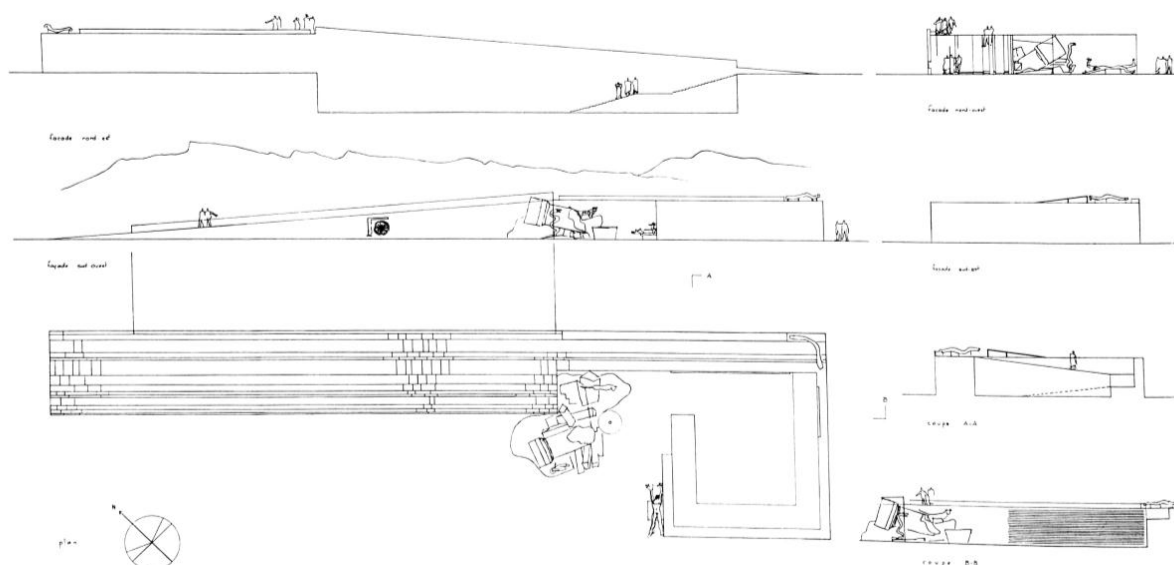
At the time of assessment, restoration work was being undertaken at the Geometric Hill. As a Purist painter and sculptor, Le Corbusier was well-versed in the language of the abstract and had intimate knowledge of the deep meanings that could be conveyed through the simplest of forms.



Over two decades ago a renowned Chandigarh sculptor and former faculty member of the Government College of Art, B M Chugh was commissioned to execute the sculptures as shown in the drawings of the Capitol team. A majority of these are housed within an enclosure at the Vindhya hostel maintenance office (Sector 12, Punjab Engineering College), and save a patina of dust are primarily in a usable condition. Some amount of restoration on one of the elements is essential as it has partially severed, but other than that these could be salvaged and installed as intended at the site, at the exact location as desired by Corbusier.



It is felt that installation of these key elements in the esplanade would provide the necessary scale and context to tie in all the buildings and monuments together, to complete the schematic as envisaged and bring in architecture, public art, contextual history and in a sense the entire composition of the Capitol together.



3. Past repairs

An essential guiding factor in terms of providing clues for future restoration works, a tabulation of past repairs is indicative of what works or isn't relevant at a project site. The following tabulation and studies undertaken on site form a basis for writing the conservation plan. In case of the three monuments, interior changes are evident as most of the flooring and wall finishes have been completely altered from the original. The exterior faces too provide certain variations in the new cement repair mix clearly visible to the discerning eye.

Information regarding maintenance and repair of the Capitol Complex under taken for the last 20 years⁴:-

A. High Court Building and its water bodies.

1. Flooring of Honorable Judges corridor from existing Judges Library to Court Room No. 42 at ground floor level was changed in the year 2005.
2. The water proofing of water bodies was done in the year 2005.
3. The Museum was setup in the existing record room block-I in the year 2005 and after necessary renovation i.e. change of flooring, false ceiling and aluminum partitions etc.

⁴ Source: Nomination Dossier, Capitol Complex, Chandigarh

4. The existing Secretaries Cabins adjoining to existing Honorable Judges Library/Conference Hall have been converted into Honorable Judges Lounges, Meeting Room and office of Secretary to Honorable Chief Justice of Punjab and Haryana High Court in the year 2005. Now the flooring of Lounges and Committee Room and Conference Hall have been replaced in the year 2012.
5. The flooring of the Hall near gate No. 2 was replaced after modification of existing stairs in the year 2005.
6. New Facilitation Centre was provided near gate No. 2 in the year 2005.
7. Escalator was provided in the Hall near gate No. 2 leading from basement floor to ground floor in the year 2005.
8. The toilets attached with Honorable Judges Chambers have been renovated in the year 2008.
9. The existing cycle stands building adjoining to Court Room No. 9 have been converted into offices space with necessary renovation in the year 2008-09.
10. Flooring of all the court rooms have been changed in the year 2008-09.
11. Flooring of the Honorable Judges Chambers have been changed in the year 2008-09.
12. False ceiling has been provided in all the Court Rooms and Honorable Judges Chambers.
13. Meditation, *Lok Adalat*, Gazette Section, Dispensary, I.L.I. and other related branches have been setup in the existing basement courts of extension wing covering 11 Nos. Courts after necessary renovation of change in flooring, false ceiling and partitions etc.
14. Existing 09 Nos. Courts of basement floor of extension wing have been converted into Secretaries cabins in the year 2012-13 after necessary renovation of change in flooring, false ceiling and Aluminum partitions etc.
15. Due to damage caused by fire, the flooring of 2nd block of Judicial Record building was replaced in the year 2012.
16. Office Space and Secretaries Cabins above Court Room No. 10 to 15 (at 1st floor level) have been converted into 6 Nos. Court Rooms with attached chambers for Honorable Judges in the year 2012 with changed specifications of flooring of court rooms and chambers including false ceiling as per patterns of already renovated courts.
17. Flooring of Public corridor at basement floor level and ground floor level of extension wing have been replaced in the year 2013.

Note:- The renovation works have been carried out as per the requirement of the Honorable Building Committee under the main head of account i.e. M.H. 4059 (C.O.) – Administration of Justice.

B. The Secretariat Building

1. Retile terracing of entire building in year 2000-02.
2. Silicon treatment of exterior concrete face in the year 1997-98 and 2008- 2009.
3. General daily routine, maintenance such as masonry repair, white washing, painting, joinery repair, sanitary repair etc.

C. The Assembly Building and its water bodies

1. Water proofing of roof terrace around Punjab *Vidhan Sabha* and Haryana *Vidhan Sabha* chambers have been done during the year 20011-12.
2. No addition and alteration have been carried out by the Chandigarh Administration except regular day to day maintenance; however the respective State of Punjab and Haryana have

renovated their areas which include change of existing flooring, false ceiling and aluminum partitions etc.

D. The Open Hand Monument

1. Cleaning of RCC/bricks surface and laying colourless hydrochloric impugnation water repellent coating.
2. Welding and grinding of worn out metallic surface and providing two coats of colourless high performance polyurethane enamel coating.
3. Treatment of RCC surface outer/inner wall with water based hydrophobic silicon water repellent.
4. Providing and laying cement concrete flooring in surrounding area of open hand.

E. Martyr's Memorial

1. Information being procured from records.
2. In 2015 dry wire brush scrubbing to remove blackening of concrete carried out

F. The Tower of Shadows

Minor repair of cement work executed in 2006.

G. The Geometric Hill

No repair done. In 2015 the Sundial was completed

H. The Plaza Flooring re-laid during 2013-14 in portion of plaza in front of High court

I. Temporary Hutments and structure at site and their use.

1 No. Horticulture Store, 1 No. Tube well for day to day maintenance of the Capitol Complex. In 2015 office of Chief Engineer UT has been requested to remove the same

Restoration & Management Plan Of Buildings & Monuments



Punjab & Haryana High Court



CURRENT ISSUES - COURT ROOMS



- Tapestry Cut / rolled up to fit Air Conditioning Grills & Ducts
- Additional Light Panels / AC Ducts / Wall Fans added along longer lengths of Rooms
- Original finishes of walls changed / covered with POP & painted
- Additional Storage units added on sides
- Furniture changed

CURRENT ISSUES - OFFICES & CHAMBERS



- Additional partitions added to create cabins & rooms
- Interior layouts & zoning changed as required with additional storages added at various places
- Original Furniture & Light Fittings replaced / changed as required with no consistency in design & type.
- Original fenestrations blocked with AC Units & curtains etc.
- False Ceilings added in most of the areas
- Flooring changed to Vitrified Tiles, wooden flooring etc. as required.

CURRENT ISSUES - CORRIDORS / PUBLIC SPACES



- False Ceilings fixed in almost all areas to cover the dense network of wiring, HVAC Ducts etc. fixed on ceiling
- Dense network of cables & wires running across corridors & hanging randomly as required.
- LAN & Telephone Junction Boxes, Hose Reel Boxes, Fire Alarm Panels & Speakers fixed randomly in the corridors
- Signages fixed Randomly on walls & Ceilings with no Uniformity in Design

CURRENT ISSUES - CORRIDORS / PUBLIC SPACES



- Additional Furniture, Storage etc. dumped in the corridors at multiple places
- Open Spaces between Judges' Chambers filled with services like AC Units, Electrical / LAN Boards, Fire wet risers etc.

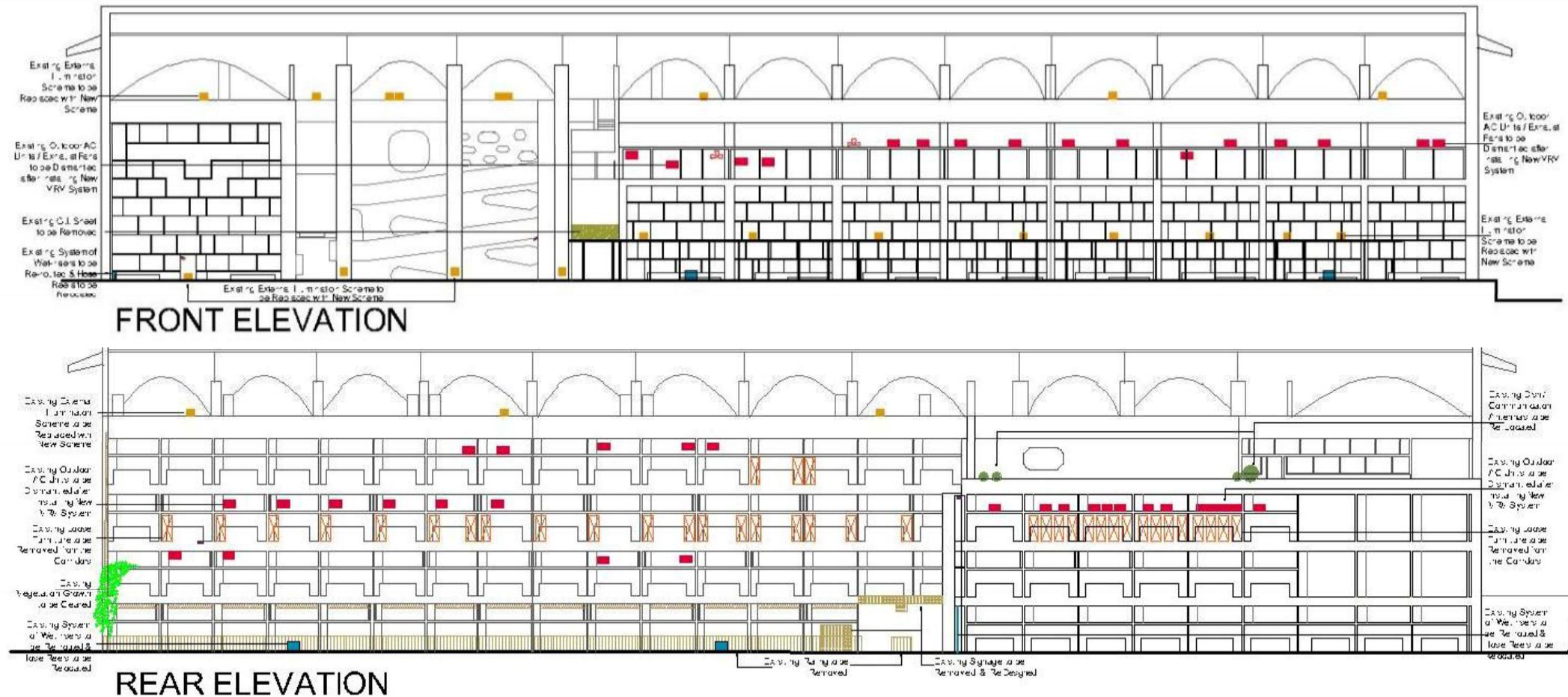
CURRENT ISSUES - TOILETS



- Existing Toilet Layouts & Designs changed as required, with no consistency in design.

Addition To FAÇADES:

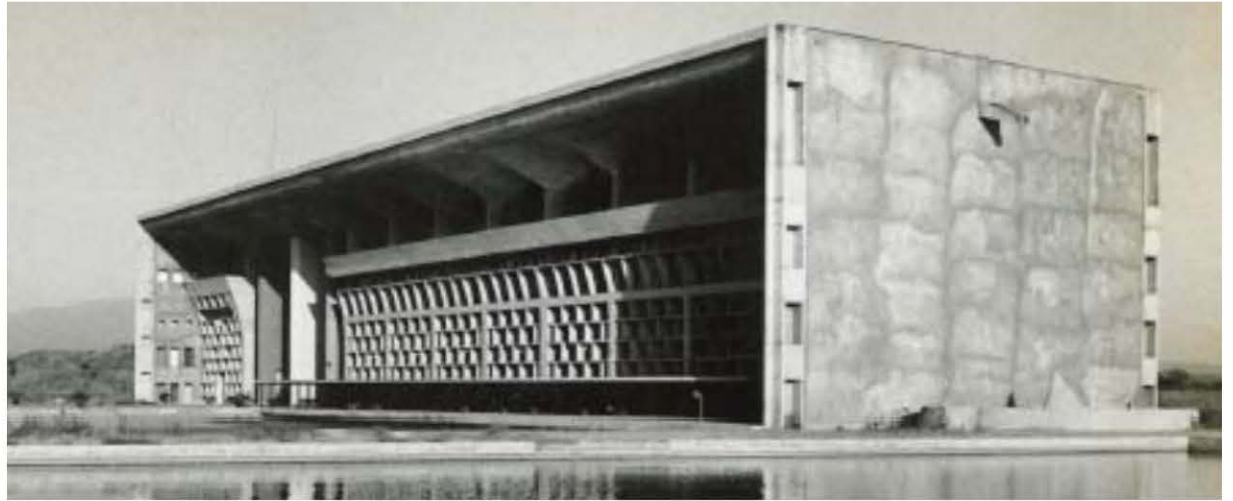
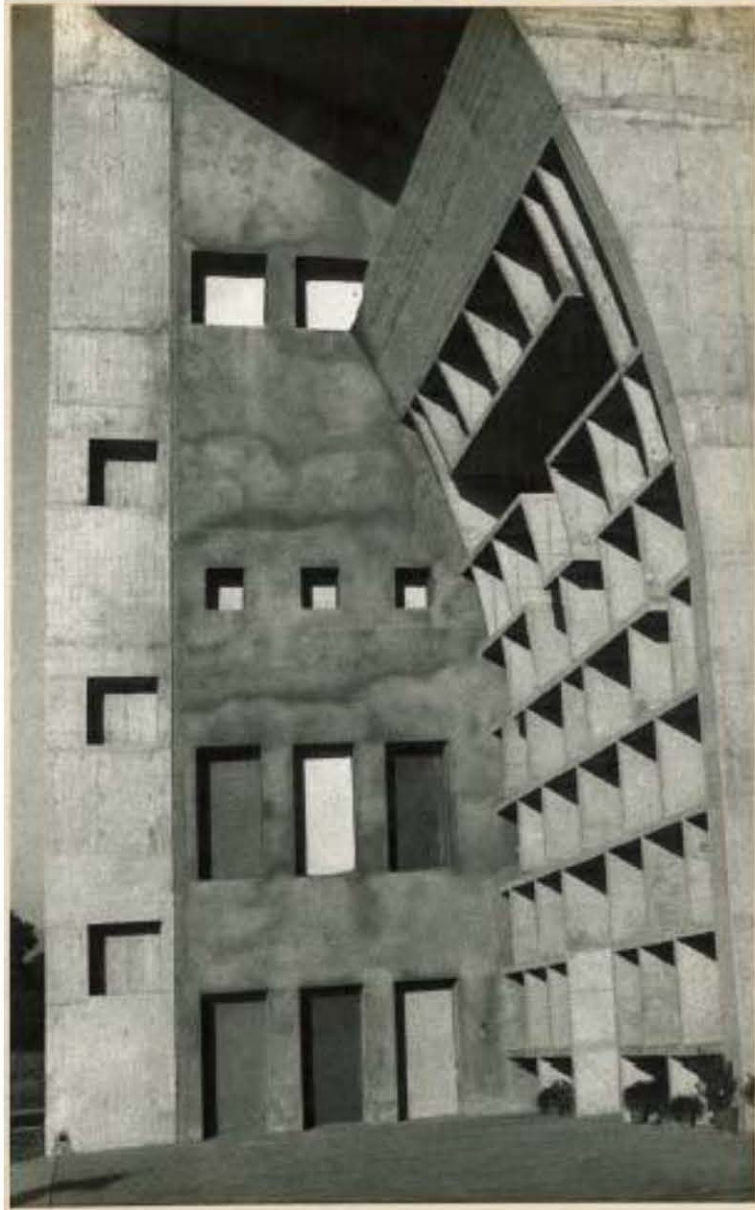
- AC Units installed along some windows, with AC Ducts & Electrical Wires running along shorter facades
- Dish Antennae, light fixtures along the parapet
- Ad-Hoc Storages placed in corridors blocking the Façade Openings



LEGEND

- | | | | |
|---|---|---|--|
| Signage to be Relocated / Redesigned | Ad-hoc Additions to be Removed | Vegetation Growth to be Removed | Communication / Dish Antennas to be Re-located |
| Existing AC Outdoor Units to be removed after installing VRV System | Existing Wet Risers & Hose Reels to be Re-routed / Re-Located | Exhaust Fans to be Removed | Loose Furniture to be Removed |
| Electrical Conduits & Wiring to be Re-routed | AC Ducts / Pipes to be Dismantled after Installing VRV System | External Illumination Lights to be replaced with new system | |

ARCHIVAL ELEVATIONS:



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WORKS OF LIFT CLADING

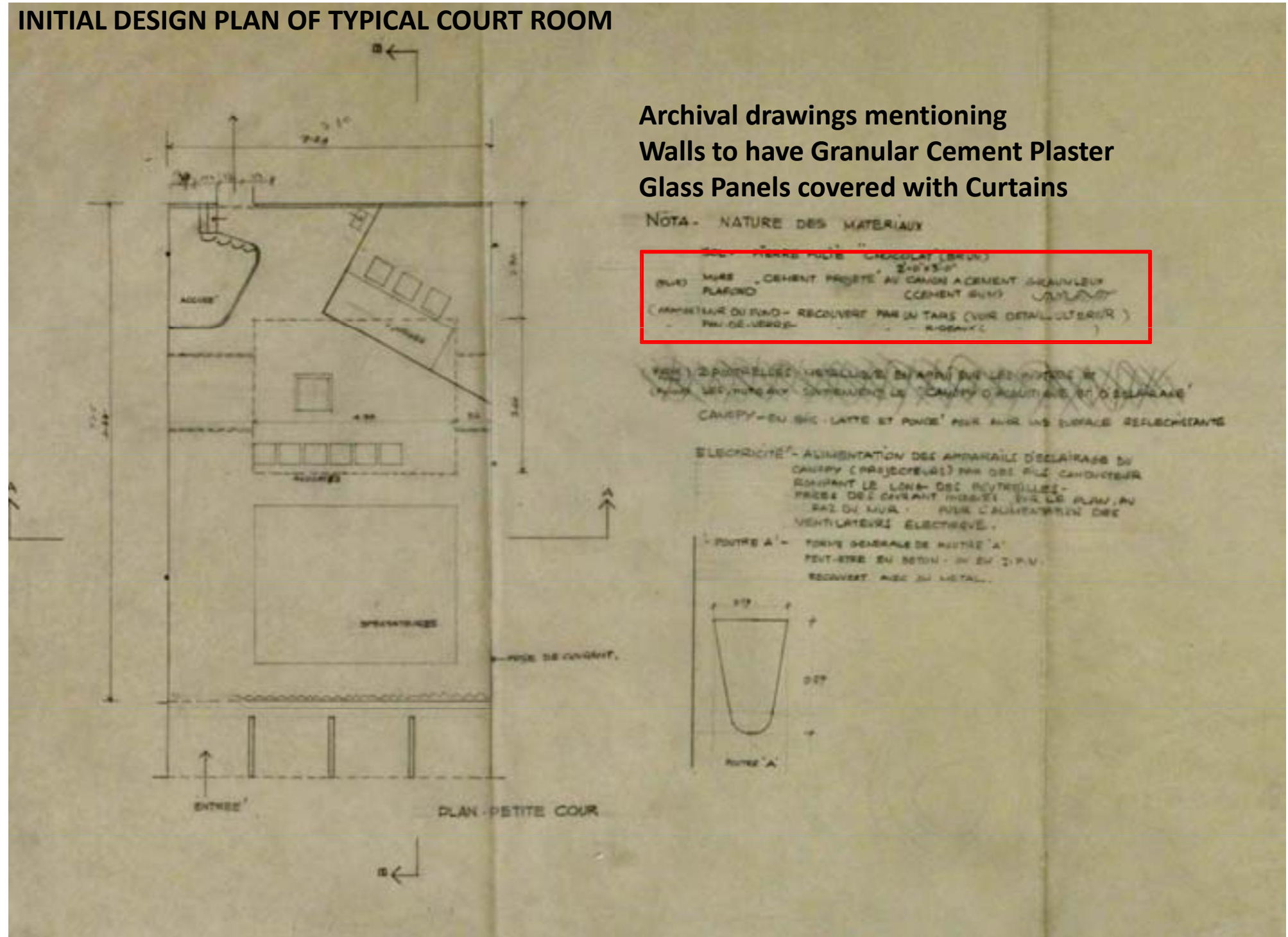


Existing Clading of Lift Shaft



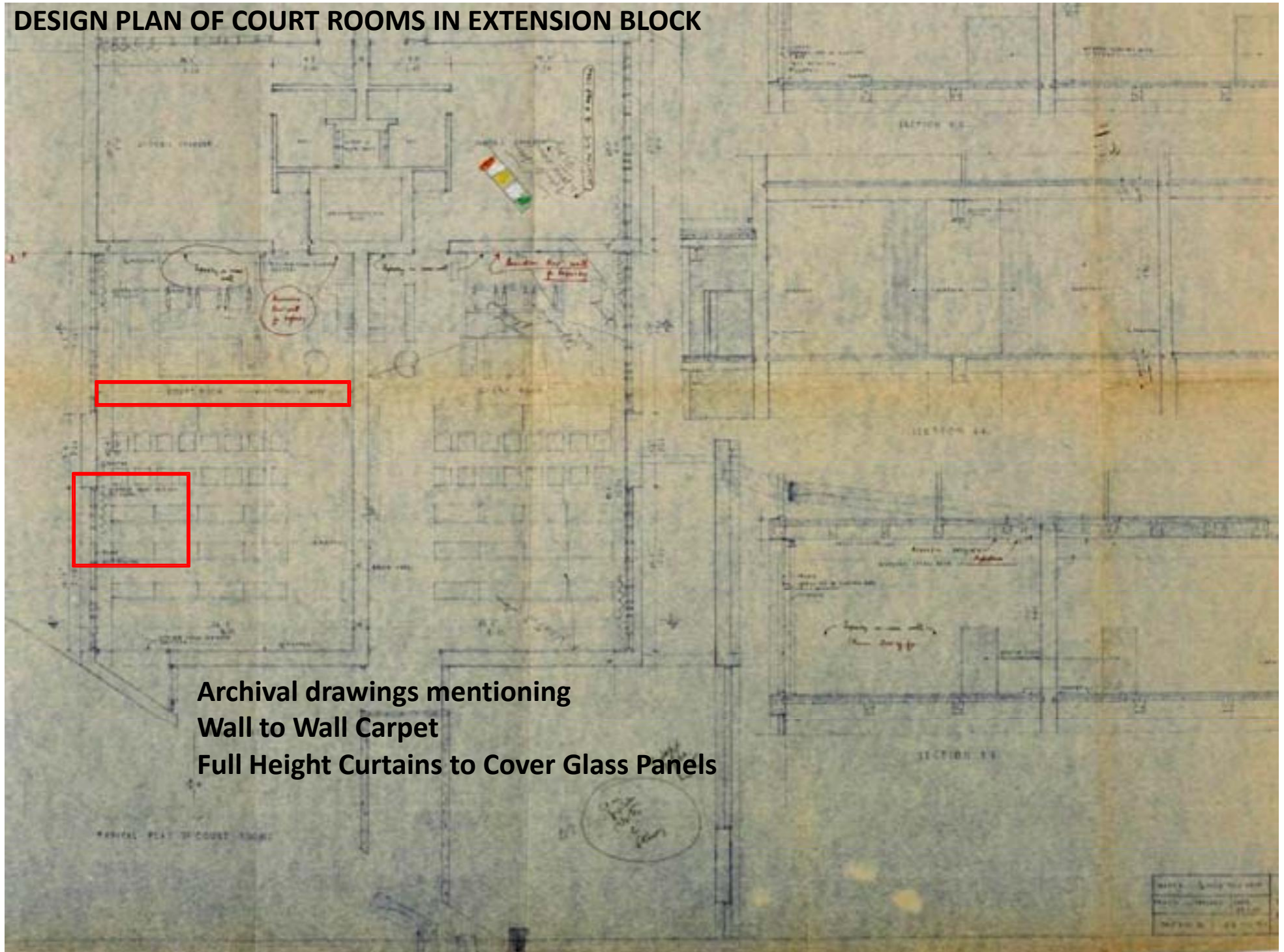
WORKS OF MODEL COURT ROOMS: ARCHIVAL REFERENCE

INITIAL DESIGN PLAN OF TYPICAL COURT ROOM

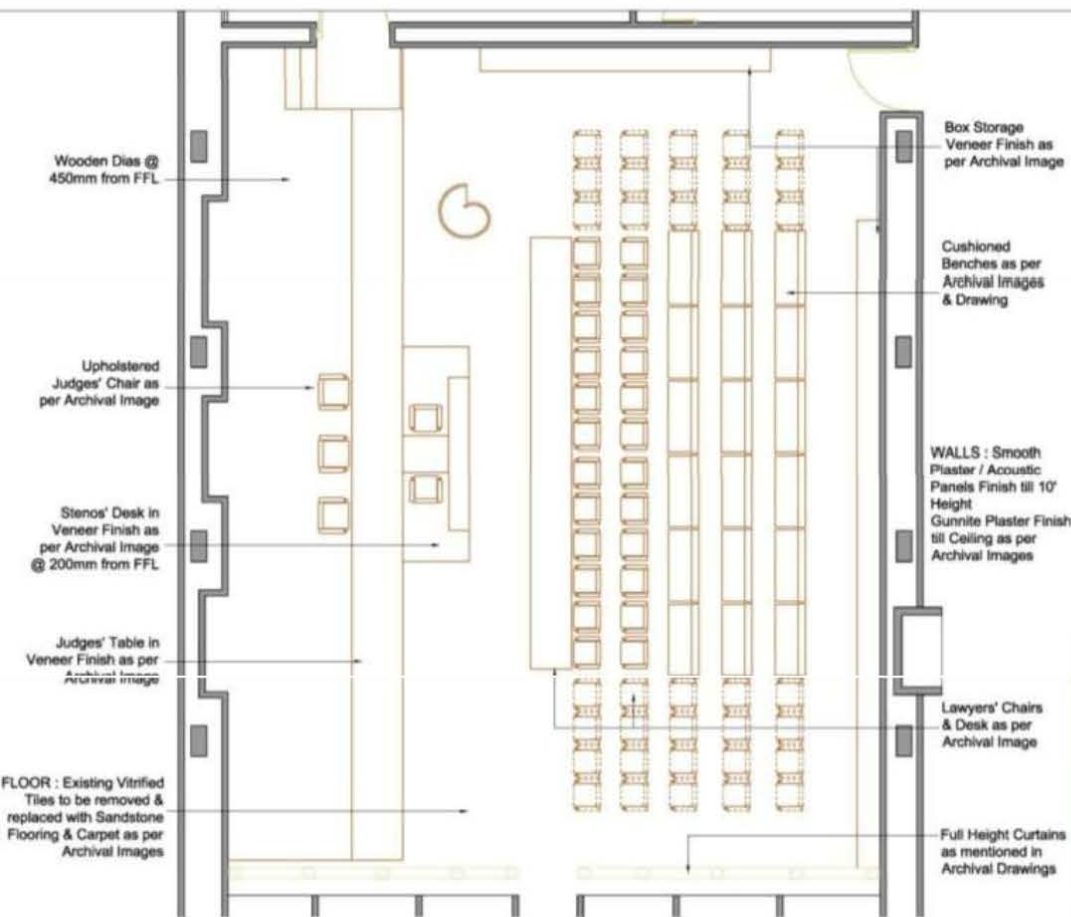


WORKS OF MODEL COURT ROOMS: ARCHIVAL REFERENCE

DESIGN PLAN OF COURT ROOMS IN EXTENSION BLOCK



WORKS OF MODEL COURT ROOMS: COURT ROOM NO. 01



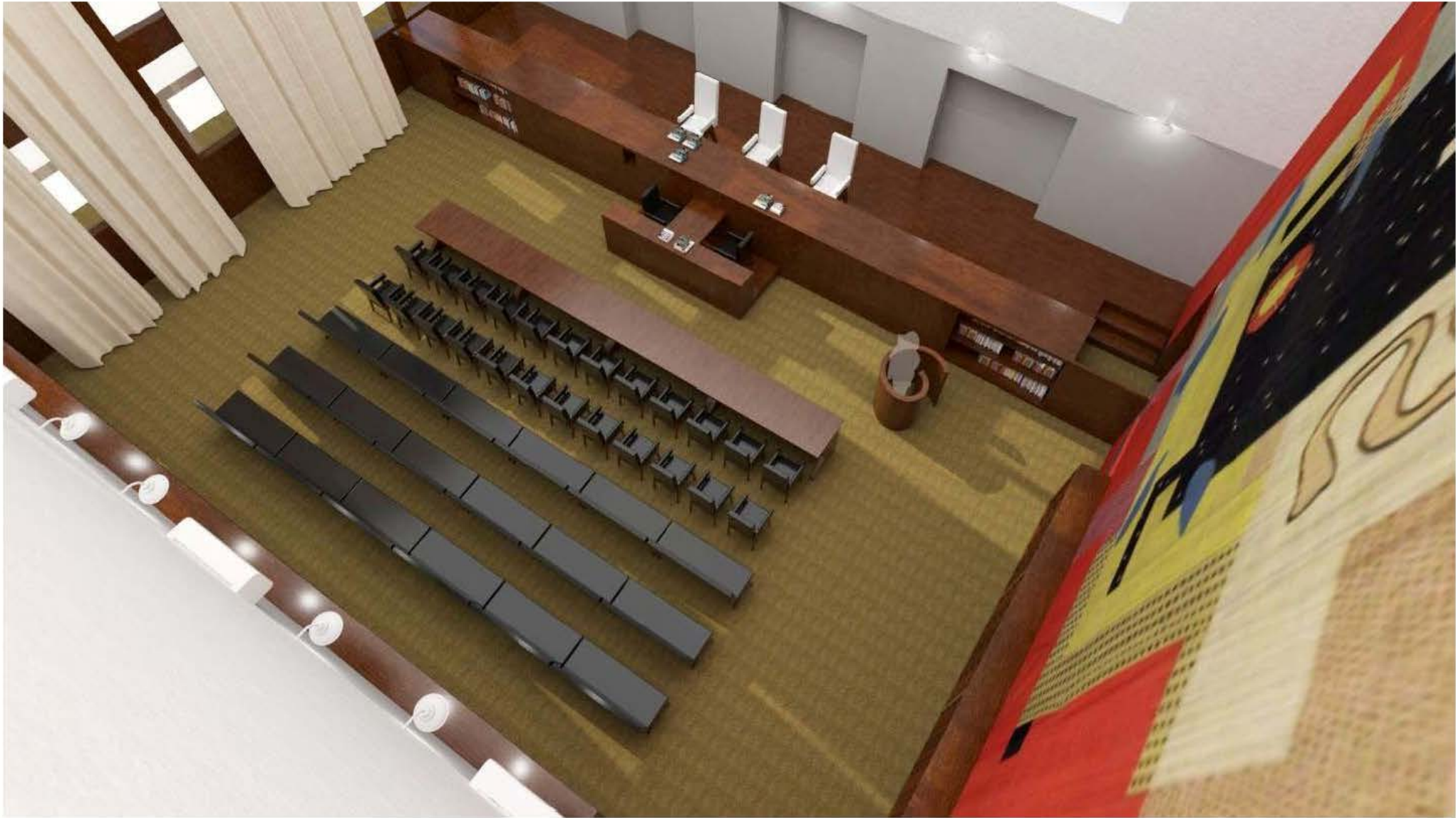
Court Room No. 01

Current Seating Capacity : 122 Nos.

Proposed Capacity : 78 Nos.

Proposed Capacity with Additional Chairs : 113 Nos.

WORKS OF MODEL COURT ROOMS: CHIEF JUSTICE COURT ROOM



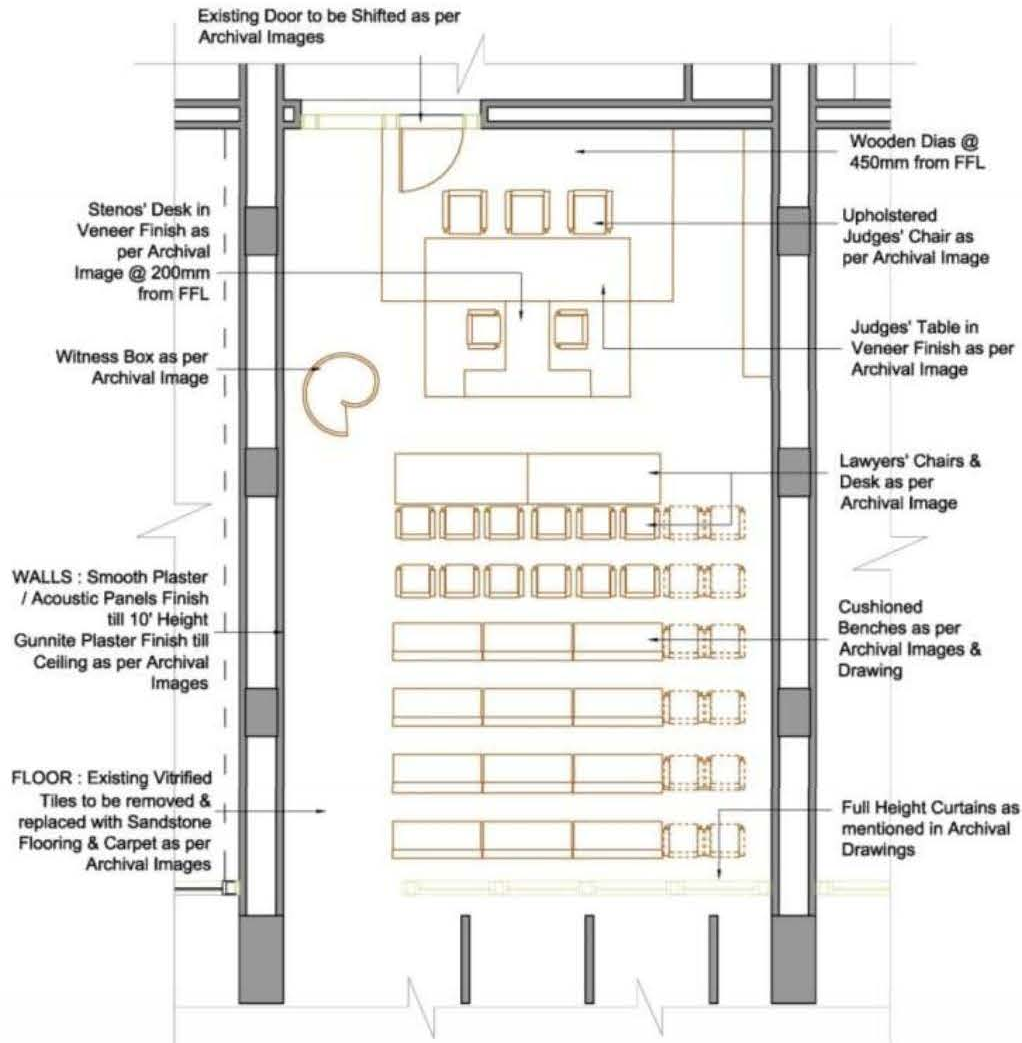
WORKS OF MODEL COURT ROOMS: CHIEF JUSTICE COURT ROOM



WORKS OF MODEL COURT ROOMS: CHIEF JUSTICE COURT ROOM



WORKS OF MODEL COURT ROOMS: COURT ROOM NO. 06



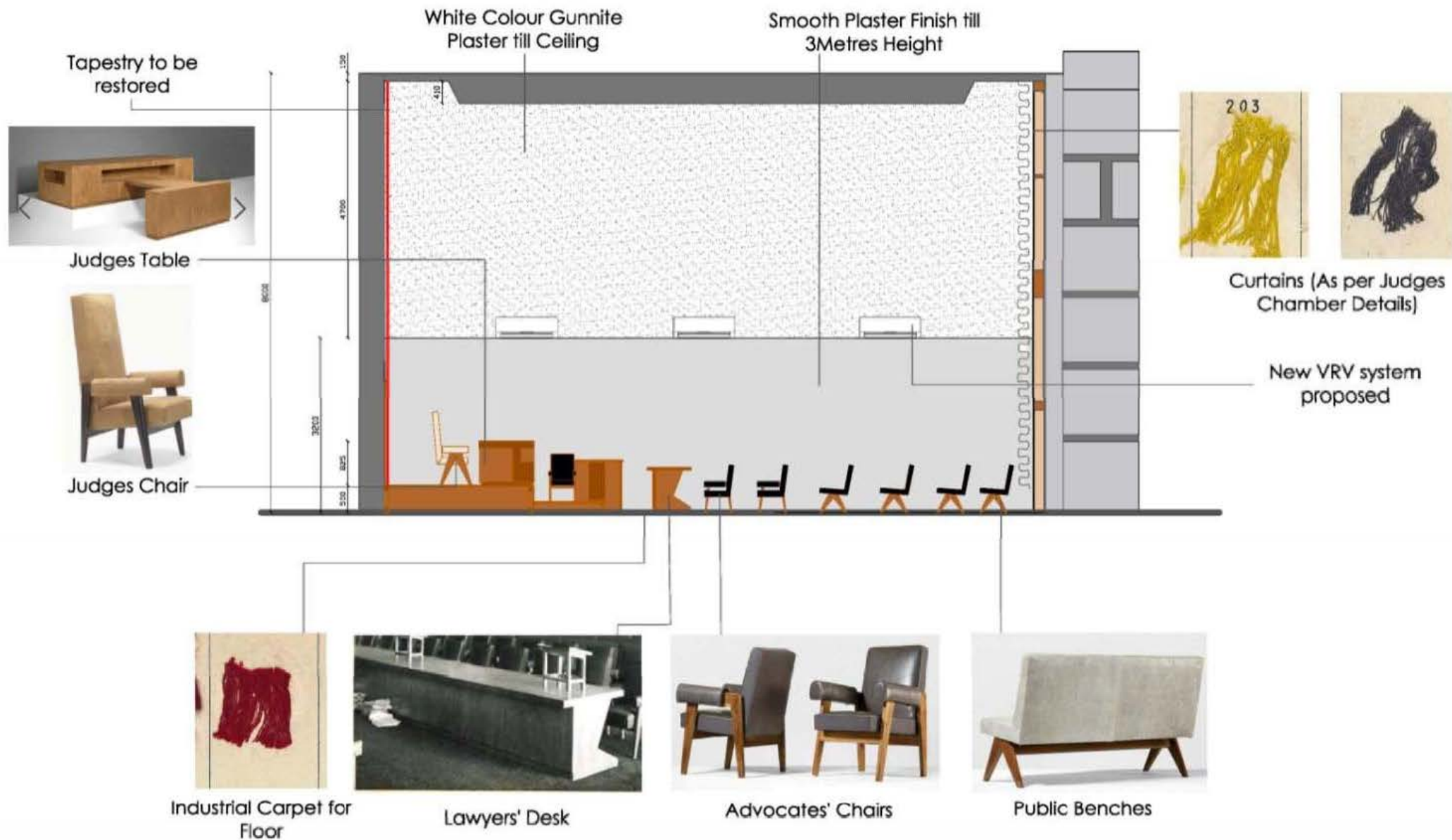
Court Room No. 06

Current Seating Capacity : 55 Nos.

Proposed Capacity : 48 Nos.

Proposed Capacity with Additional Chairs : 60 Nos.

WORKS OF MODEL COURT ROOMS: COURT ROOM NO. 06



WORKS OF MODEL COURT ROOMS: COURT ROOM



WORKS OF MODEL COURT ROOMS: COURT ROOM NO. 05



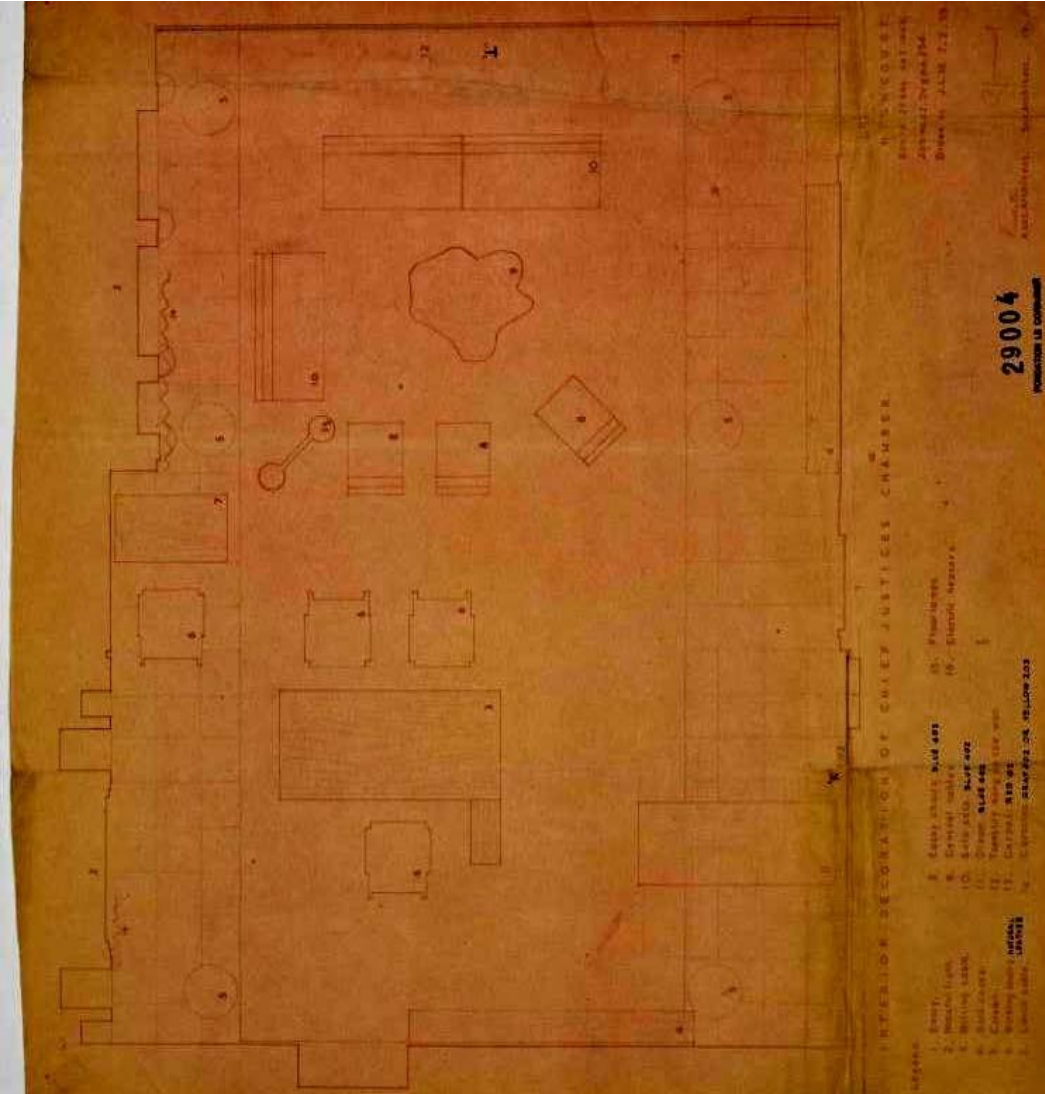
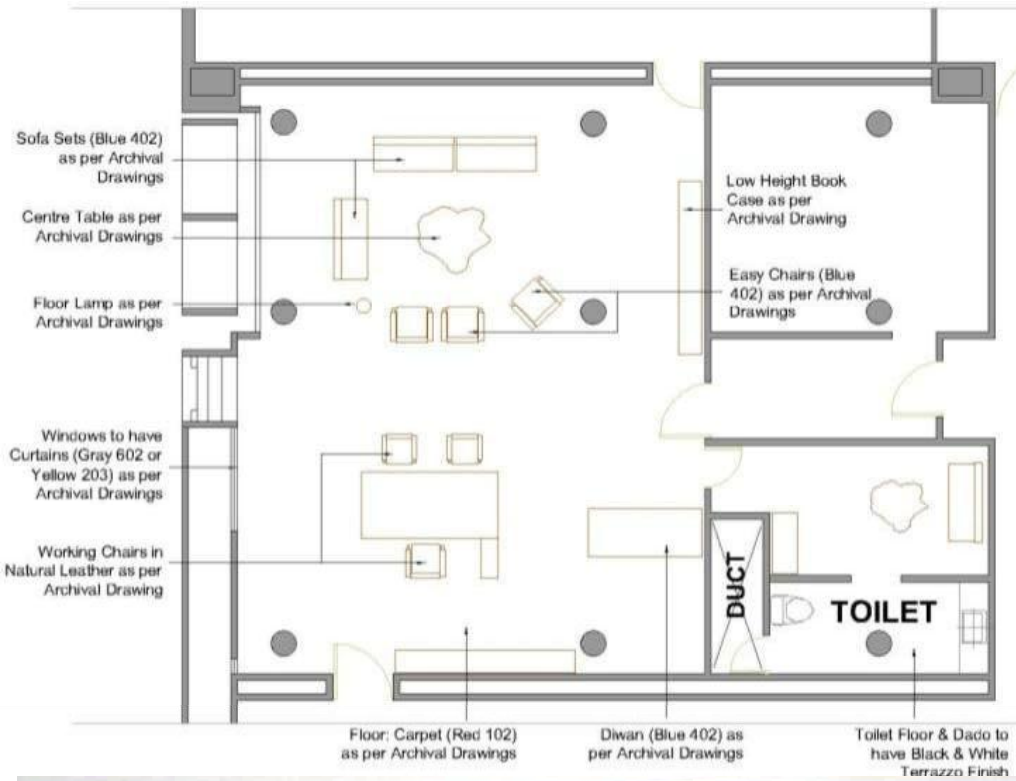
WORKS OF MODEL COURT ROOMS: COURT ROOM NO. 05



WORKS OF MODEL COURT ROOMS: COURT ROOM NO. 05



WORKS OF MODEL JUDGES' CHAMBER: CHIEF JUSTICE'S CHAMBER



- Finishes Mentioned in Archival Drawing:
- Working Chairs to be in Natural Leather
 - Easy Chairs to be in Blue (402) Color
 - Sofa Sets to be in Blue (402) Color
 - Diwan to be in Blue (402) Color
 - Carpet to be Red (102) Color
 - Curtains to be in Gray (602) or Yellow (203) Color

WORKS OF MODEL JUDGES' CHAMBER: CHAMBER NO. 06



Carpet Colour:
Red 102



Sofa Colour:
Blue 402



Judge's Desk



Judge's Chair



Sofa Design



Centre Table



Curtain Colour:
Yellow 203



Curtain Colour:
Gray 602



Visitors' Chair



Book Cases



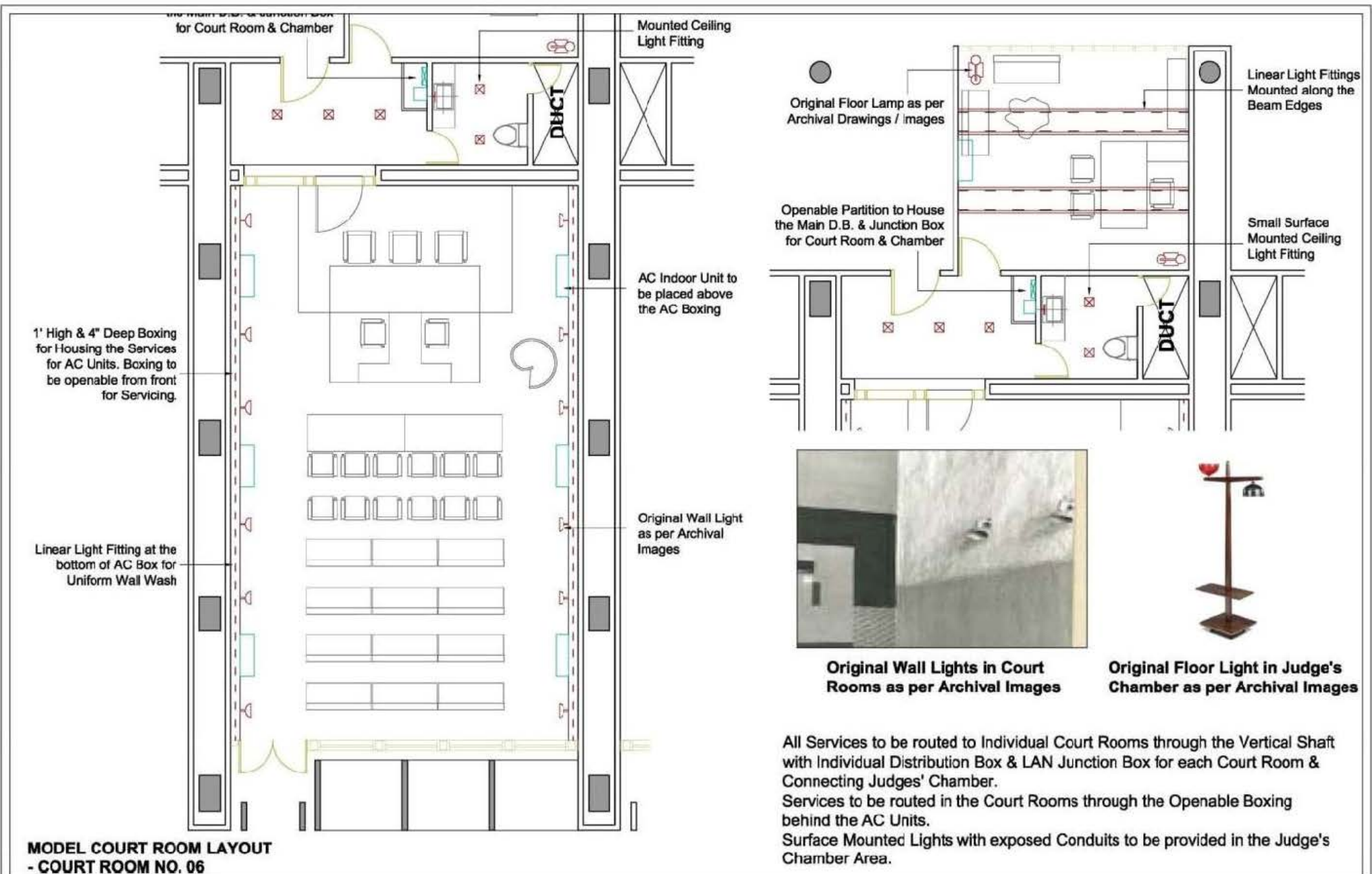
Easy Chair



Floor Lamp

**MODEL JUDGE'S CHAMBER LAYOUT:
JUDGES' CHAMBER NO. 06**

AREAS OF WORKS ON LEVEL 03 & 04 (COURT OFFICES):



HERITAGE COMMITTEE DRAWING, HIGH-COURT, CAPITOL COMPLEX, CHANDIGARH

**DRAWING TITLE:
PROPOSED COURT ROOM 06**

SCALE:1:50 @A2

DATE: MAY 2017



**CLIENT:
UT,
CHANDIGARH**

DRAWN BY:

SHEET NO.:

1.P.C7

Abha Narain Lambah Associates
Conservation Architects & Historic Building Consultants
201 B - Wing Amrit Carter Road, Khar(W), Mumbai-400052
Tel: 2605 5756 Fax: 2604 5667
Email: anlassociates@gmail.com
Website: anlassociates.com

WORKS OF MODEL JUDGES' COURTROOM & CHAMBER: FURNITURE CUT

Court Rooms	Size	Material / Finish	Reference Picture	Archival Picture
Judges Table	324w x 253d x 109h cm	Natural Teak Wood		
Lawyers' Desk	50w x 75h x 210L cm	Natural Teak Wood		
Witness Box	144w x 119d x 117h cm	Natural Teak Wood		
Reading Stand	52w x 55d x 26h cm	Natural Teak Wood & Leather Top		
Low Height Books Rack	160w x 34d x 72h cm	Natural Teak wood & Glass		

WORKS OF MODEL JUDGES' COURTROOM & CHAMBER: FURNITURE CUT

Judges' Chairs	71w x 81d x 124h cm	Natural Teak Wood + Leather		
Advocates' Chairs	67w x 74d x 88h cm	Natural Teak Wood + Leather / Linen		
Public Benches	140w x 66d x 83h cm	Natural Teak Wood + Leather		
Public Benches (Outside)	140w x 66d x 83h cm	Natural Teak Wood + Netted		

WORKS OF MODEL JUDGES' COURTROOM & CHAMBER: FURNITURE CUT

	Floor Finish (As per Judge Chamber Details)	Wall to Wall Industrial Carpet	Red 102		
	Walls	Cement Plaster till 10' Height from floor Gunnite Plaster painted white till Ceiling			
	Curtains (As per Judges Chamber Details)	Automated Full Height Curtains	Yellow 203		Gray 602 

WORKS OF MODEL JUDGES' COURTROOM & CHAMBER: FURNITURE CUT

Judges' Chambers	Size	Material / Finish	Reference Picture	
Judges' Table	190w x 183d x 75h cm	Natural Teak Wood		
Judges' Chairs	71w x 81d x 124h cm	Natural Teak Wood + Leather		
Visitor Chairs	58w x 66d x 83h cm	Natural Teak Wood + Leather		
Single Seater Sofa	57w x 58d x 83h cm	Natural Teak Wood + Leather		

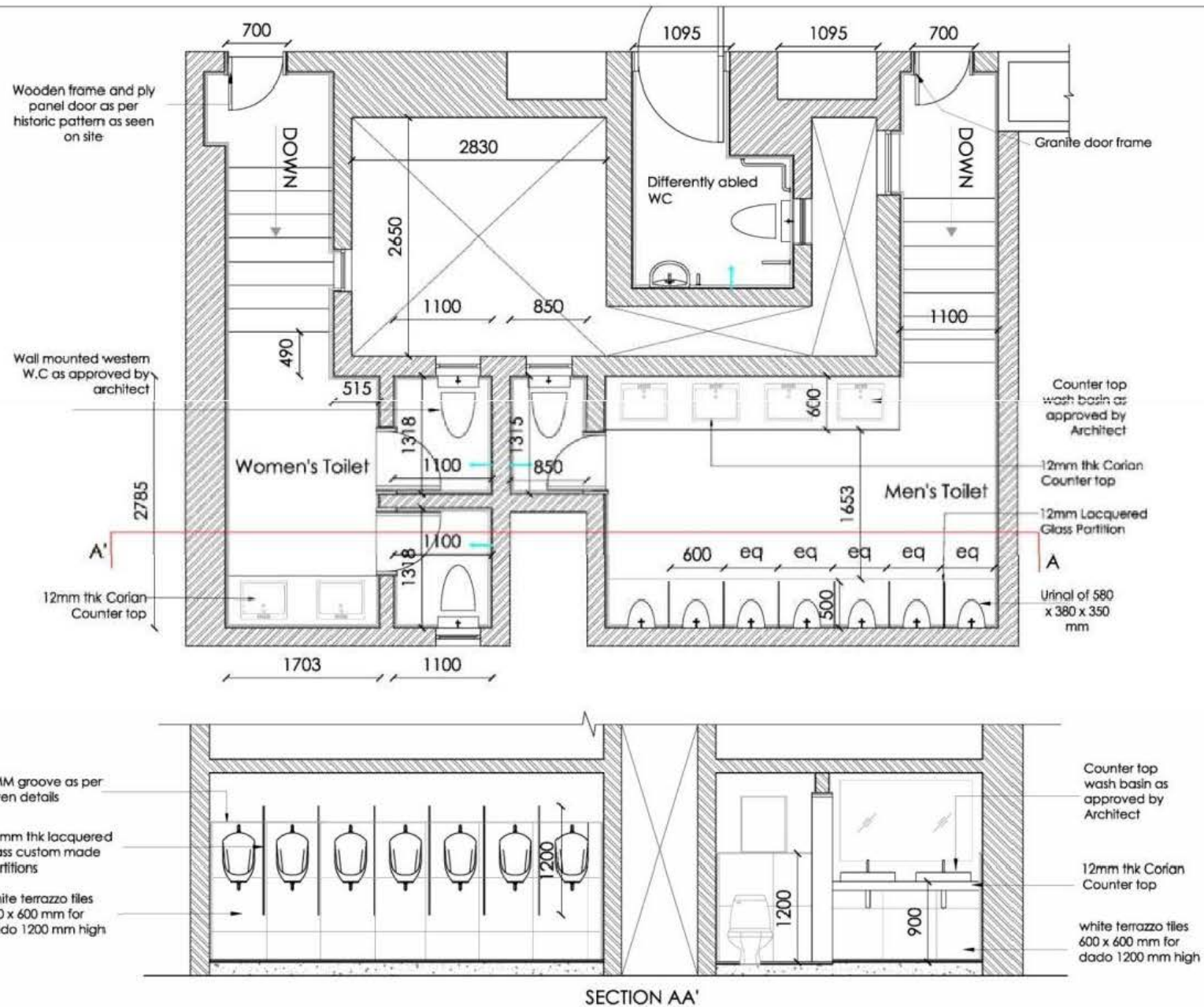
WORKS OF MODEL JUDGES' COURTROOM & CHAMBER: FURNITURE CUT

		Blue 402			
2 Seater Sofa		163w x 81d x 84h cm	Natural Teak Wood + Leather		
Low Height Books Rack		160w x 34d x 72h cm	Natural Teak wood & Glass		
Centre Table			Natural Teak wood & Steel Frame		

WORKS OF MODEL JUDGES' COURTROOM & CHAMBER: FURNITURE CUT

					
Floor Light					
Floor Finish		Wall to Wall Industrial Carpet	Red 102		
Curtains		Automated Full Height Curtains	Yellow 203		Gray 602
					

PUBLIC TOILET – LEVEL 02:

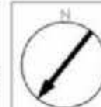


**HERITAGE COMMITTEE DRAWING, HIGH-COURT,
CAPITOL COMPLEX, CHANDIGARH**

**DRAWING TITLE:
PUBLIC TOILET - LEVEL 02**

SCALE:1:30 @A2

DATE: APR 2017



**CLIENT:
UT,
CHANDIGARH**

DRAWN BY:

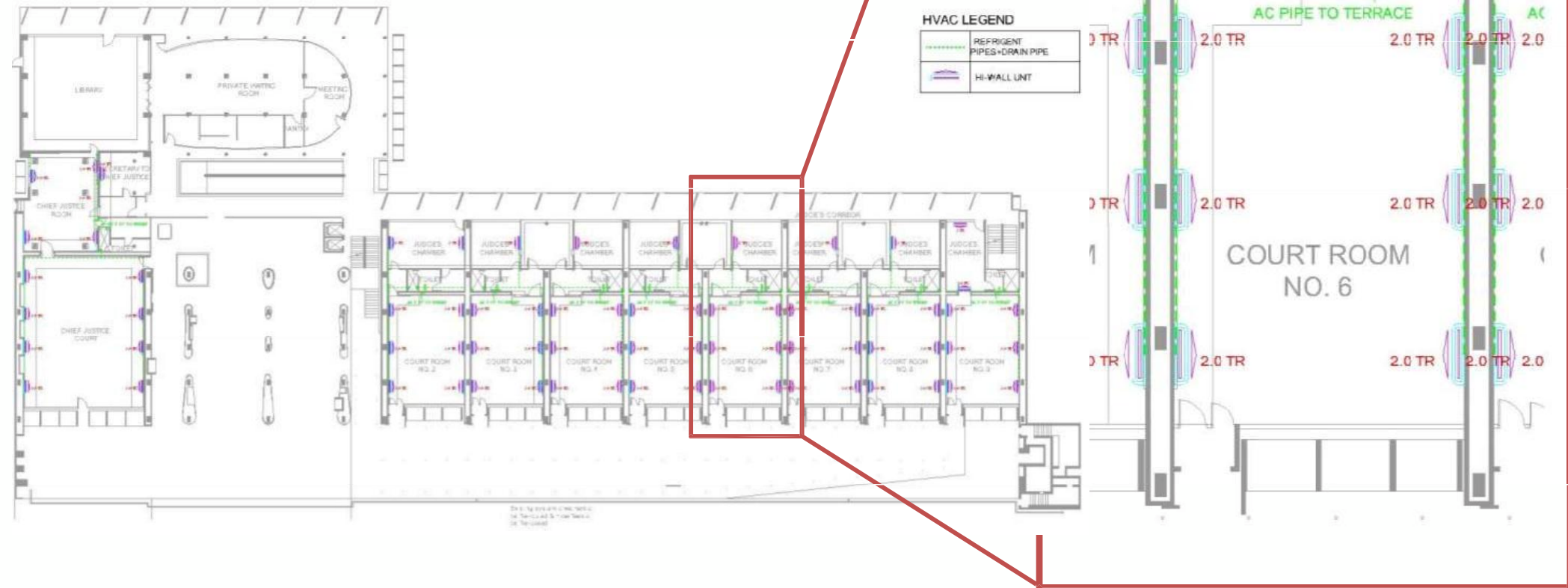
SHEET NO.:

1.T1.C1

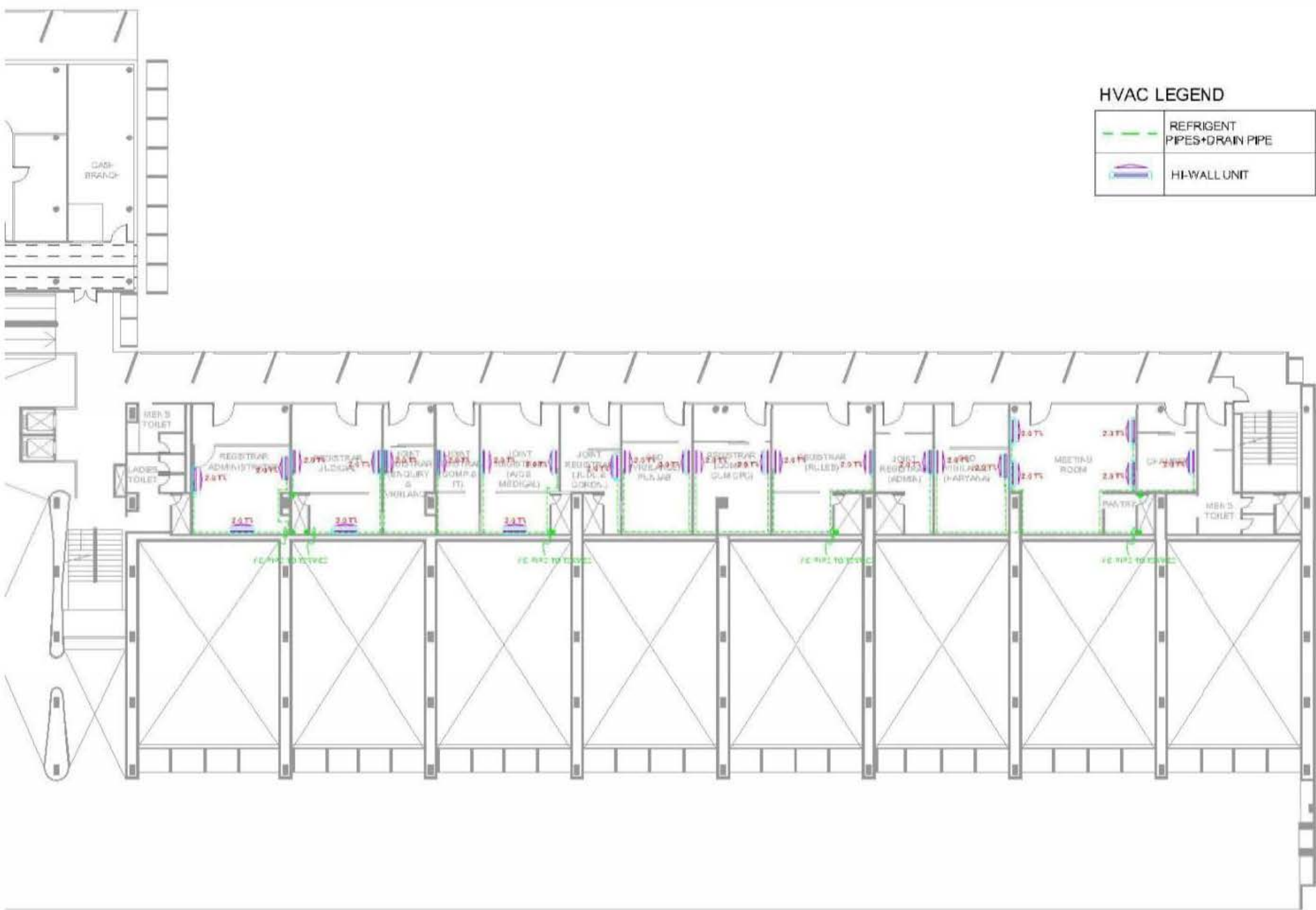
Abha Narain Lambah Associates
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Tel: 2605 5756 Fax: 2604 5667
Email: anlassociates@gmail.com
Website: anlassociates.com

HVAC SCHEME: LEVEL 02 & COURT ROOM 06

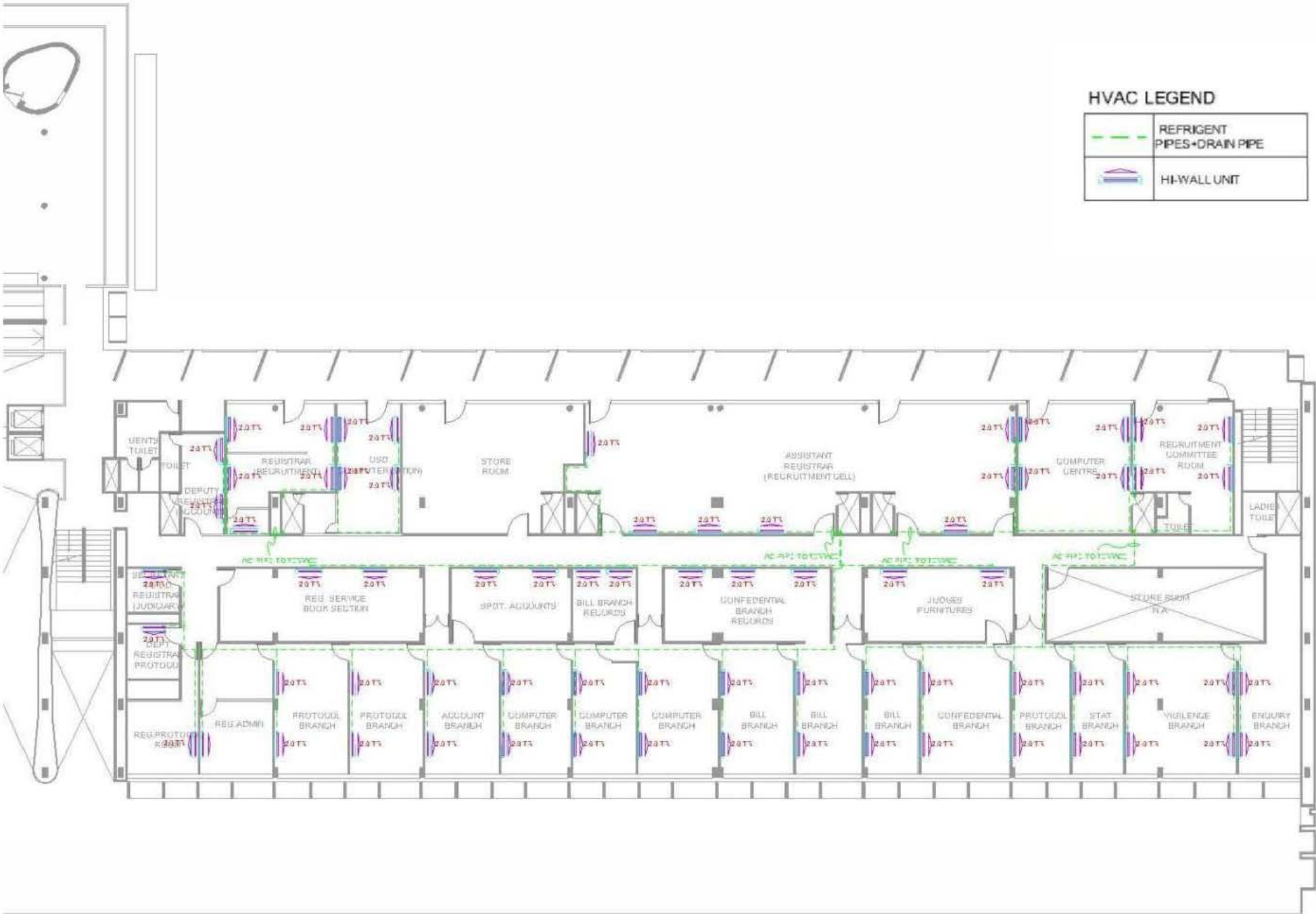
- Individual Shafts behind each Court Room to be used for the HVAC Services
- 3 Nos. High Wall Mounted Units to be placed on either sides of the Court Room with the Services hidden with boxing finished to match the Wall Finish
- Existing HVAC Ducts & System to be Dismantled after making provisions for new VRV System to avoid In-Convenience.



HVAC SCHEME: LEVEL 03

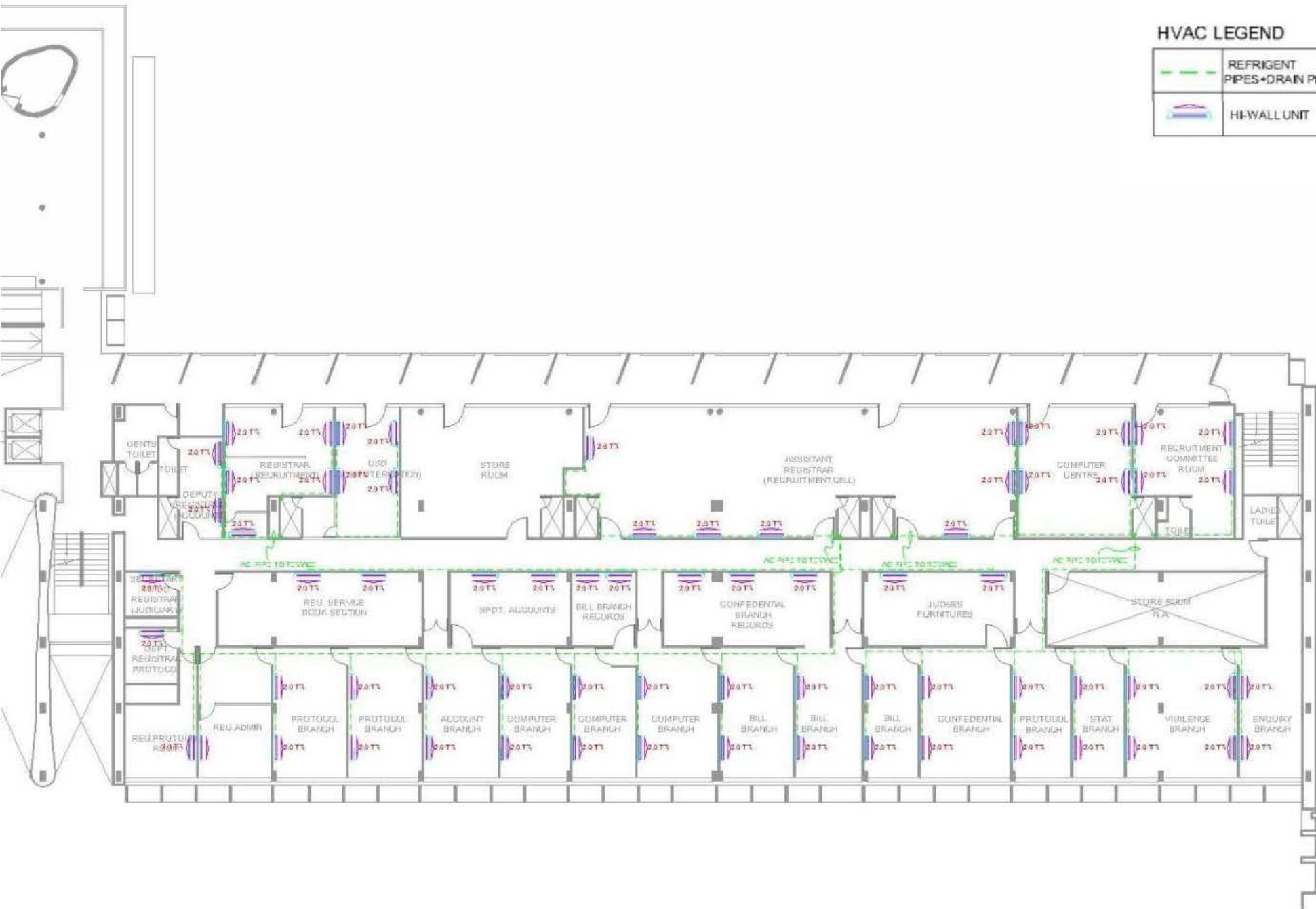


HVAC SCHEME: LEVEL 04

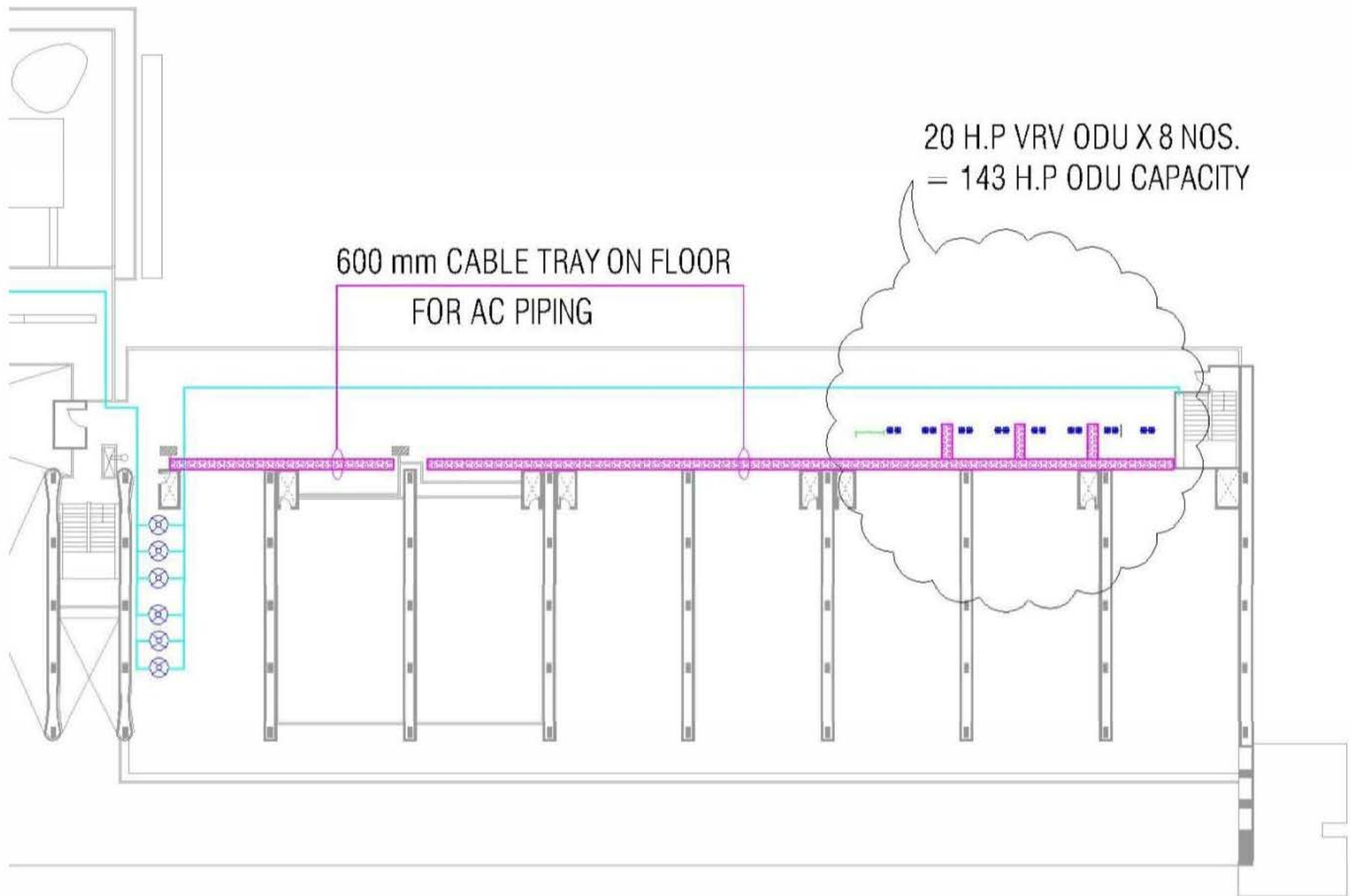


HVAC SCHEME: LEVEL 04

HVAC LEGEND	
	REFRIGENT PIPES+DRAIN PIPE
	HI-WALL UNIT



HVAC SCHEME: TERRACE LEVEL



LIST OF WORKS PROPOSED:

High Court Works Proposed:

- Dismantling existing Central HVAC system in Main Building & replacing same with VRV System
- Model Court Rooms & Chambers No. 01 & 06
- Restoration of Tapestry in all Court Rooms after Dismantling existing HVAC System
- Signage & Display Units
- Re-routing of wiring utilizing the horizontal Shaft in Basement & existing Vertical Shafts
- Replacing existing Fire Detection System with wireless system
- Switching existing LAN & Telephone systems to Fibre Optic System
- Up gradation of Public Toilets
- External Illumination
- Revitalizing 2 Water Tanks in front of the building and providing new system for same.

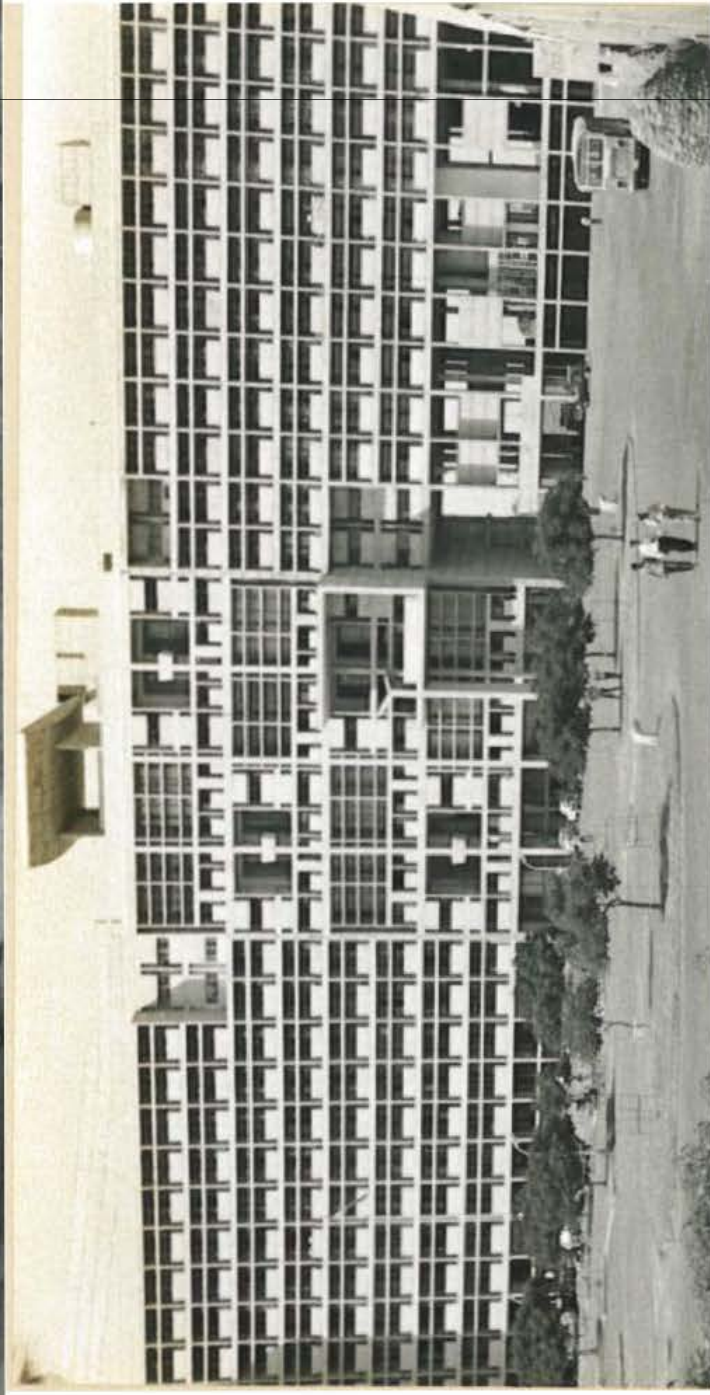
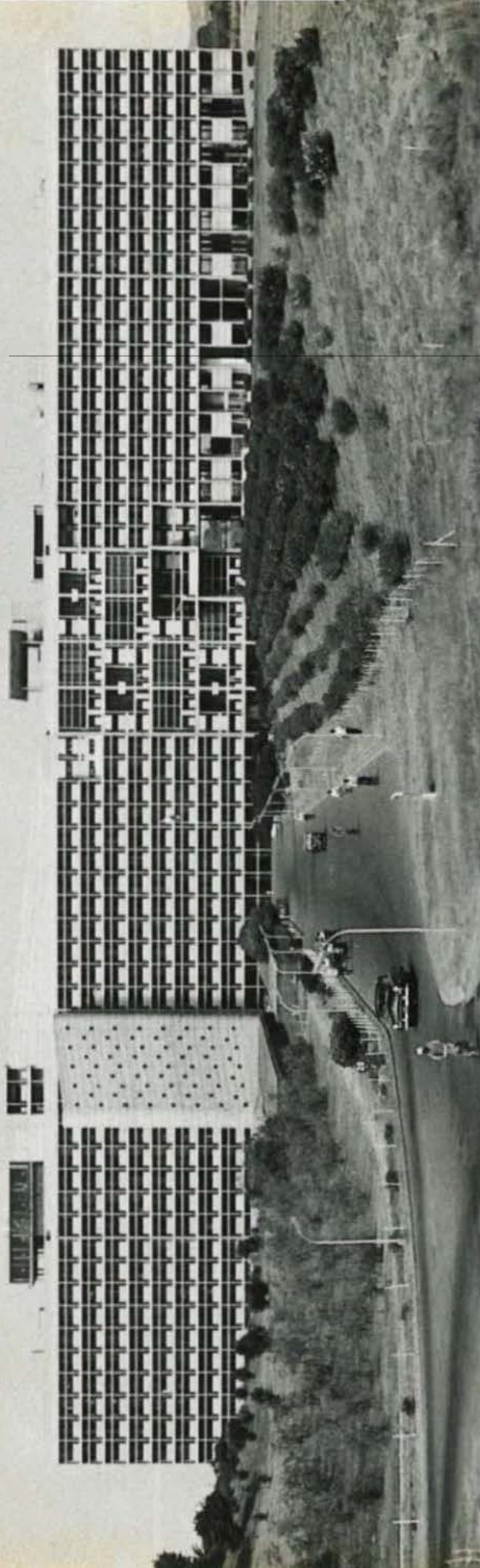
BLOCK ESTIMATE:

BLOCK ESTIMATE FOR PUNJAB & HARYANA HIGH COURT, CAPITOL COMPLEX					
SR. NO	DESCRIPTION	QUANTITY	RATE	UNIT	AMOUNT
1 INTERIOR RESTORATION AND UPGRADATION					
	Interior works Court Rooms	1200	32000	SQ.M	3,84,00,000.00
	Interior Restoration of Judges' Chambers	500	27500	SQ.M	1,37,50,000.00
	Restoration of Tapestry	650	16500	SQ.M	1,07,25,000.00
	Restoration of Existing Furniture			Lumpsum	15,00,000.00
	Public Toilet Upgradation Works	85	33000	SQ.M	28,05,000.00
	Lift Clading Restoration	75	12000	SQ.M	9,00,000.00
	Civil Works in Corridors (Removal of False Ceiling, Damage Repairs, Shifting of Furniture etc.)	825	5750	SQ.M	47,43,750.00
	TOTAL				7,28,23,750.00
2 SERVICES UPGRADATION WORKS					
	HVAC Systems	175	150000	Tonne	2,62,50,000.00
	Fire Alarm & Security System	3950	850	SQ.M	33,57,500.00
	Extra Low Voltage Systems + Rerouting of Cables			Lumpsum	75,00,000.00
	External Illumination	4500	3000	SQ.M	1,35,00,000.00
	TOTAL				5,06,07,500.00
3 MOBILIZATION WORKS					
				Lumpsum	25,00,000.00
4 SPECIALIZED CLEANING OF WALL SURFACES					
		1000	3,000.00	SQ.M	30,00,000.00
5 RECHARGING WATER TANKS & NEW SYSTEM					
				Lumpsum	50,00,000.00
6 PROVIDING & UPGRADING VISITOR FACILITIES					
				Lumpsum	25,00,000.00
	TOTAL				13,64,31,250.00
	Add Night Charges @ 5%				68,21,562.50
	Add Contingency @ 10%				1,43,25,281.25
	GRAND TOTAL				15,75,78,093.75
7 ASBESTOS ABEDMENT & CELLULOSE ACOUSTIC TREATMENT					
		1200	5,500.00	SQ.M	66,00,000.00
	Above works subjective to tests to be carried out if Asbestos treatment has been done in the Court Rooms as part of Acoustic Treatment				
	GRAND TOTAL				16,41,78,093.75

Secretariat



ARCHIVAL ELEVATIONS:



BALCONIES



- Balconies have been blocked in several areas, AC units fitted, coolers placed and also used for dumping cupboards in certain areas

Addition To FAÇADES:

- AC Units along most of the windows
- Dish Antennae along the parapet
- Blocking of balconies and the facade



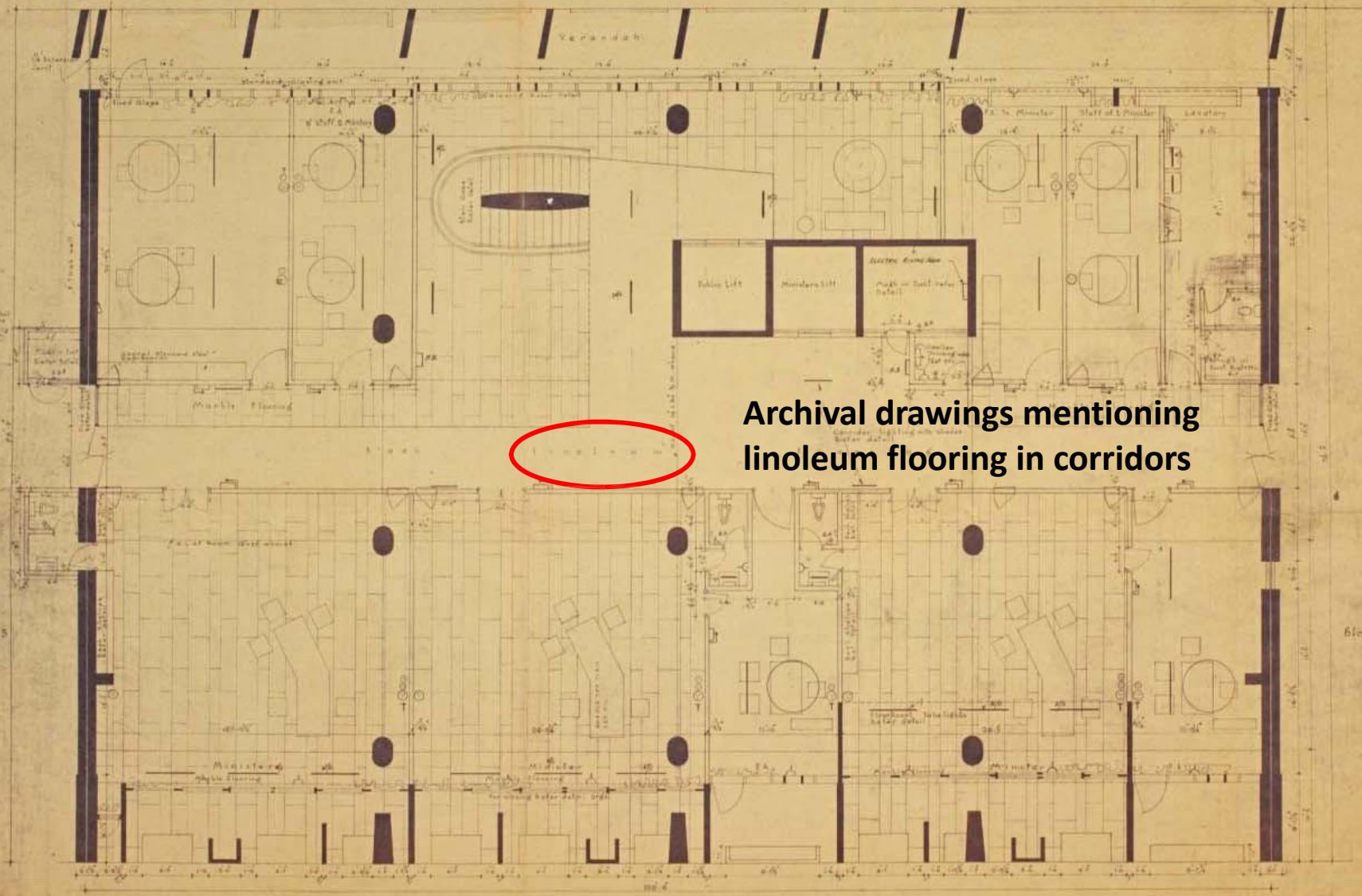
FRONT ELEVATION



REAR ELEVATION

- | | | | |
|---|---|--|---|
|  OUTDOOR A.C UNIT
All outdoor units to be relocated on terrace as part of a holistic centralized HVAC scheme |  LIGHT
Facade illumination scheme proposed |  ADDITIONAL STRUCTURES
structures added later in an incongruous fashion to be demolished, the ones part of original scheme to be retained |  COMMUNICATION DISH
To be relocated on terrace out of the line of vision |
|  BLOCKED BALCONIES
The balconies that are blocked to be opened up and restored as per original |  DISH ANTENNA
To be relocated on terrace out of the line of vision |  PORCH COVERED ENTRY
canopies for entrances to be demolished, public entrances re-routed | |

chandigarh
project

[illegible]

Archival drawings mentioning linoleum flooring in corridors

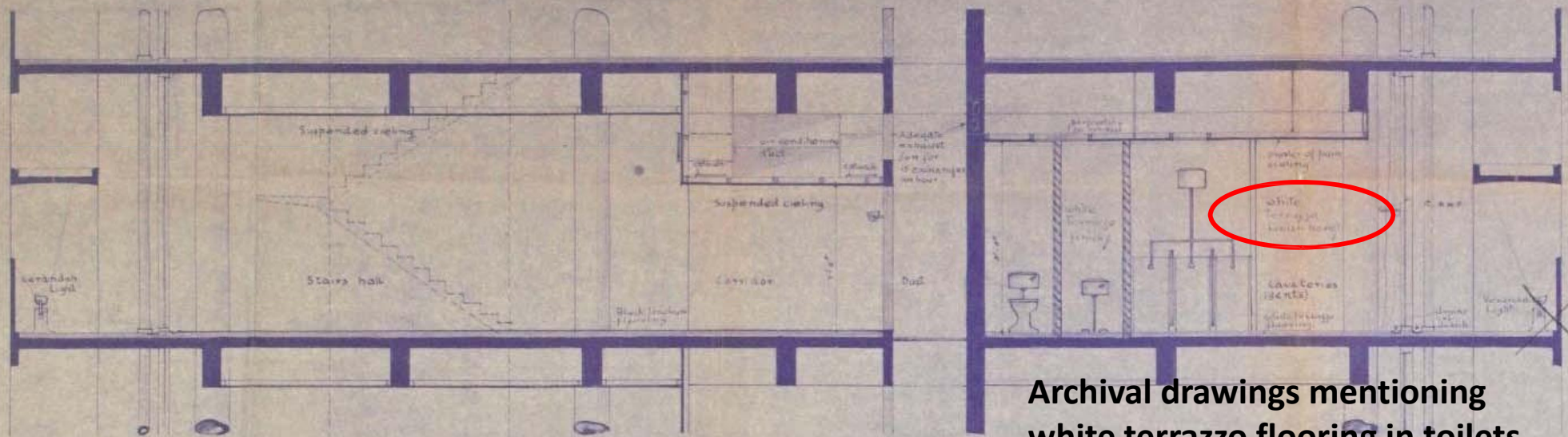
Working Drawing

Deputy	Charles	Spivey
John	Spivey	Spivey
John	Spivey	Spivey

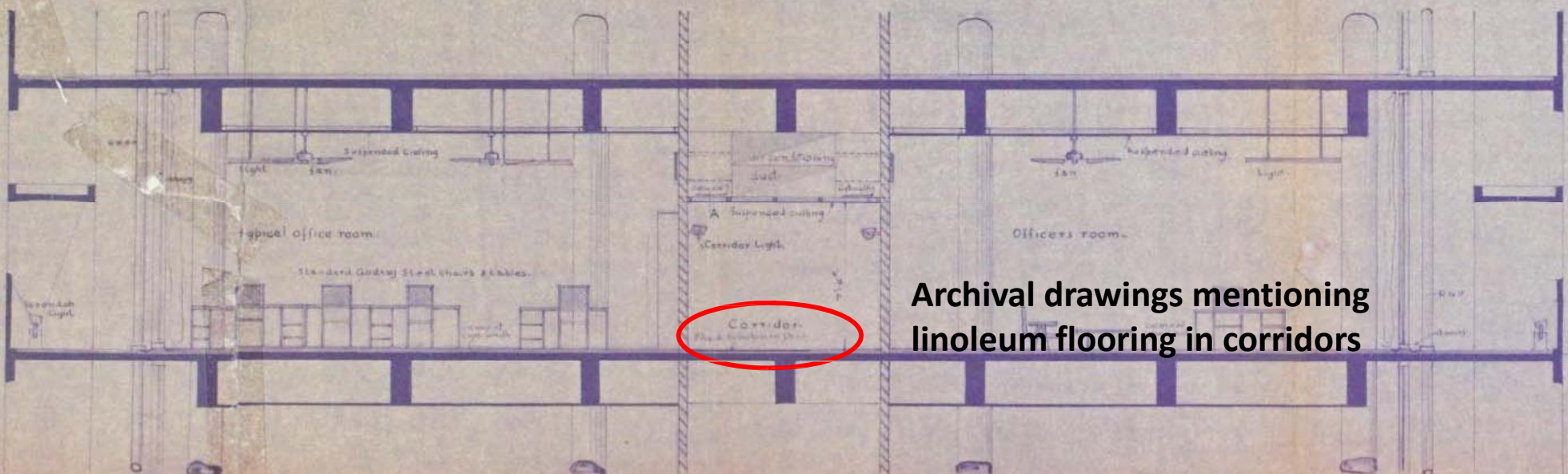
SECRETARIAT
Floor No. 8
Block No. 4.

13402

ARCHIVAL DRAWINGS: SECTIONS

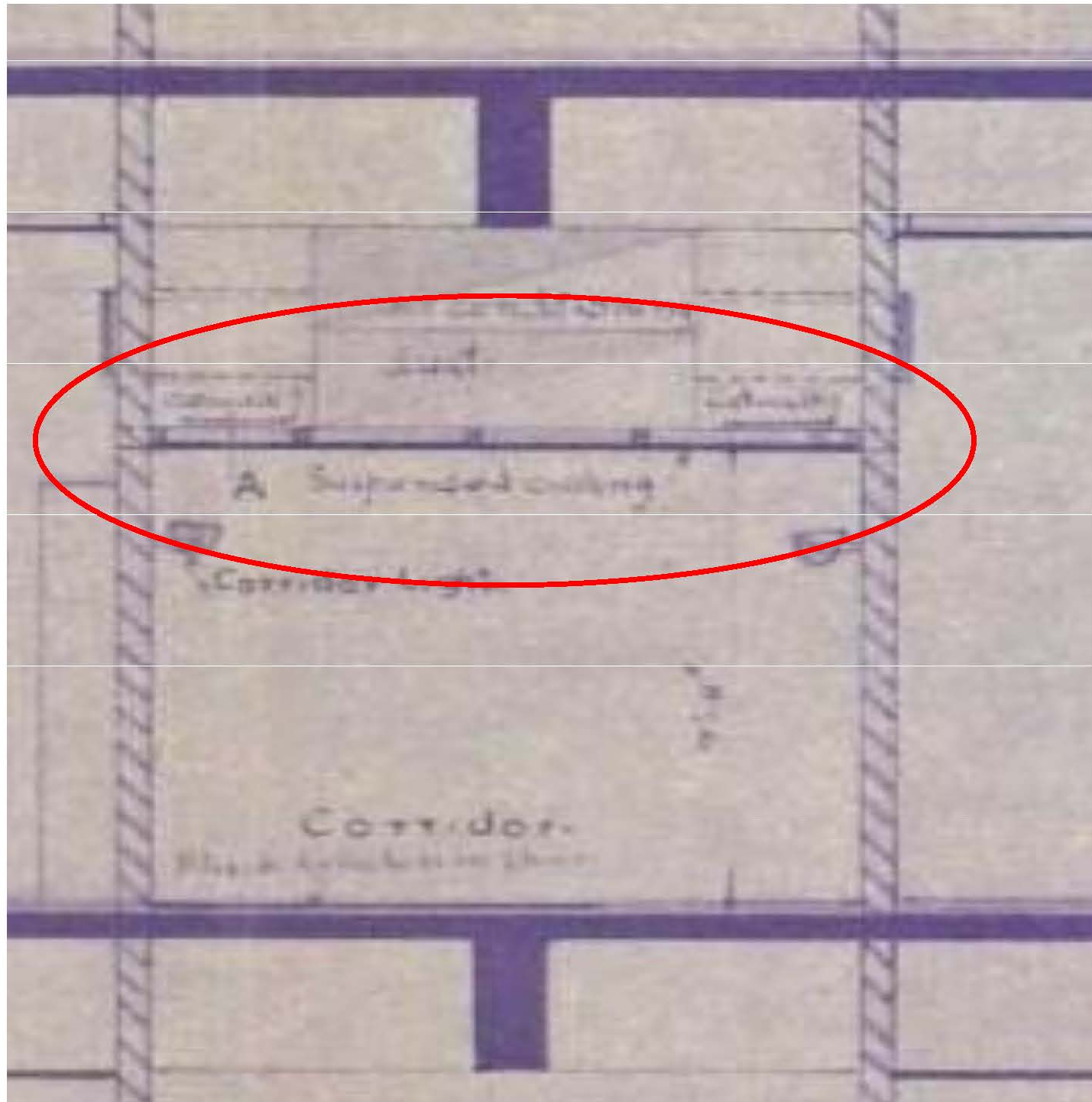


Archival drawings mentioning white terrazzo flooring in toilets

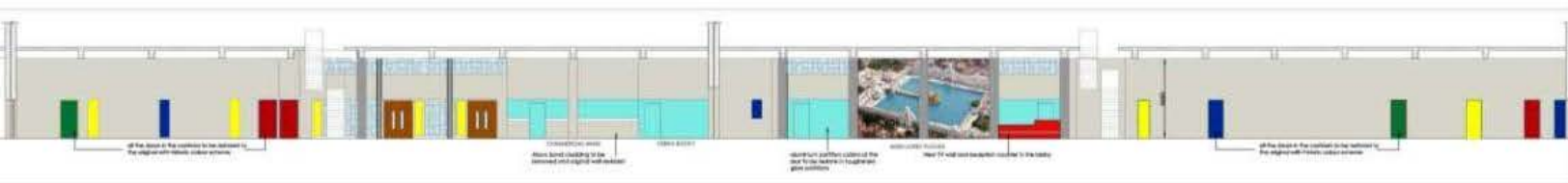


Archival drawings mentioning linoleum flooring in corridors

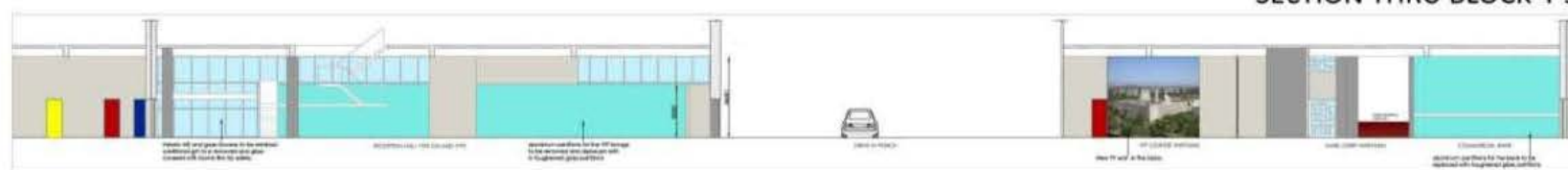
ARCHIVAL DRAWINGS: SECTIONS



AREAS OF WORKS ON GROUND FLOOR:



SECTION THRU BLOCK 2-3



SECTION THRU BLOCK 4-5



AREAS OF WORK to be restored/redesigned on site as per original scheme

OUTDOOR A.C. UNIT To be relocated on terrace as part of a holistic HVAC scheme

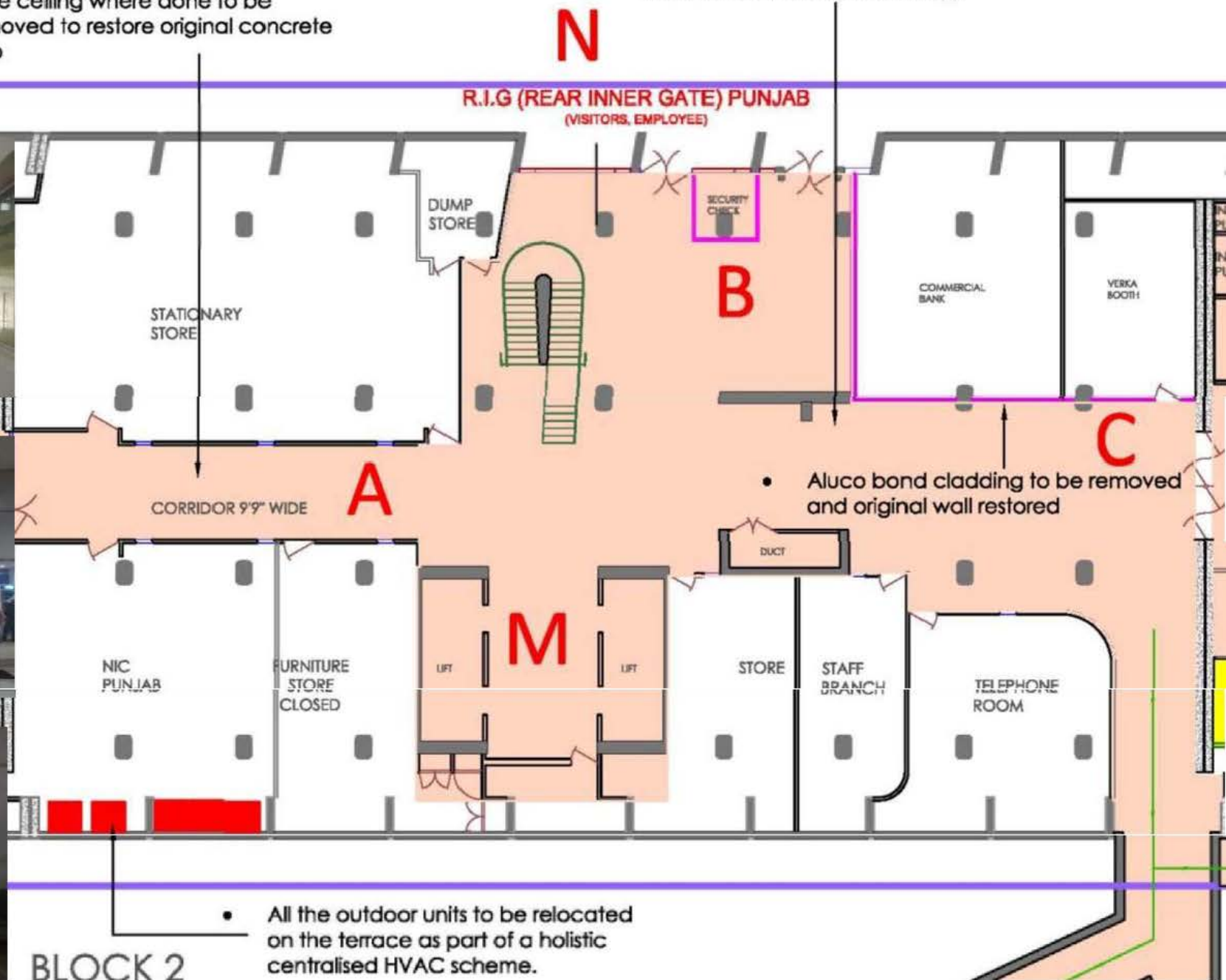
AREA DEMARCATED AS PUNJAB SECTION

AREA DEMARCATED AS HARYANA SECTION

AREAS OF WORKS ON GROUND FLOOR :

- Haphazard signage to be removed. All signages to follow a consistent design.
- The entire corridor flooring to be restored in black terrazzo as per original design
- False ceiling where done to be removed to restore original concrete slab

- Flooring in the lift lobby to be restored to black terrazzo
- Later additions of cladding on lift wall to be removed and original concrete surface to be exposed or cladded with enamel painted MS panels as mentioned in archival drawings



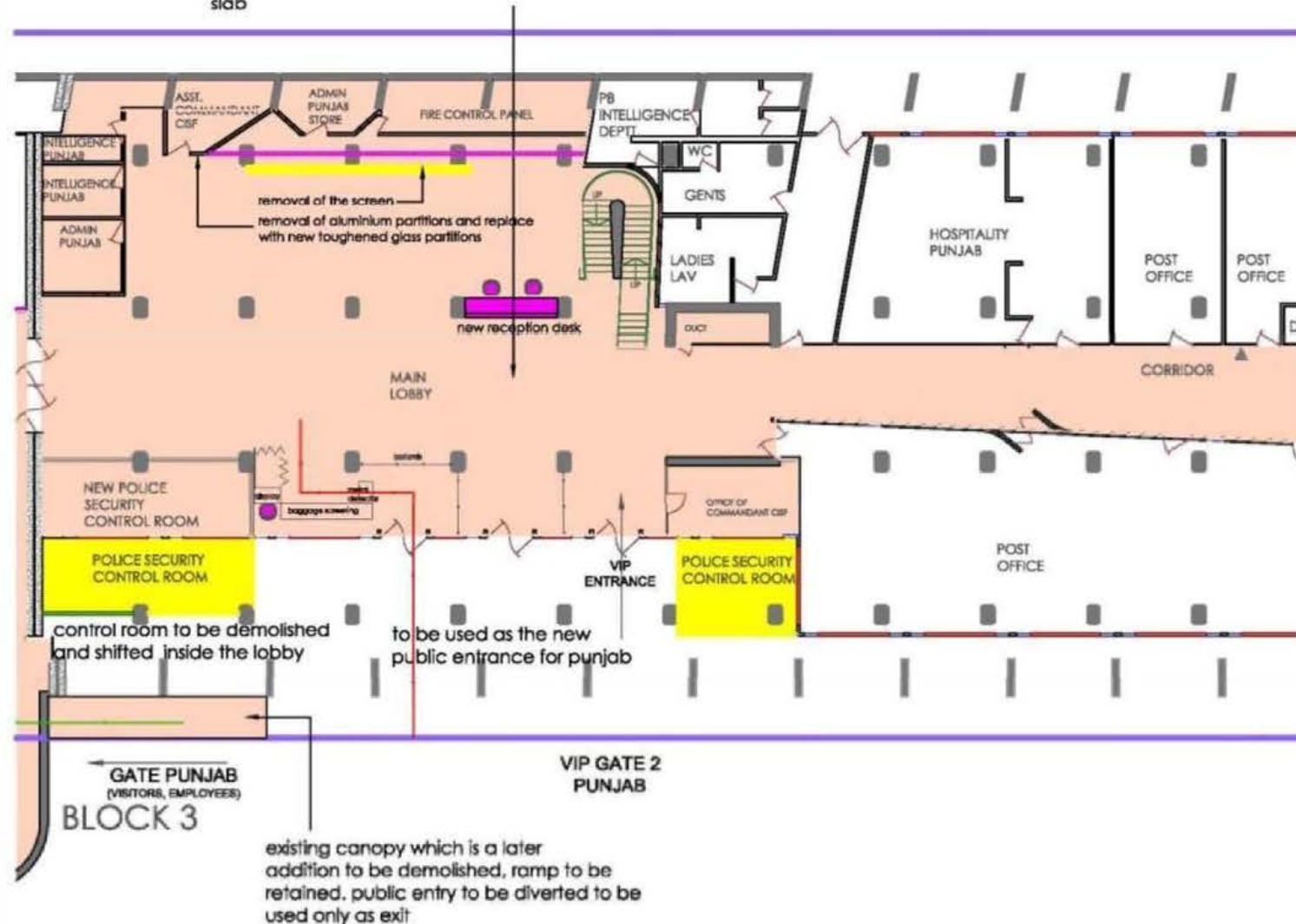
AREAS OF WORKS

ON GROUND

FLOOR :



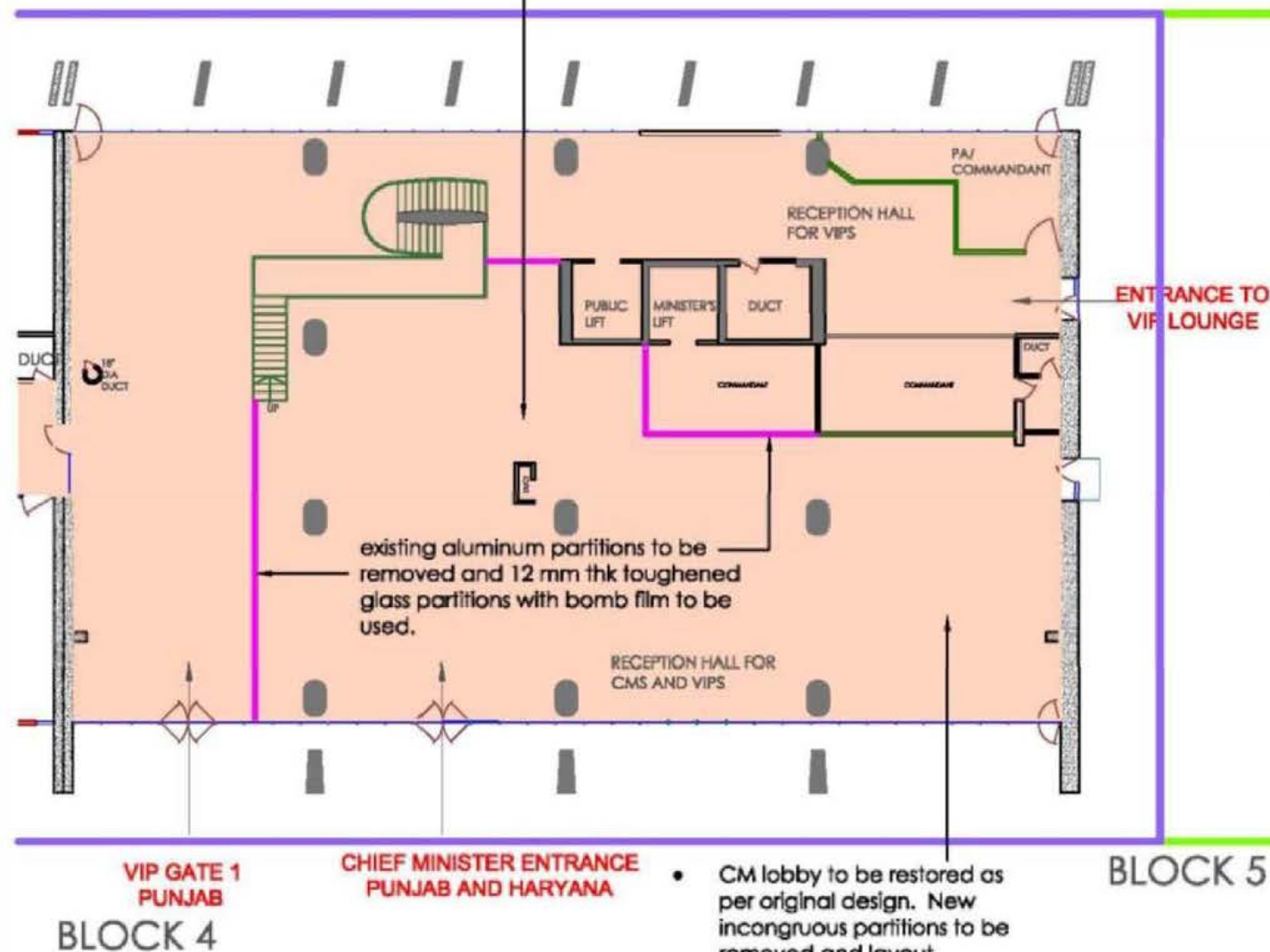
- Staircase lobby to be restored.
- Later additions to be removed.
- Flooring restored to original black terrazzo.
- Treads to be restored to black terrazzo.
- False ceiling where done to be removed to restore original concrete slab
- Haphazard signage to be removed.
- All signages to follow a consistent design.
- Lobby to be redesigned using historic palette in flooring (black terrazzo) and toughened glass partitions



AREAS OF WORKS ON GROUND FLOOR :



- Staircase lobby to be restored.
- Later additions to be removed.
- Flooring restored to original black terrazzo.
- Treads to be restored to black terrazzo.
- False ceiling where done to be removed to restore original concrete slab
- Later additions of cladding on lift wall to be removed and original concrete surface to be exposed or cladded with enamel painted MS panels as mentioned in archival drawings

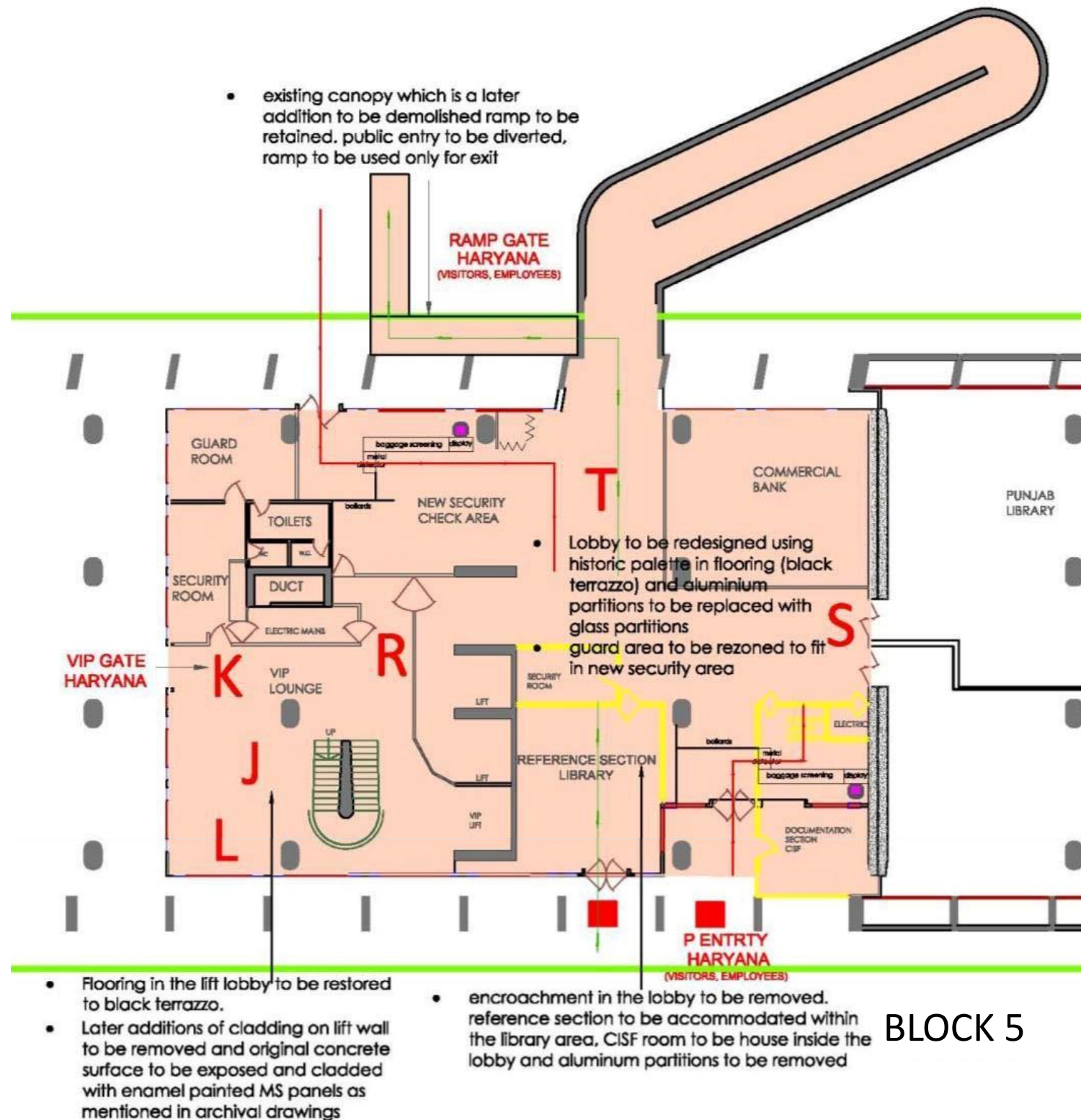


- CM lobby to be restored as per original design. New incongruous partitions to be removed and layout redesigned using toughened glass partition

AREAS OF WORKS

ON GROUND

FLOOR :



AREAS OF WORKS ON GROUND FLOOR :

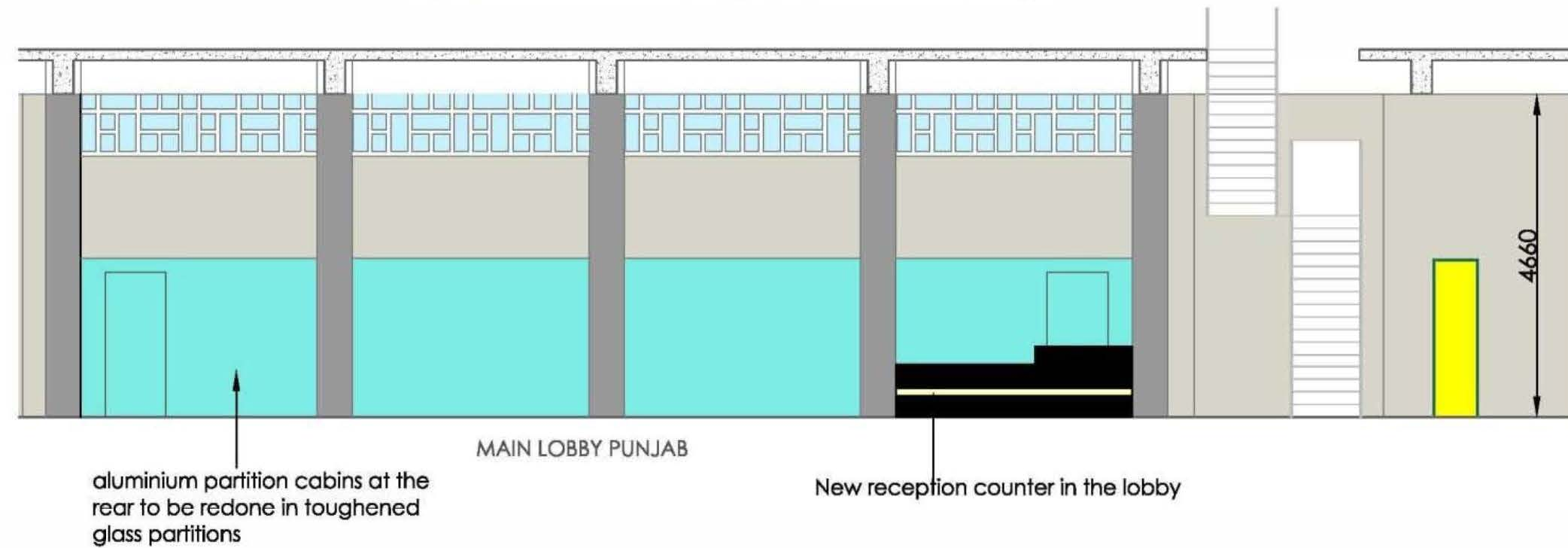


AREAS OF WORKS ON GROUND FLOOR :



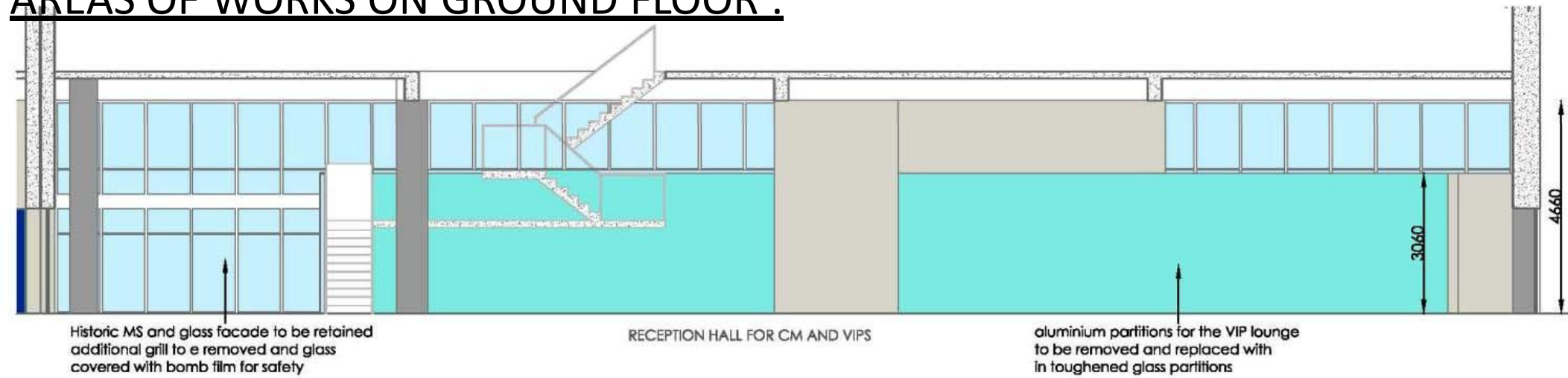
SECTION THRU BLOCK 2

AREAS OF WORKS ON GROUND FLOOR :

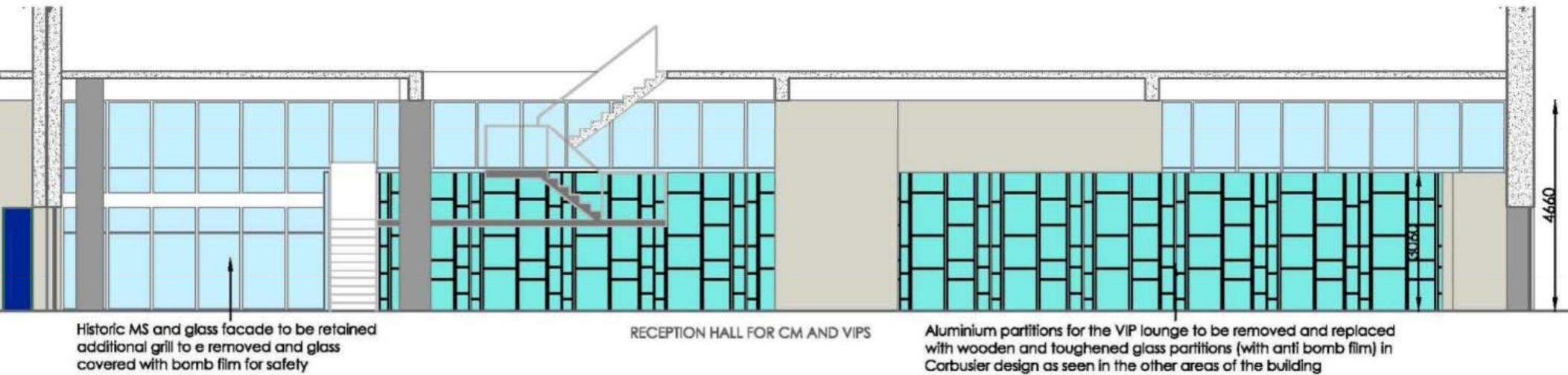


SECTION THRU BLOCK 3

AREAS OF WORKS ON GROUND FLOOR :



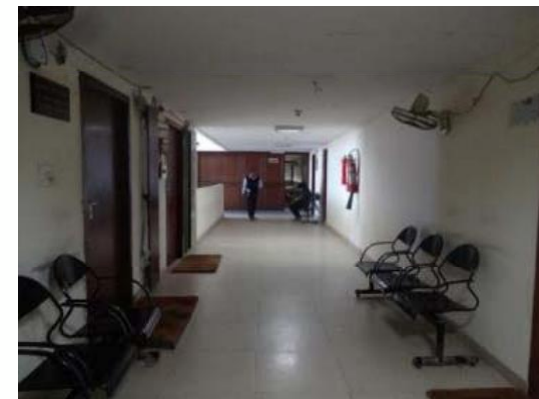
SECTION THRU BLOCK 4



ALTERNATIVE FOR VIP LOUNGE PARTITION

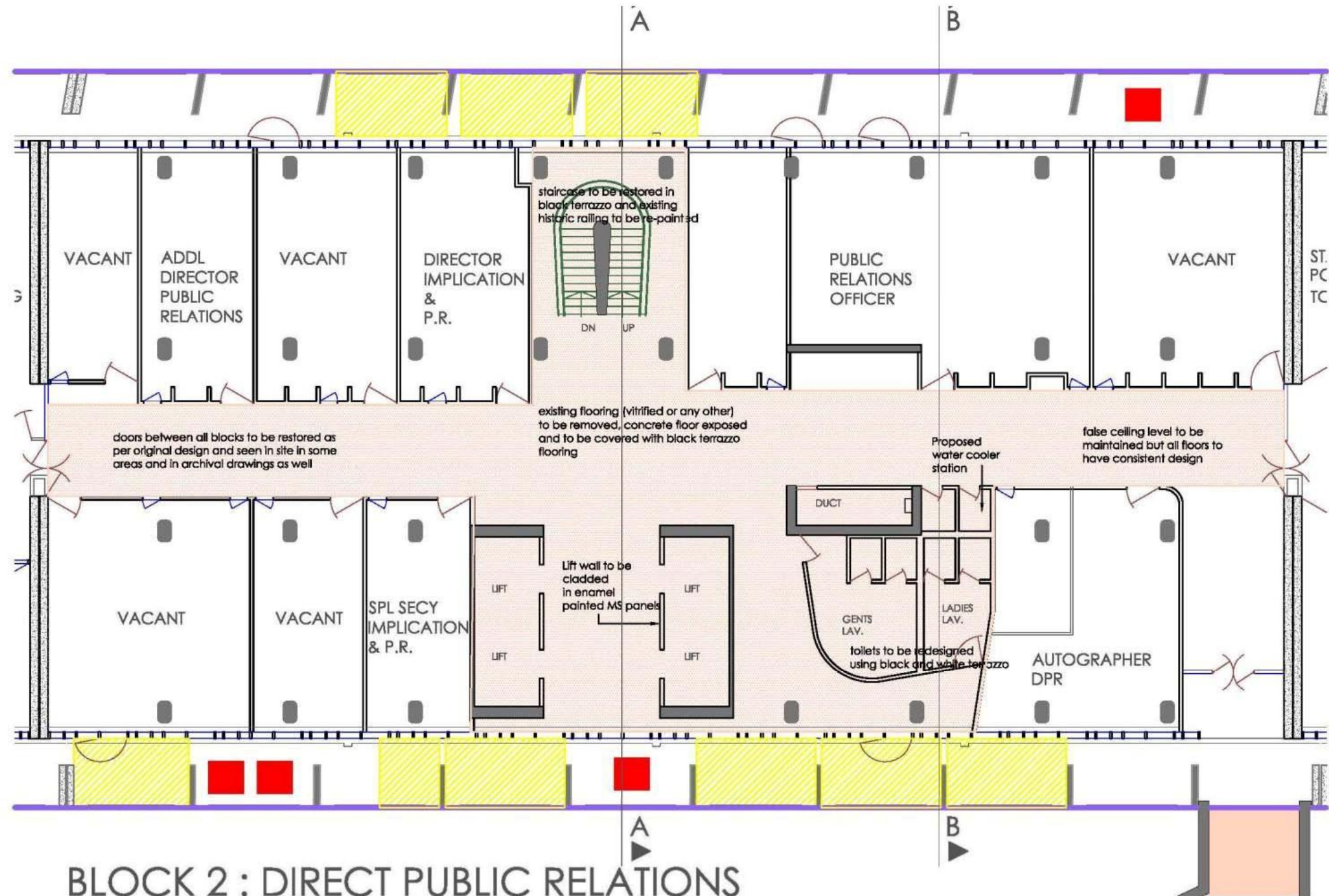


CORRIDORS / PUBLIC SPACES

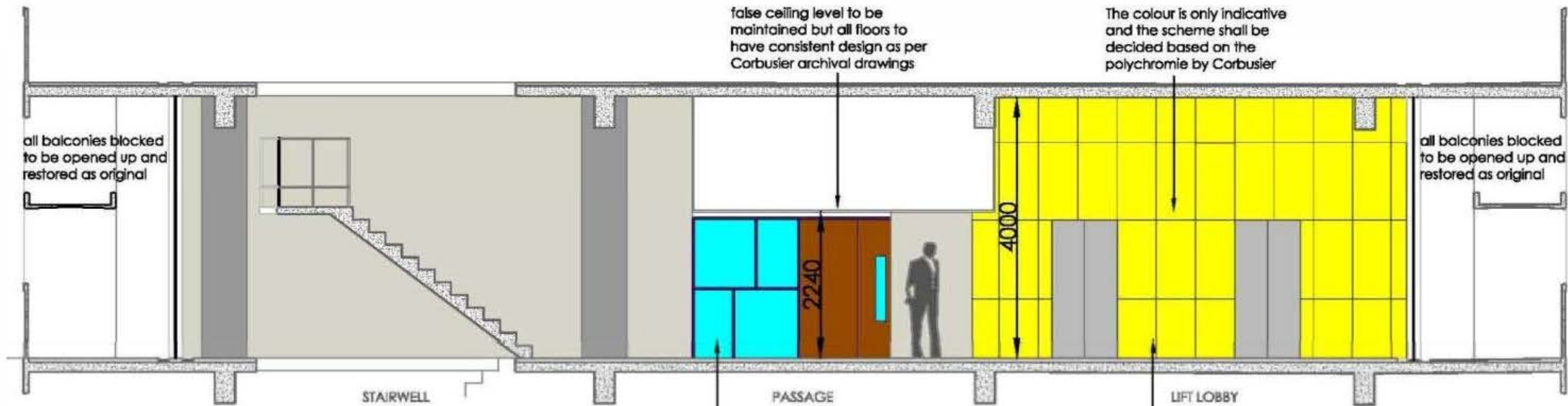


- False Ceilings fixed in almost all areas to cover the dense network of
- wiring, HVAC Ducts etc. fixed on ceiling
- Dense network of cables & wires running across corridors & hanging randomly as required.
- LAN & Telephone Junction Boxes, Hose Reel Boxes, Fire Alarm Panels & Speakers fixed randomly in the corridors

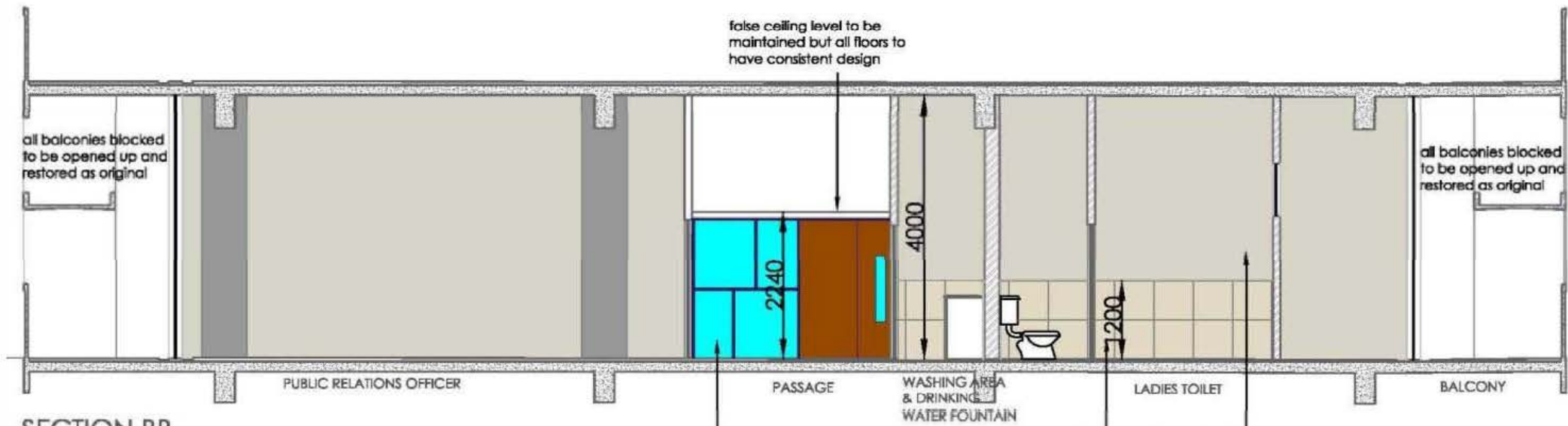
FLOOR PLANS: TYPICAL



SECTIONS TYPICAL:

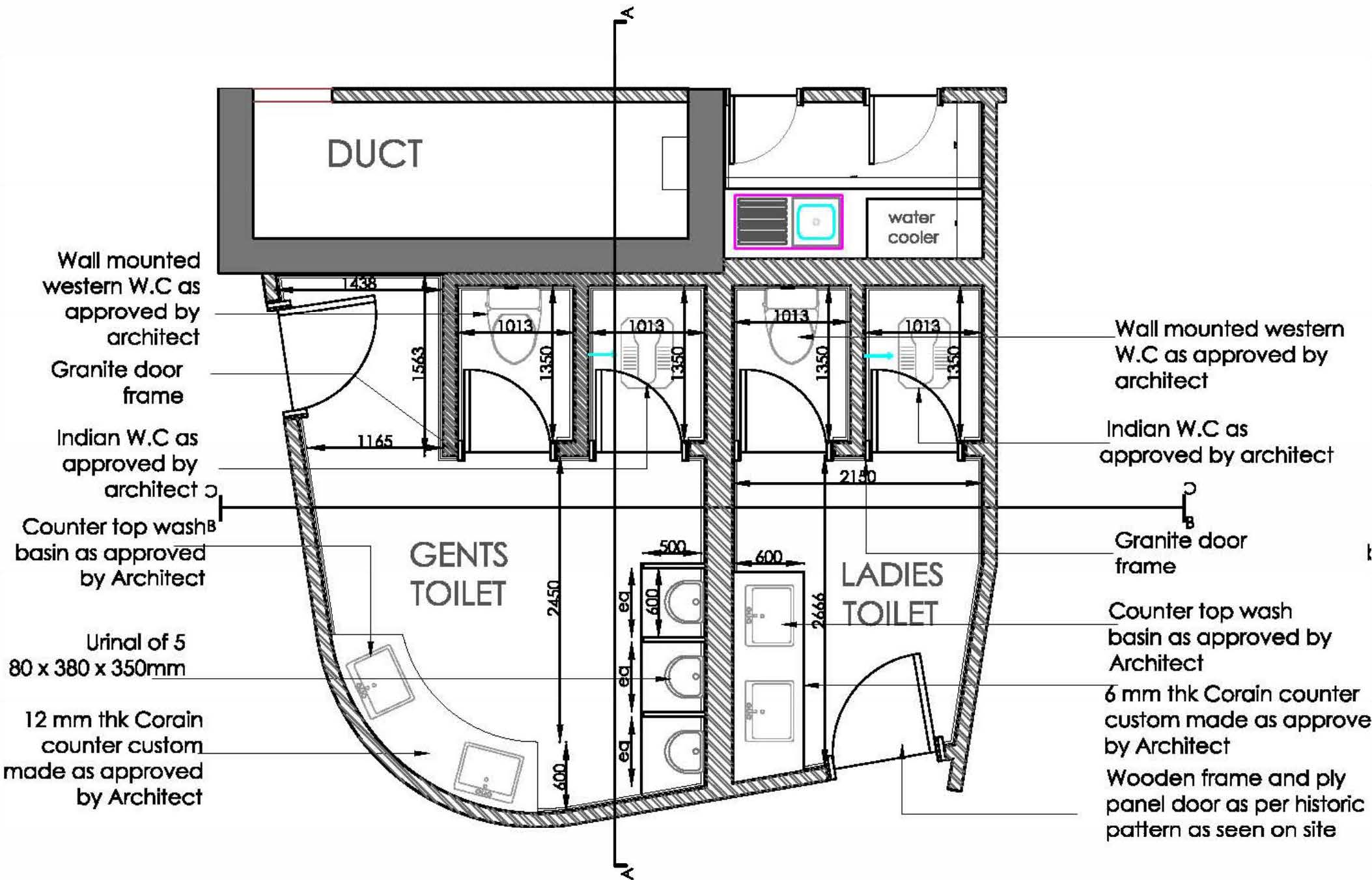


SECTION AA



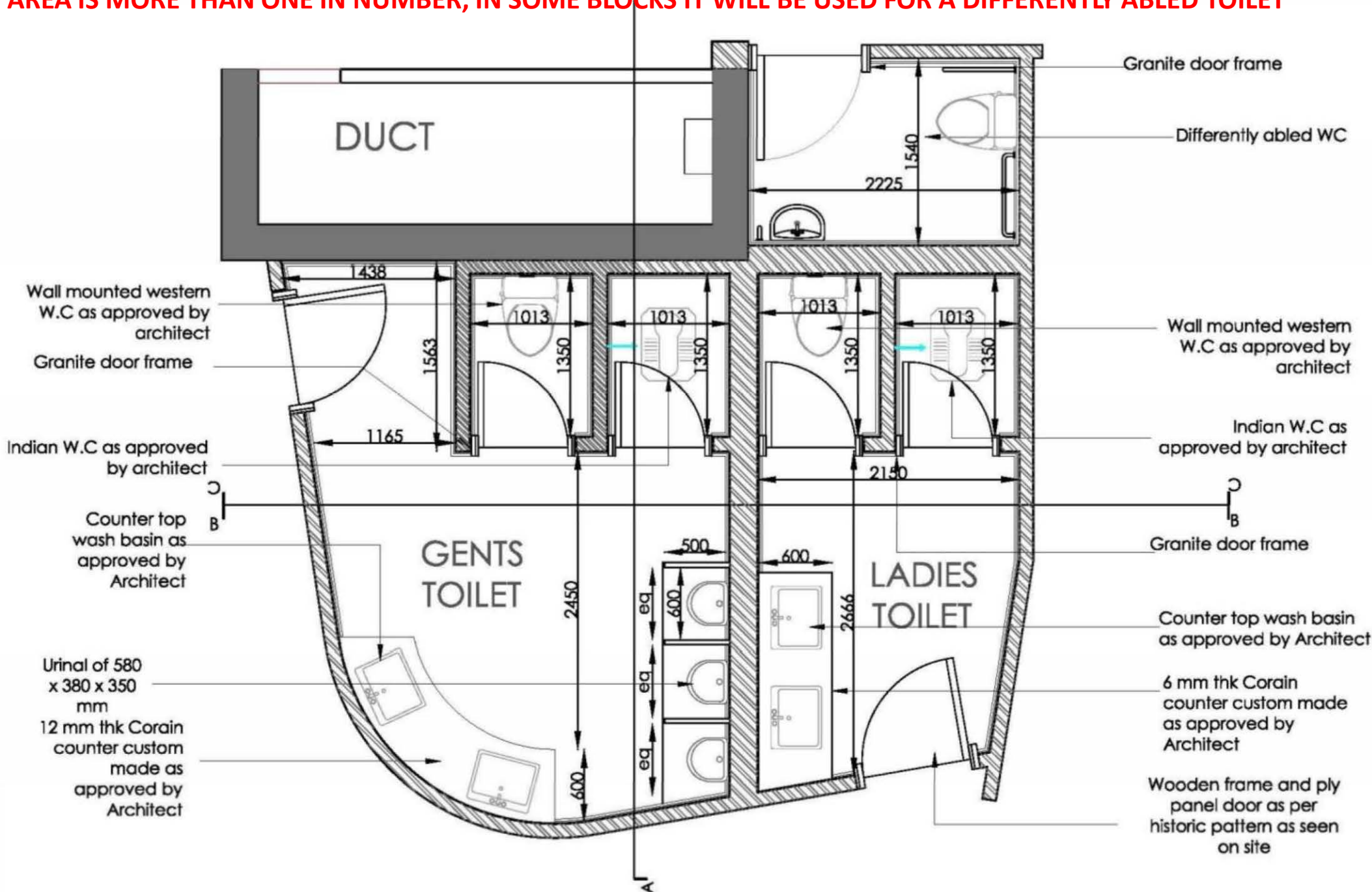
SECTION BB

TOILETS TYPICAL:

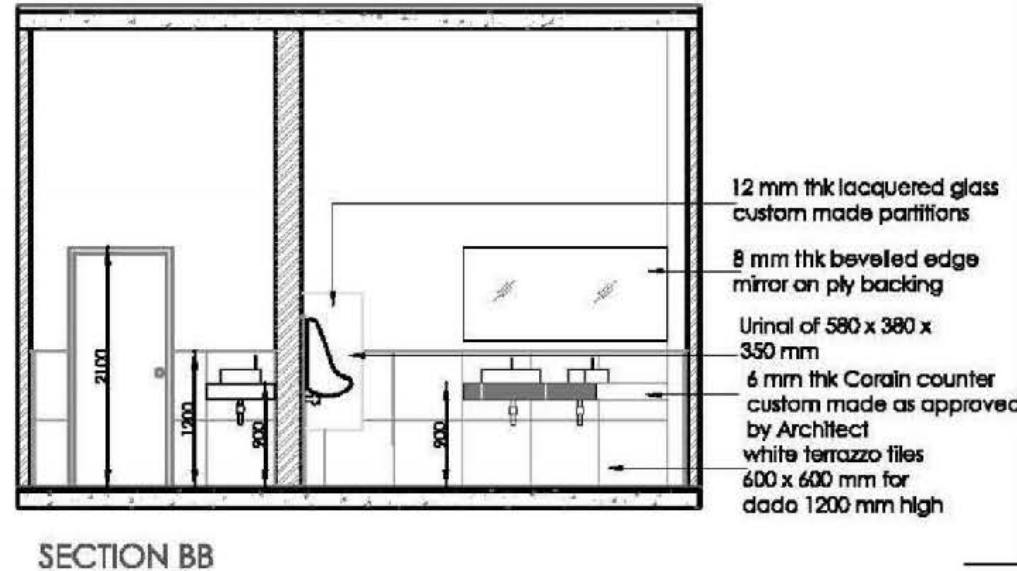
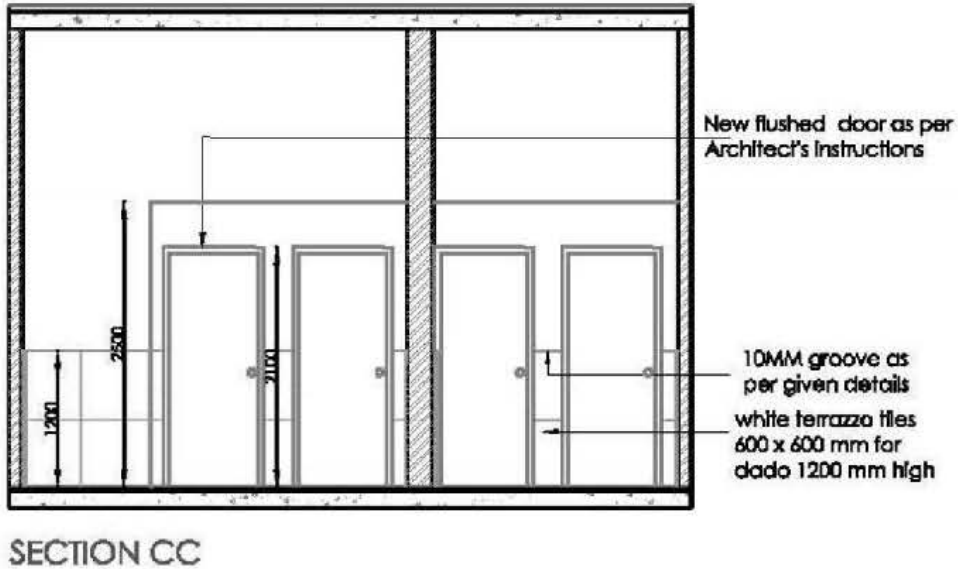
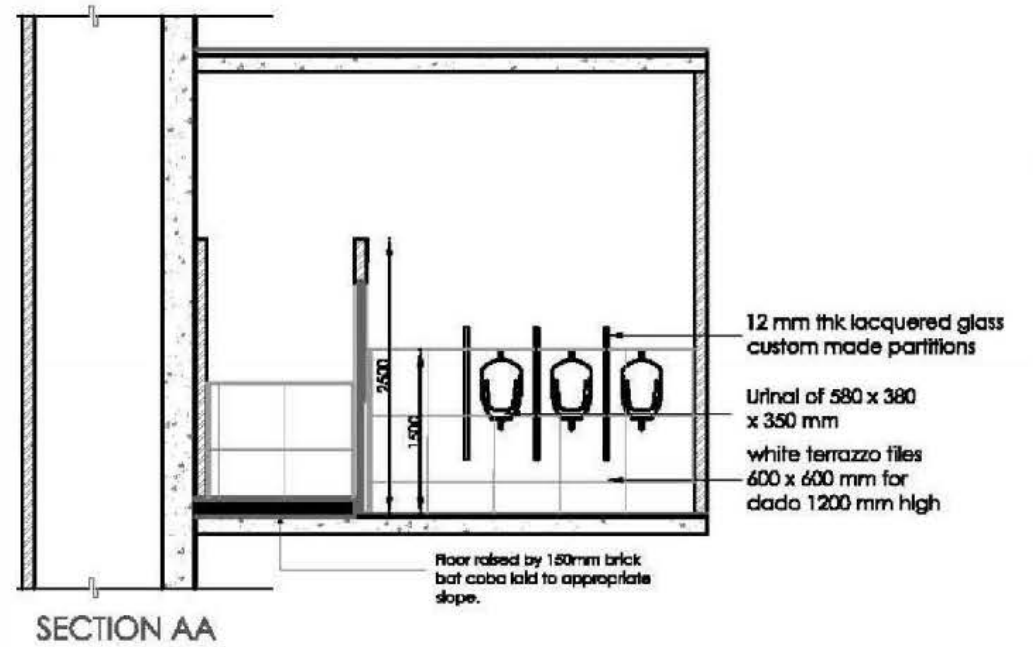
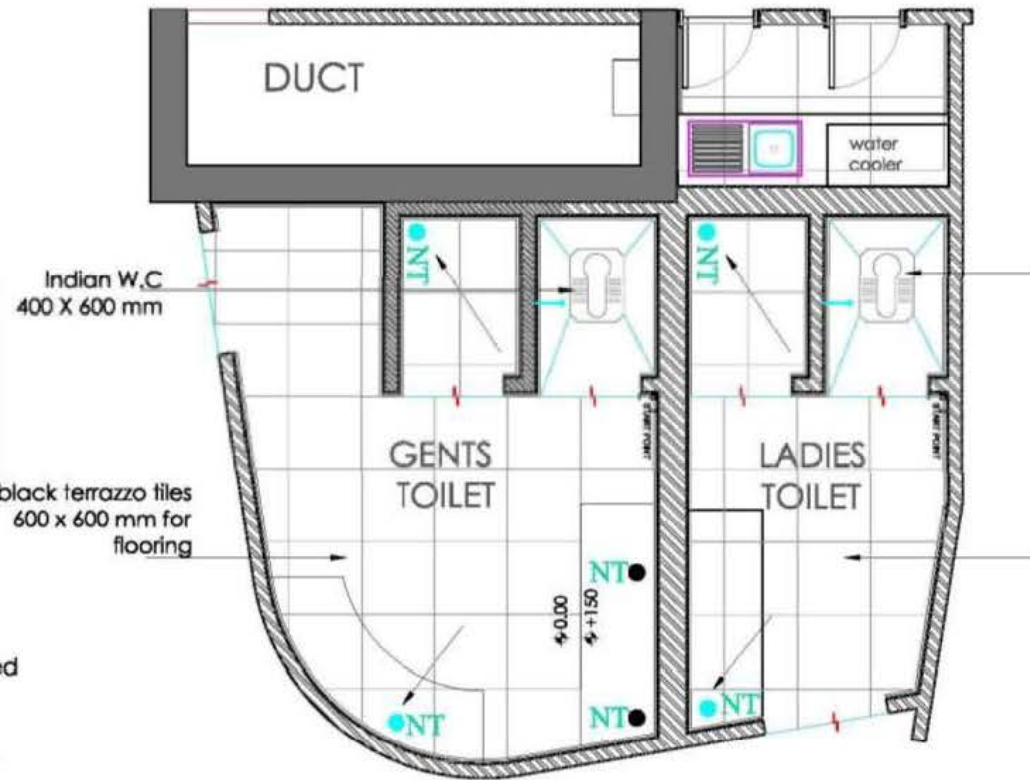


TOILETS TYPICAL: DIFFERENTLY ABLED

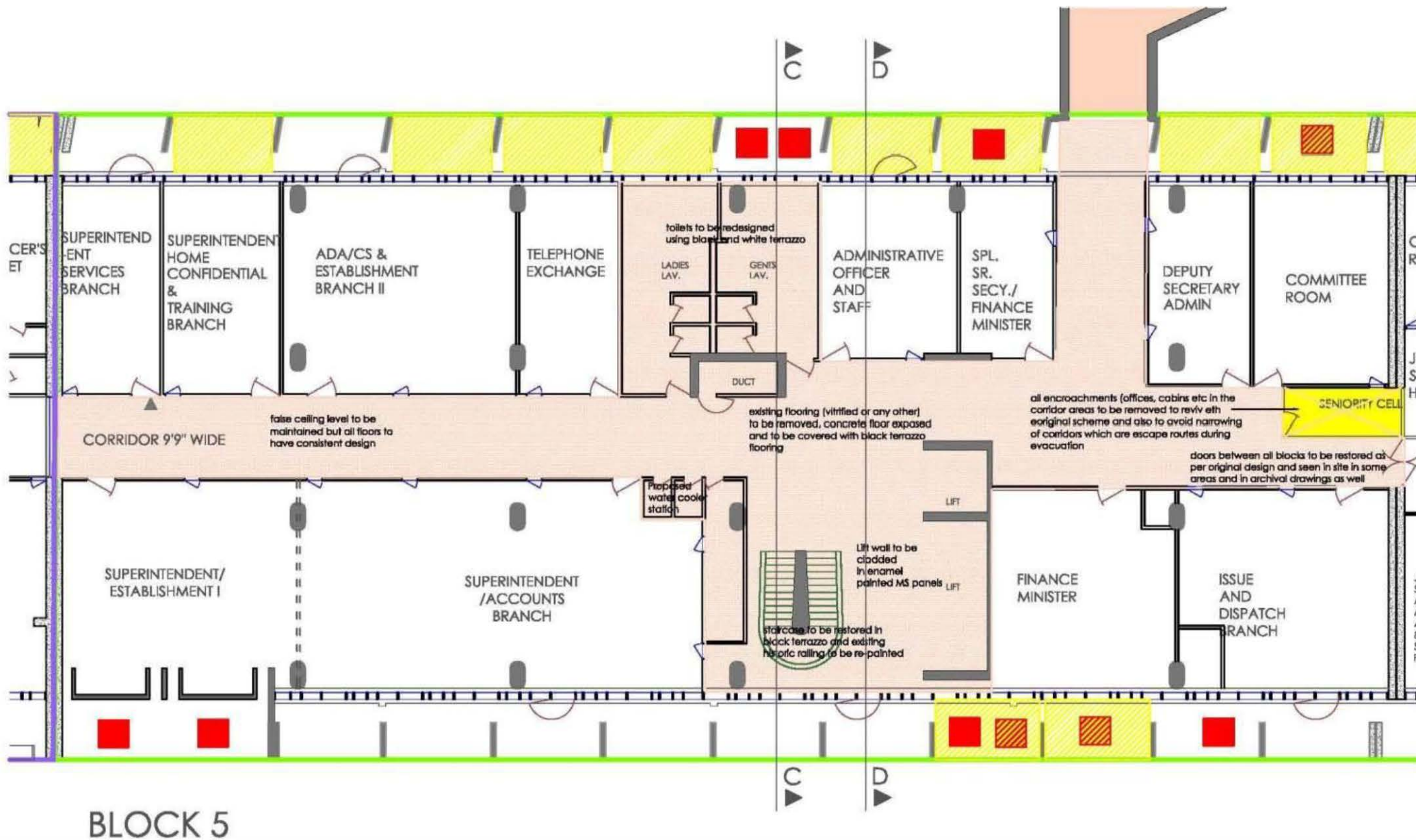
NOTE: DEPENDING ON THE GROUPING OF CORE SERVICE BLOCKS ON EACH FLOOR, WHERE THE DRINKING WATER AREA IS MORE THAN ONE IN NUMBER, IN SOME BLOCKS IT WILL BE USED FOR A DIFFERENTLY ABLED TOILET



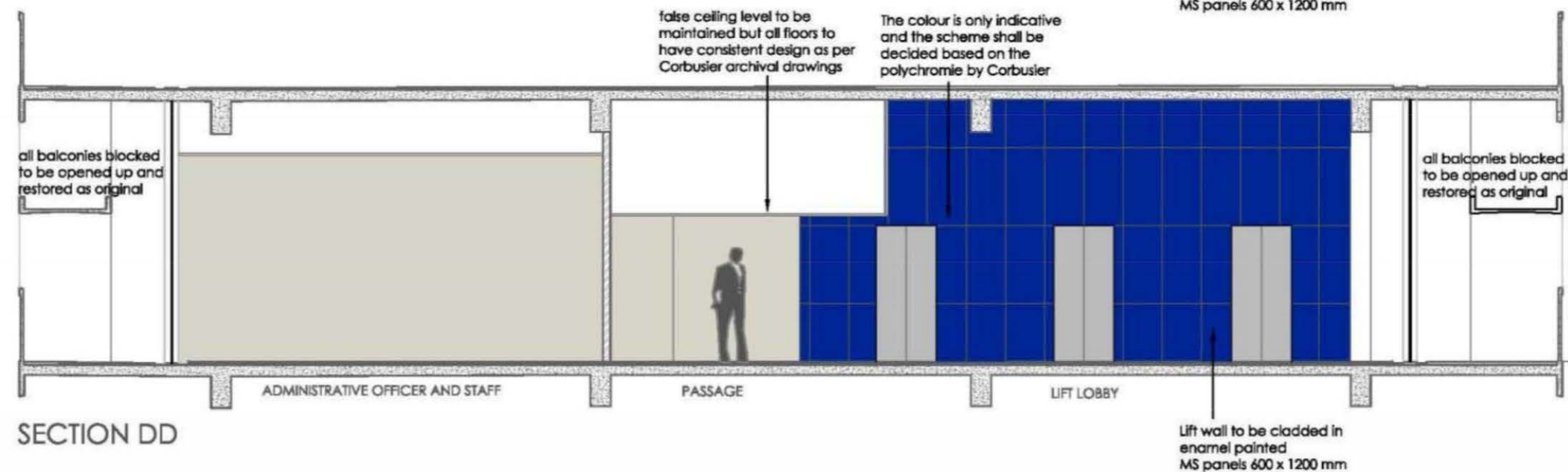
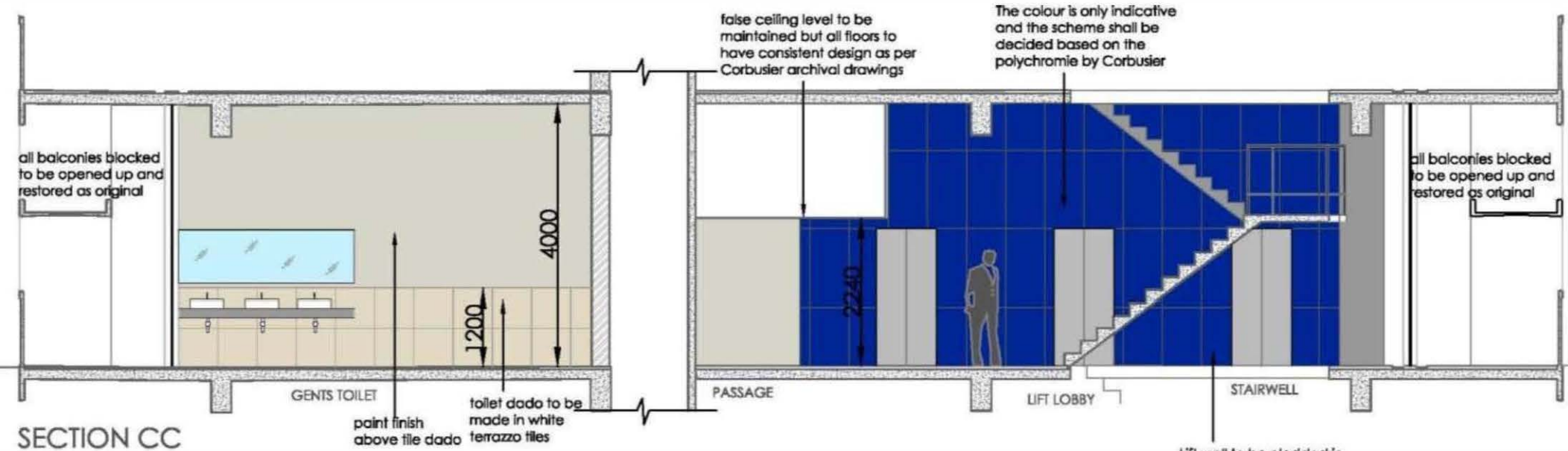
TOILETS TYPICAL:



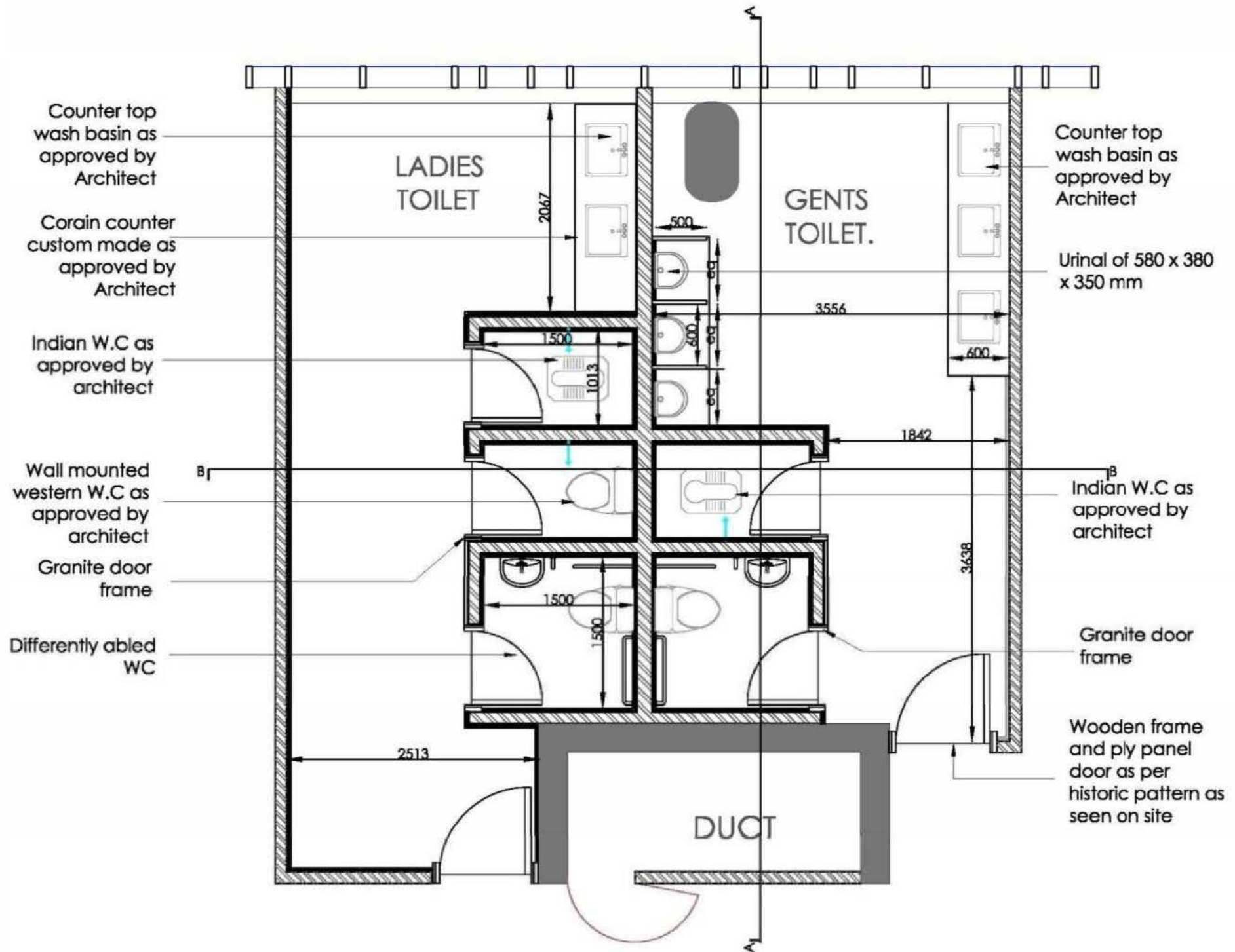
FLOOR PLANS: TYPICAL



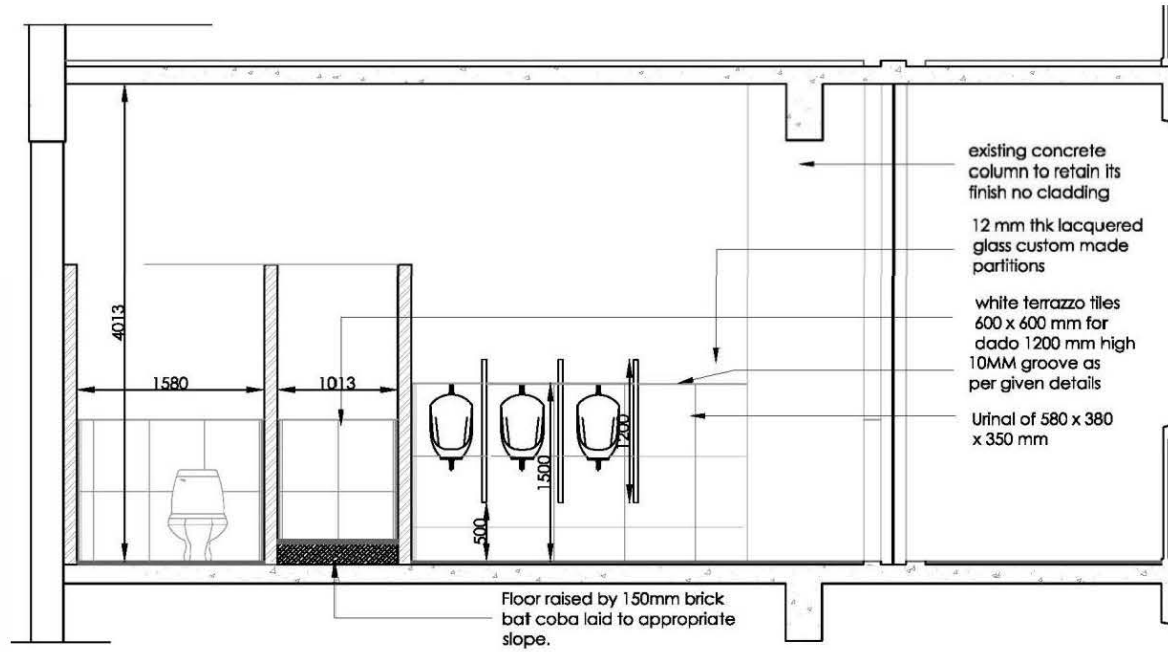
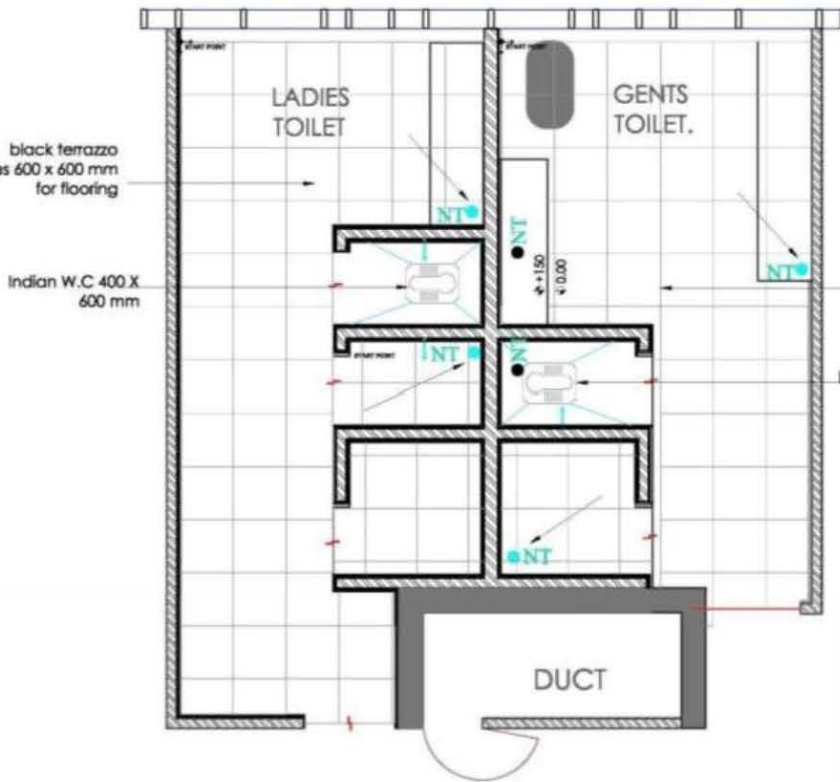
SECTIONS TYPICAL:



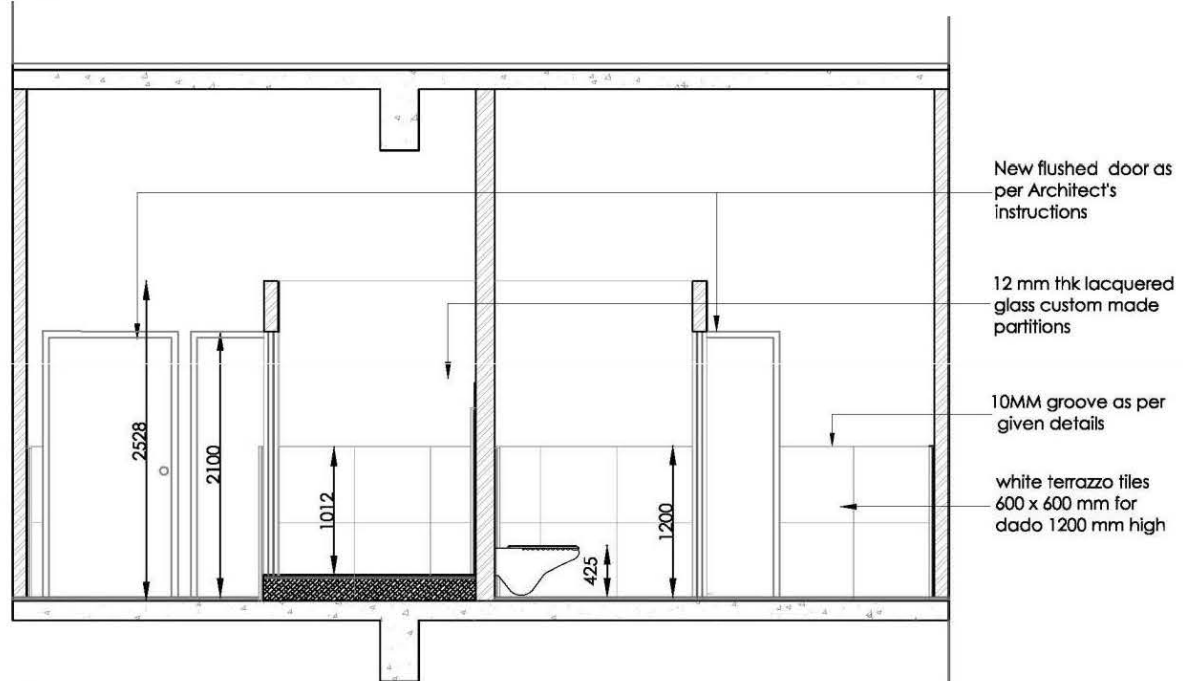
TOILETS TYPICAL:



TOILETS TYPICAL:



AA



SECTION BB

TOILETS



•Existing Toilet Layouts & Designs changed as required, with no consistency in design or use of historic material palette

PROPOSED TOILETS



PROPOSED TOILETS



PROPOSED TOILETS

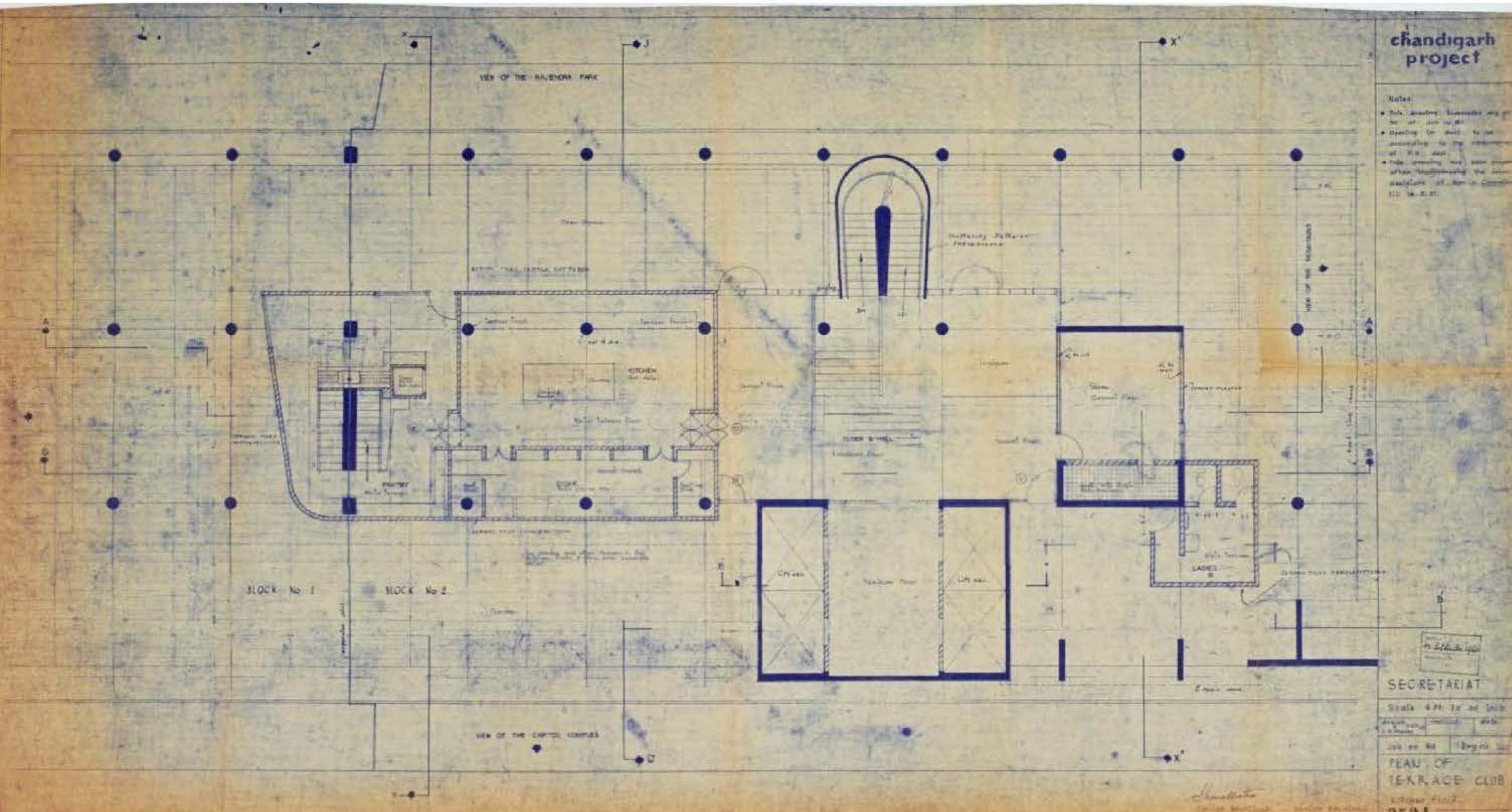


SIGNAGE



- Signage fixed Randomly on walls & Ceilings with no Uniformity in Design

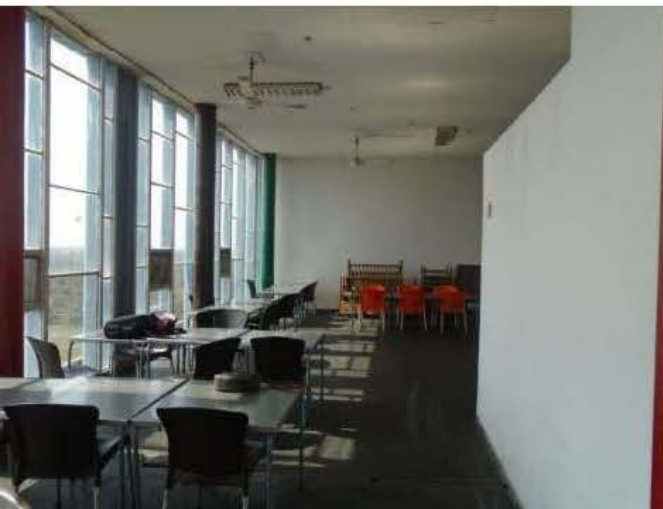
ARCHIVAL DRAWINGS: TERRACE CLUB



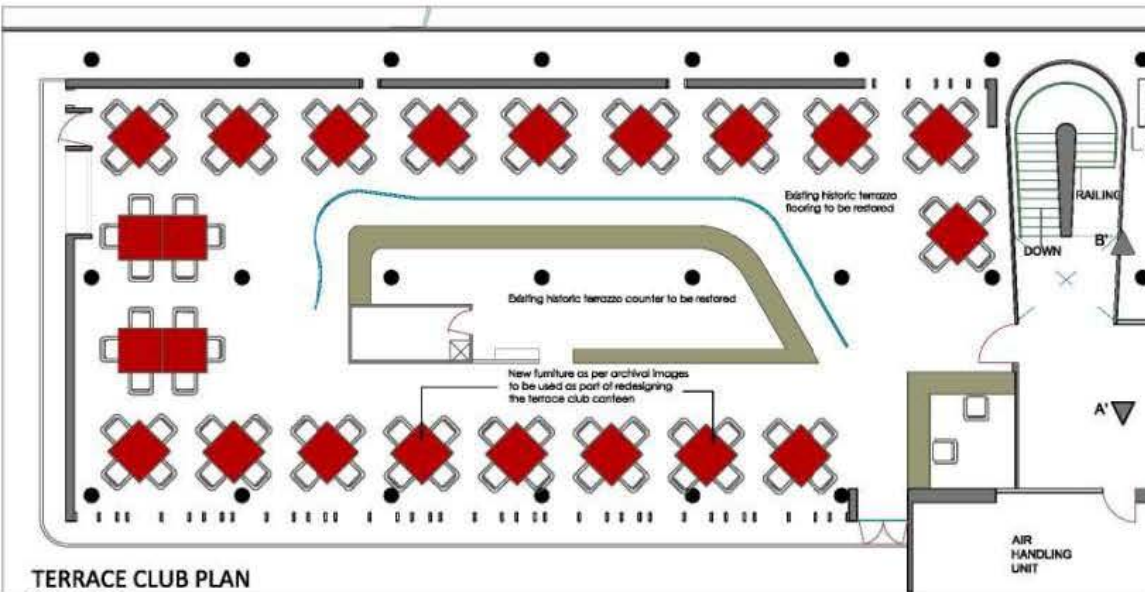
ARCHIVAL IMAGES: TERRACE CLUB



SITE IMAGES: TERRACE CLUB



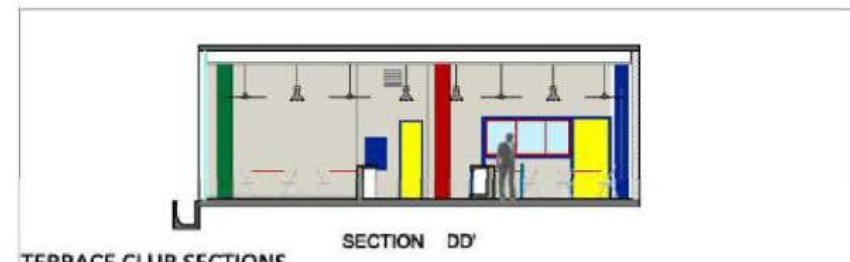
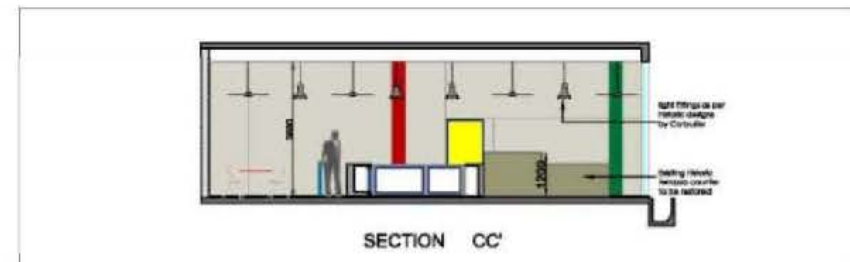
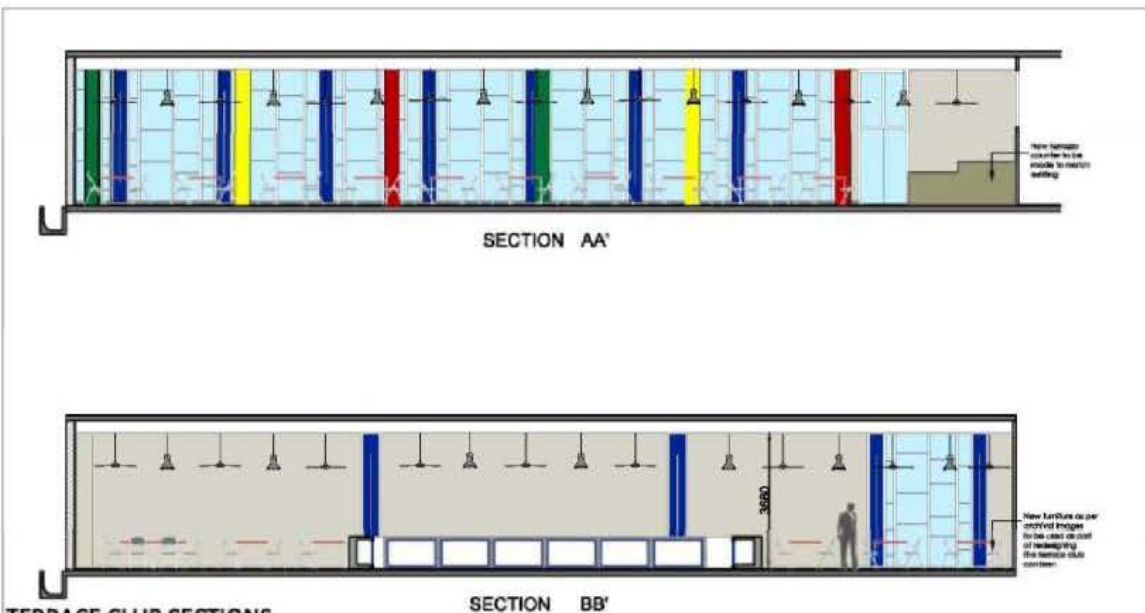
TERRACE CLUB: DRAWINGS



EXISTING TERRACE CLUB IMAGES

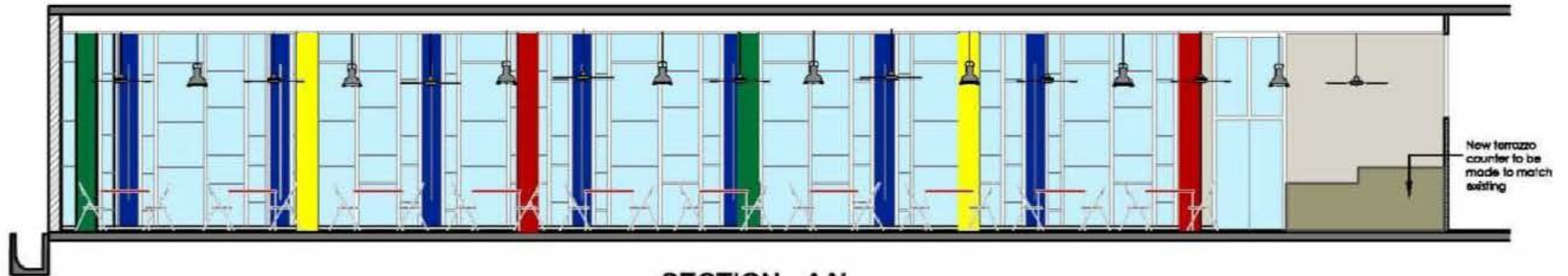


ARCHIVAL TERRACE CLUB IMAGES

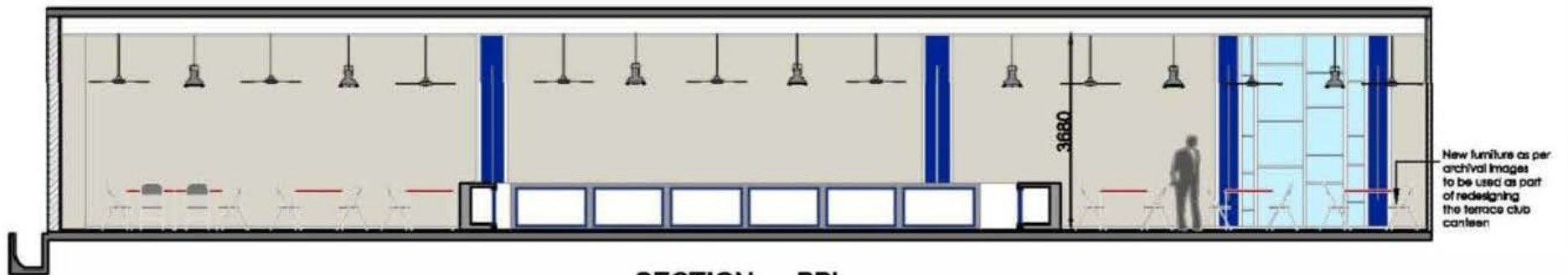


TERRACE CLUB SECTIONS
SCALE 1:100

TERRACE CLUB: DRAWINGS



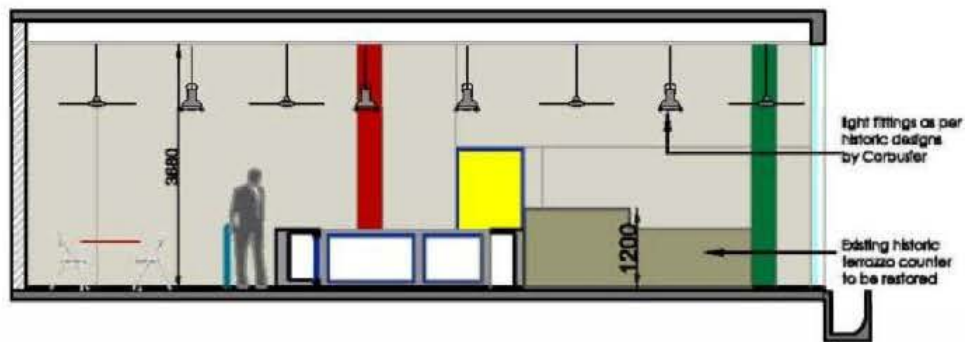
SECTION AA'



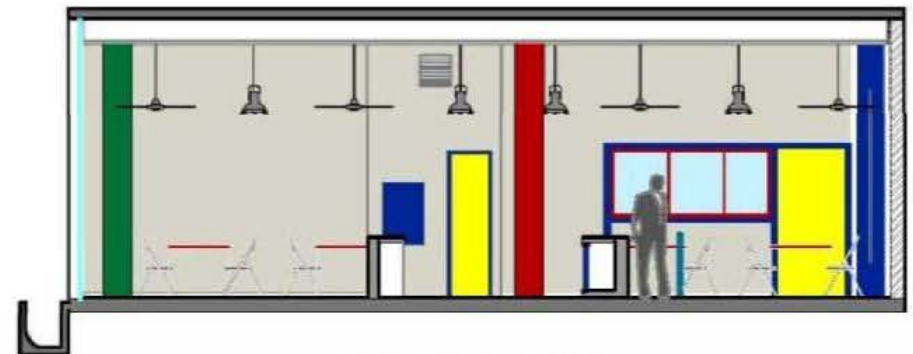
SECTION BB'

TERRACE CLUB SECTIONS

SCALE 1:100



SECTION CC'



SECTION DD'

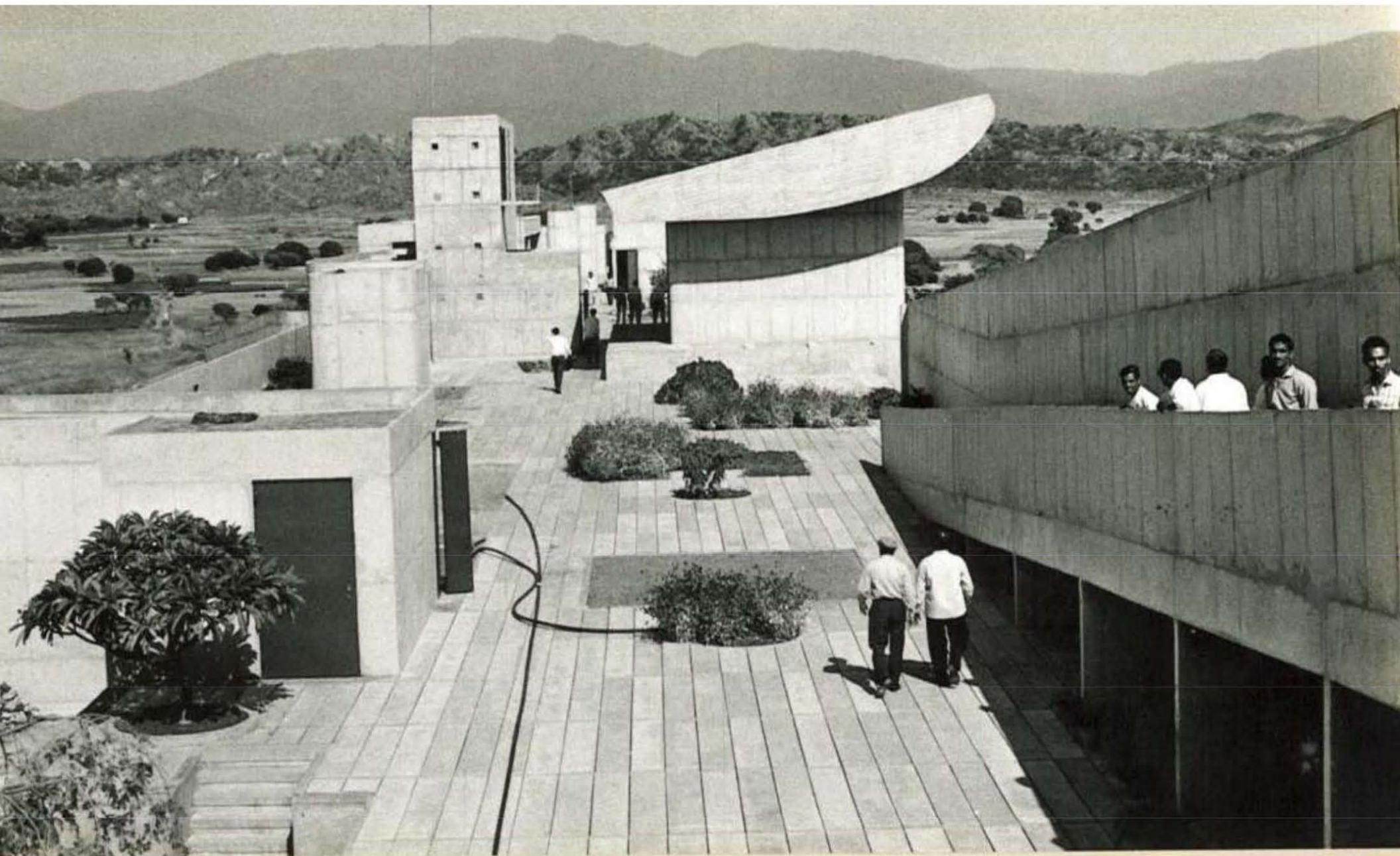
TERRACE CLUB: VIEWS



TERRACE CLUB: VIEWS



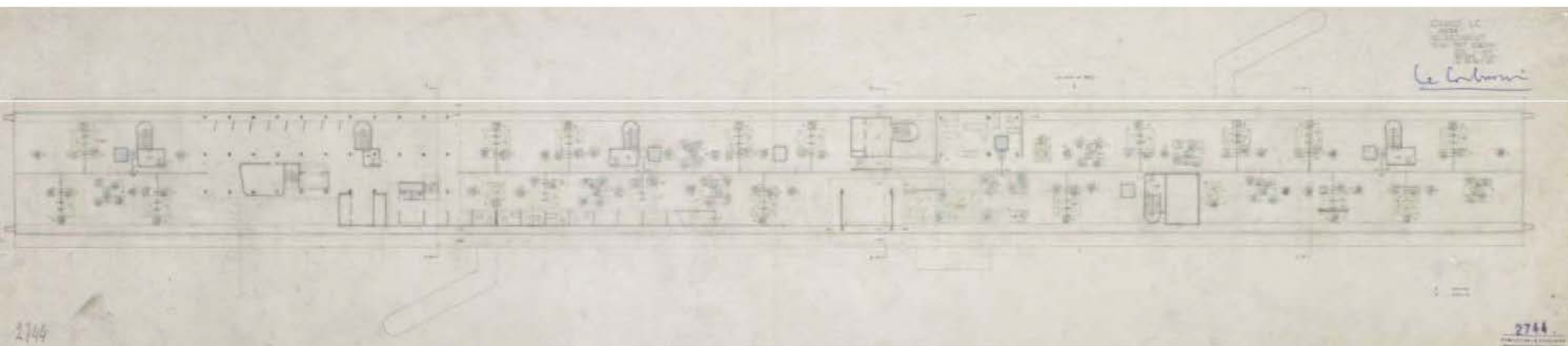
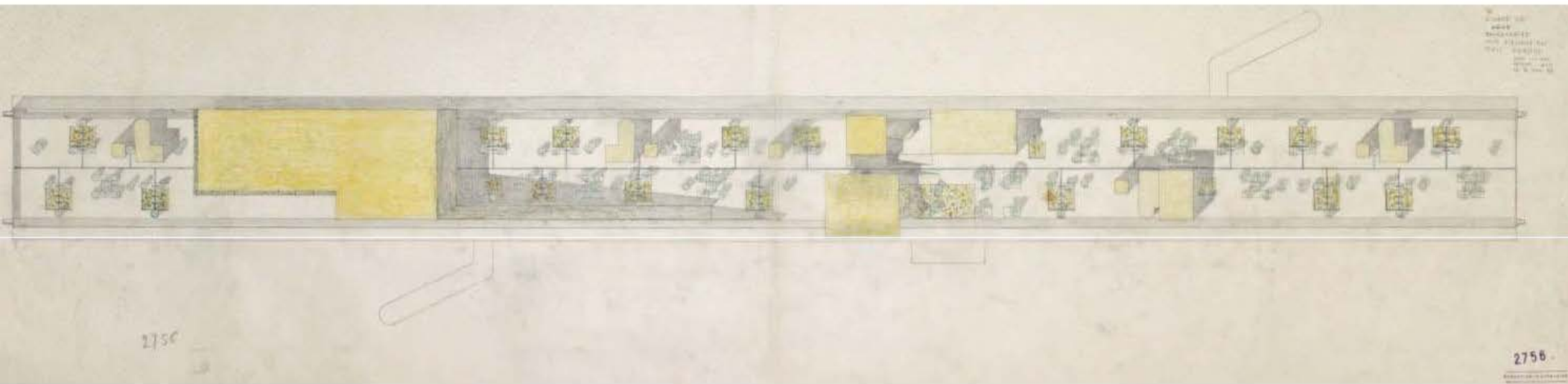
ARCHIVAL IMAGES: TERRACE

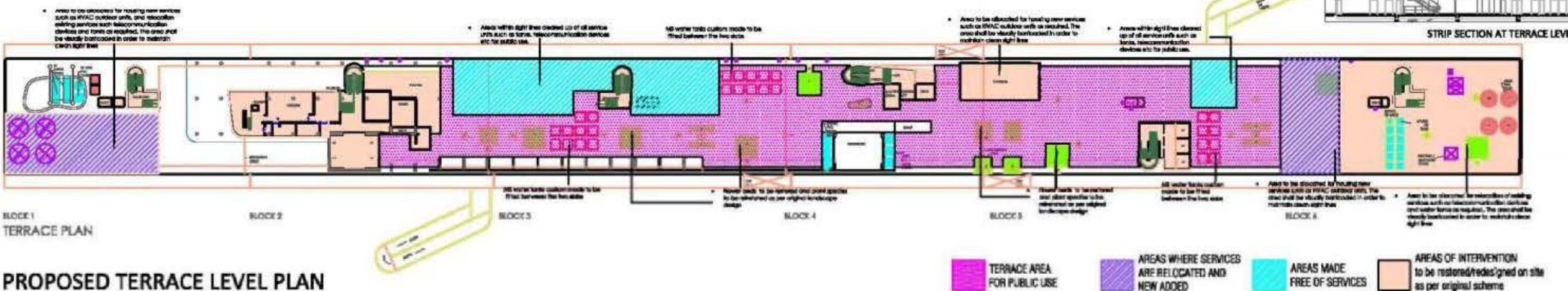


SITE IMAGES: TERRACE



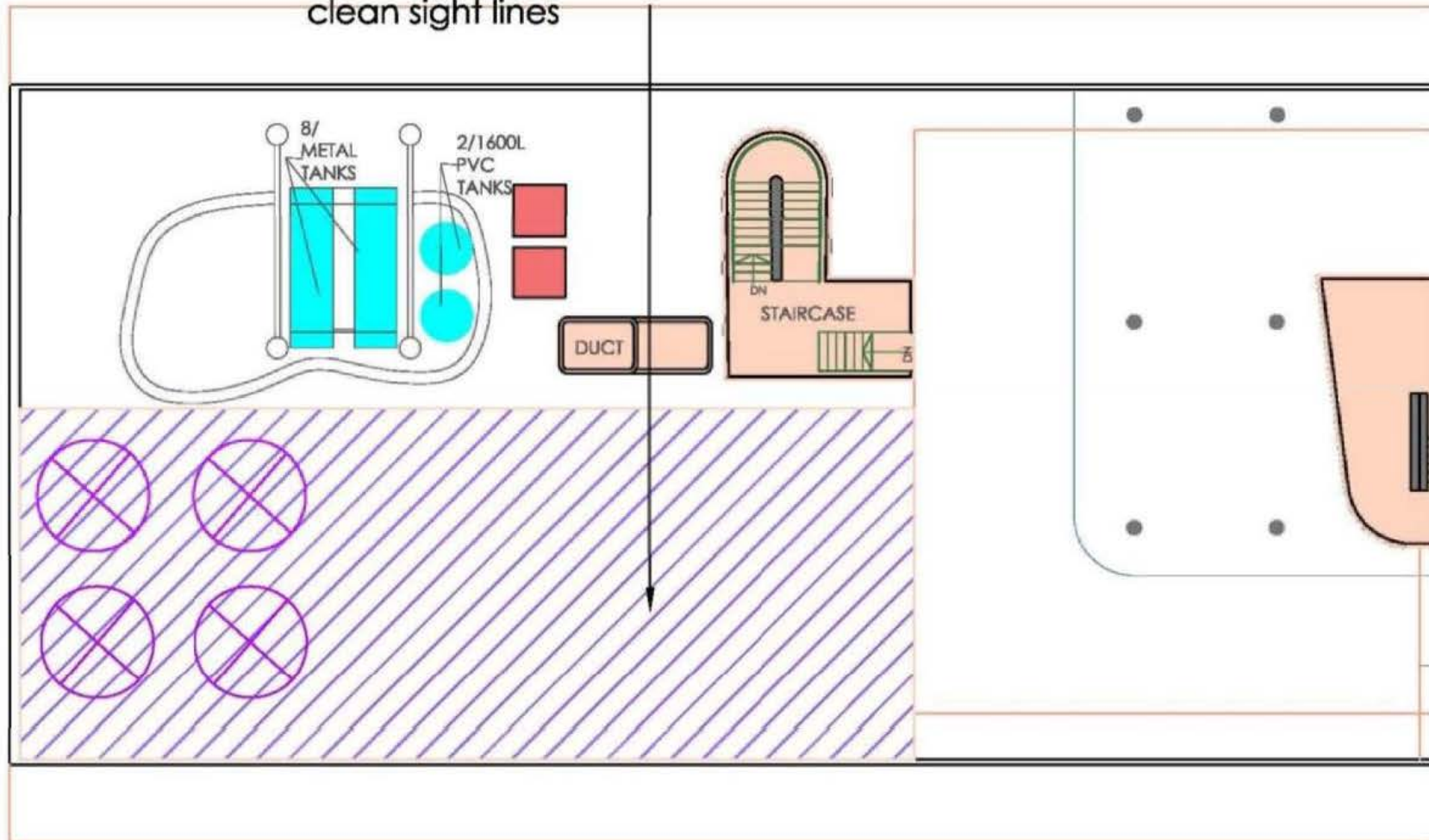
ARCHIVAL DRAWINGS: TERRACE





TERRACE PLAN:

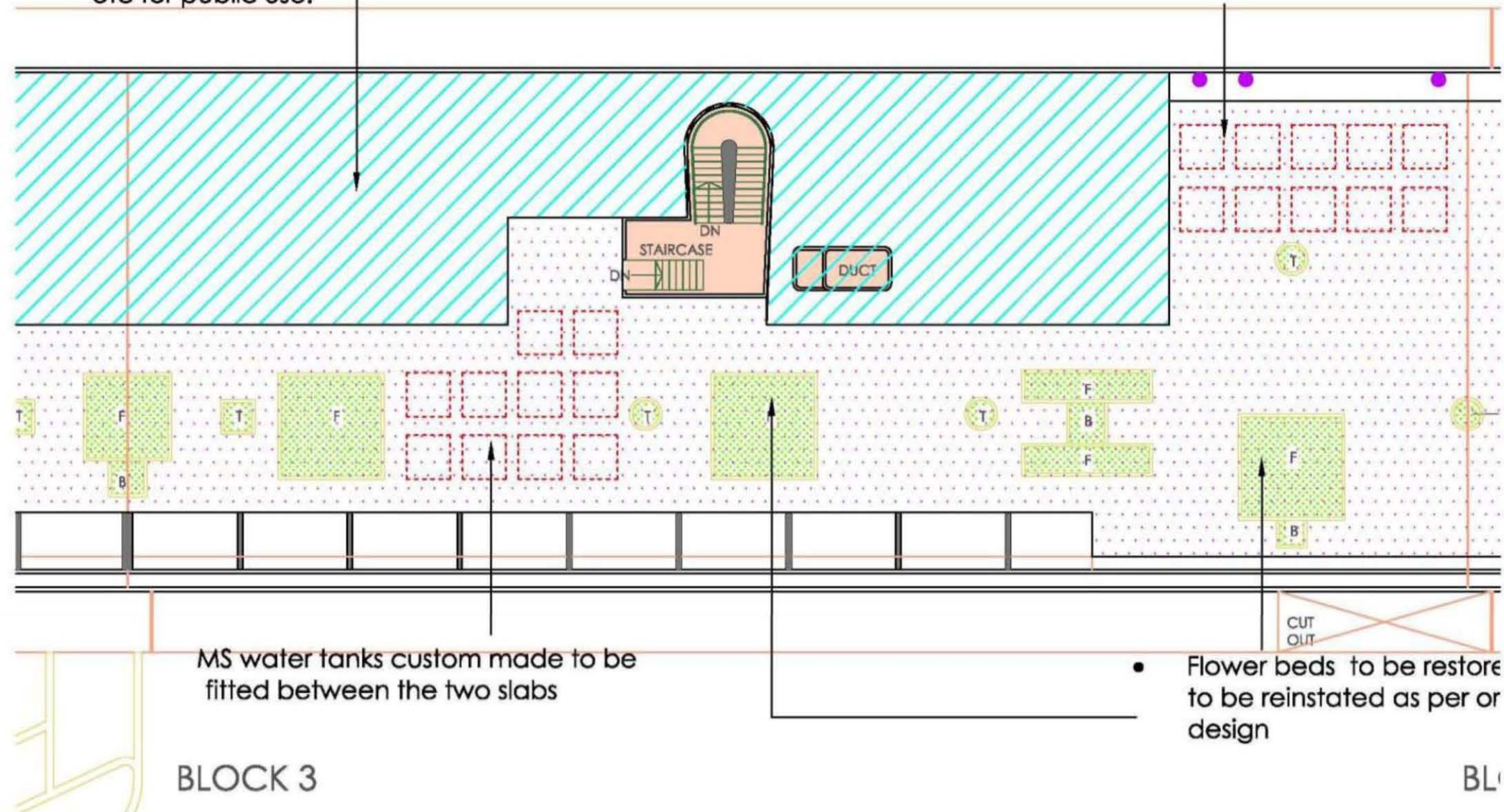
- Area to be allocated for housing new services such as HVAC outdoor units, and relocation existing services such telecommunication devices and tanks as required. The area shall be visually barricaded in order to maintain clean sight lines



TERRACE PLAN:

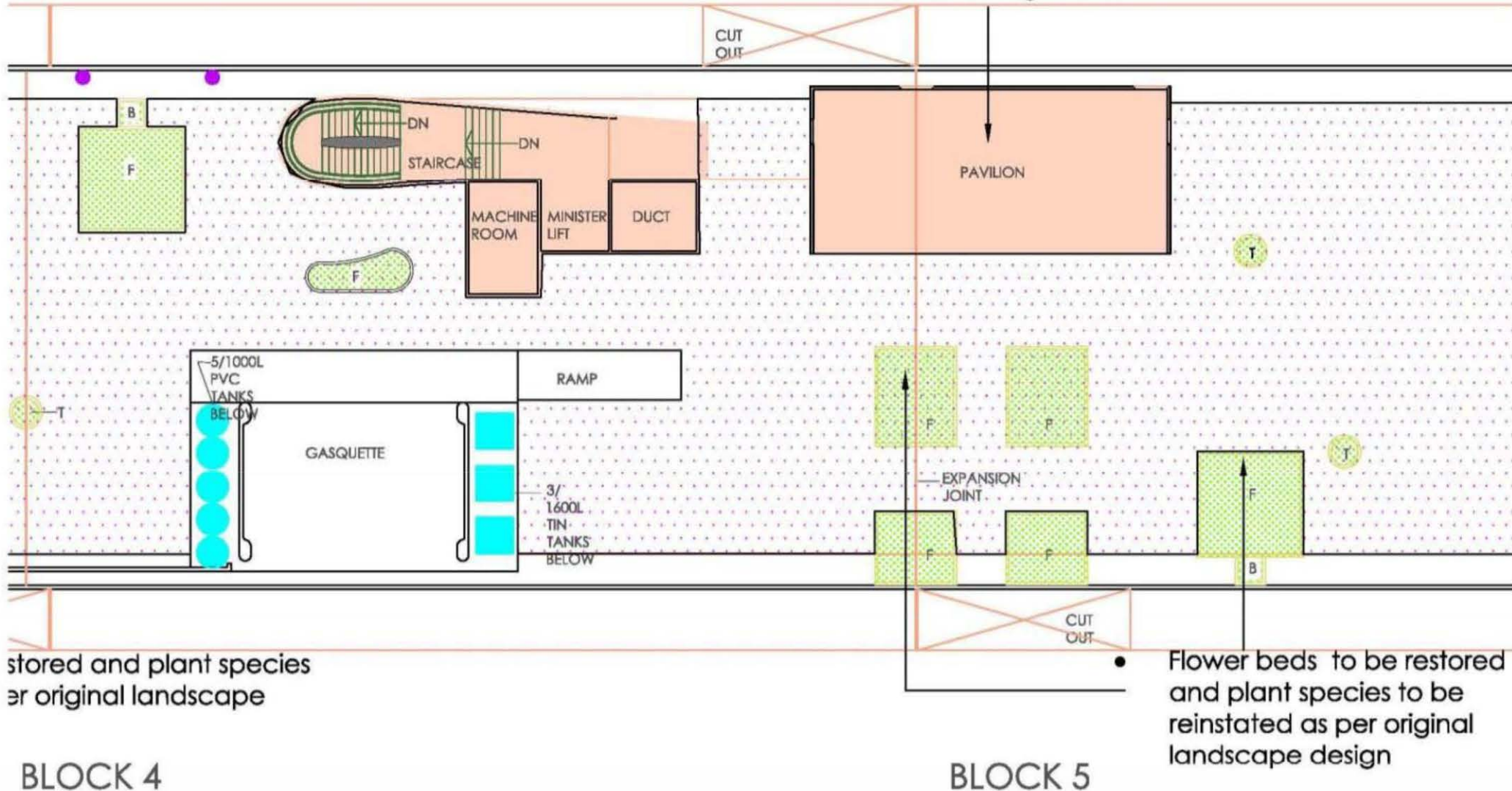
- Areas within sight lines cleared up of all service units such as tanks, telecommunication devices etc for public use.

MS water tanks custom made to be fitted between the two slabs



TERRACE PLAN:

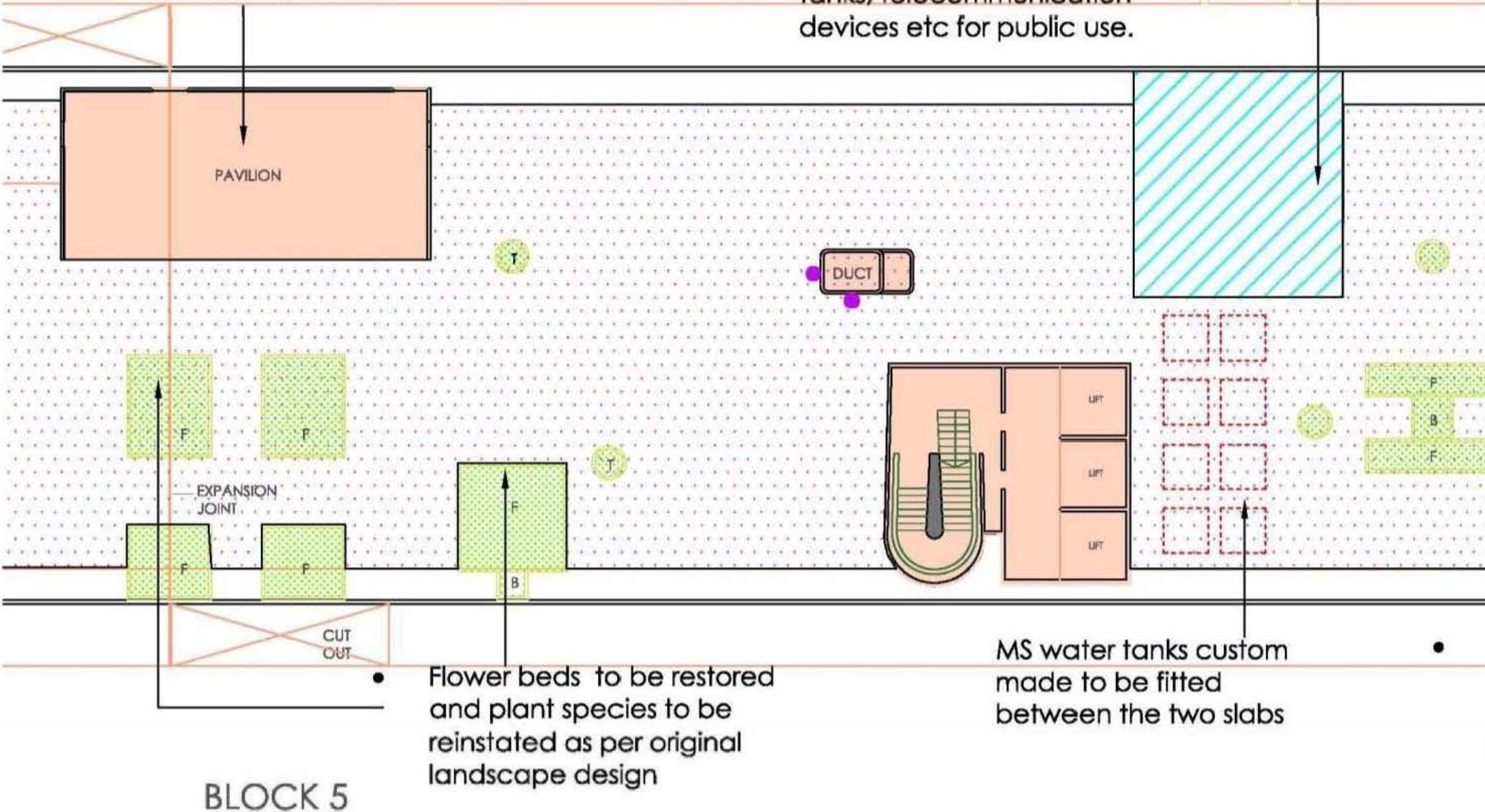
- Area to be allocated for housing new services such as HVAC outdoor units as required. The area shall be visually barricaded in order to maintain clean sight lines



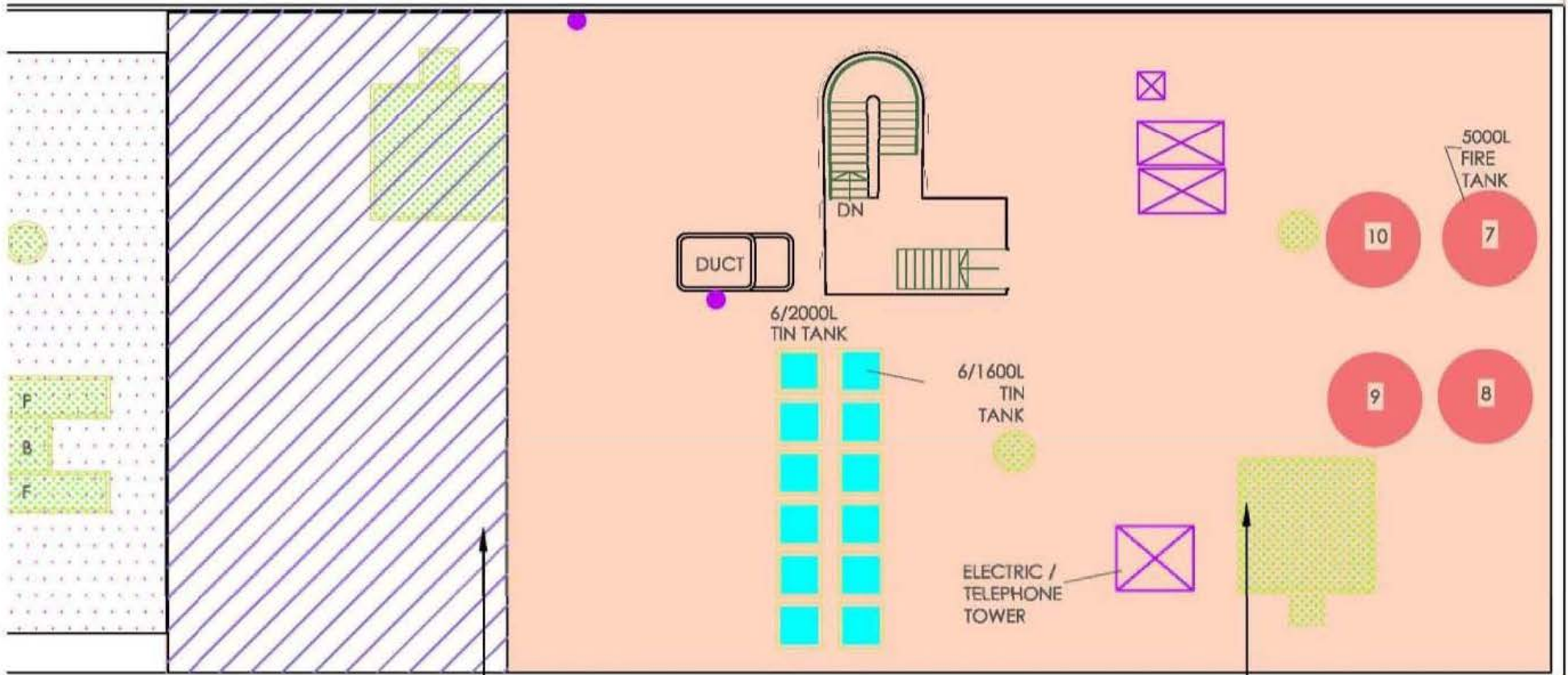
TERRACE PLAN:

- Area to be allocated for housing new services such as HVAC outdoor units as required. The area shall be visually barricaded in order to maintain clean sight lines

- Areas within sight lines cleared up of all service units such as tanks, telecommunication devices etc for public use.



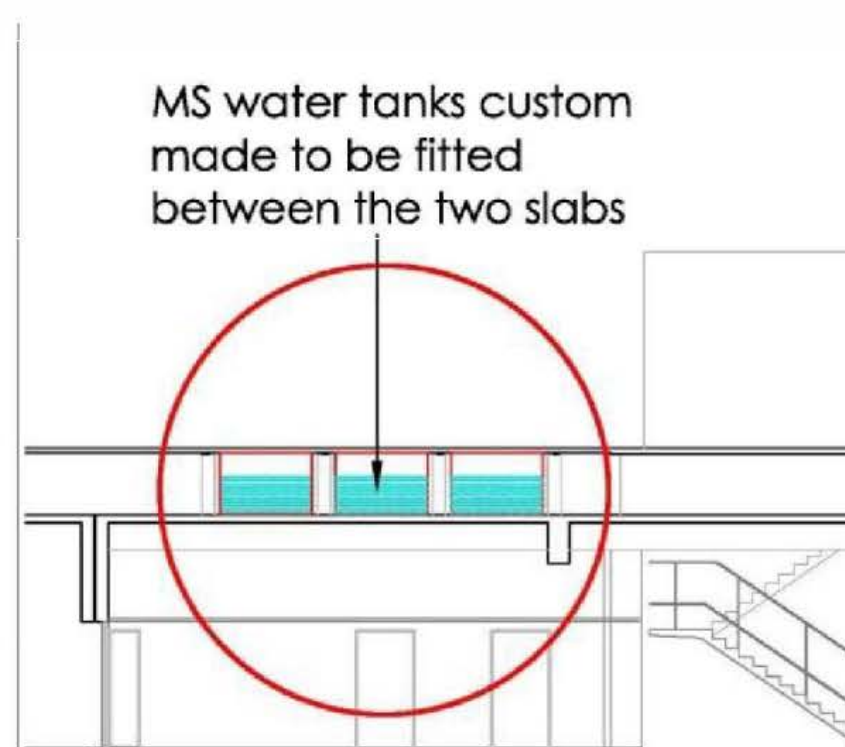
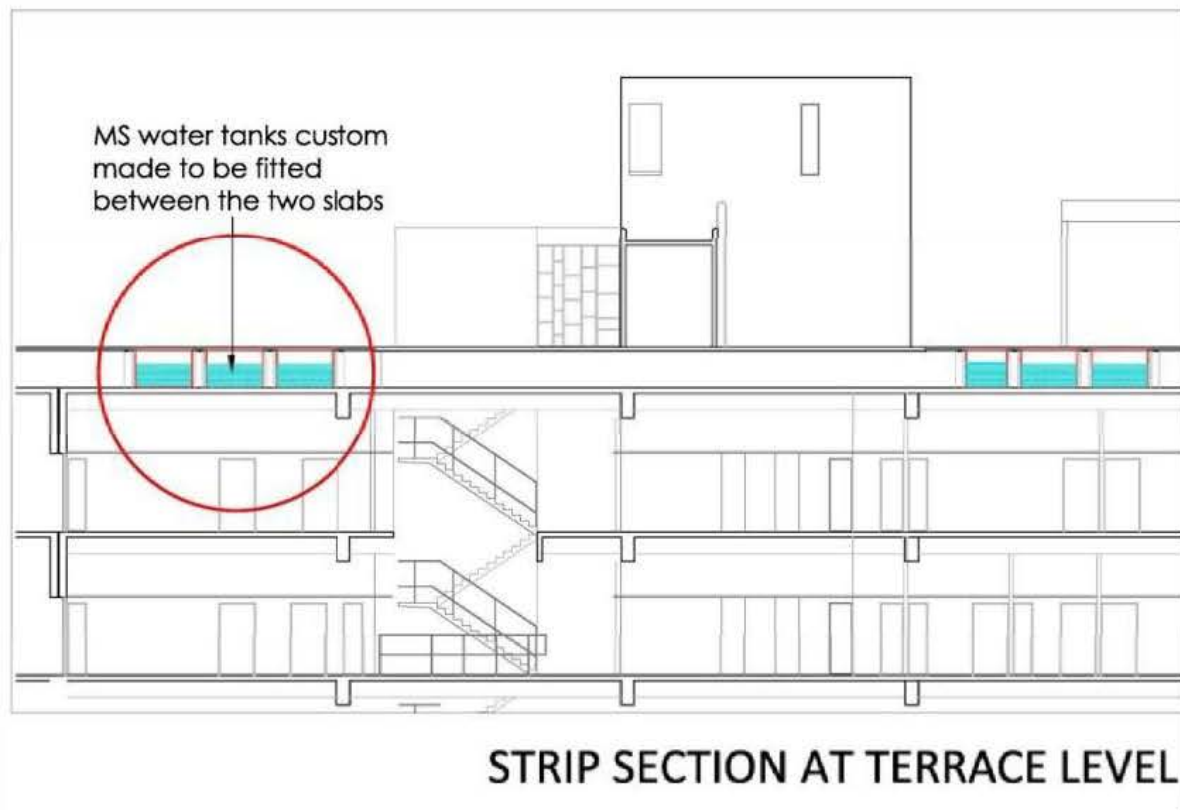
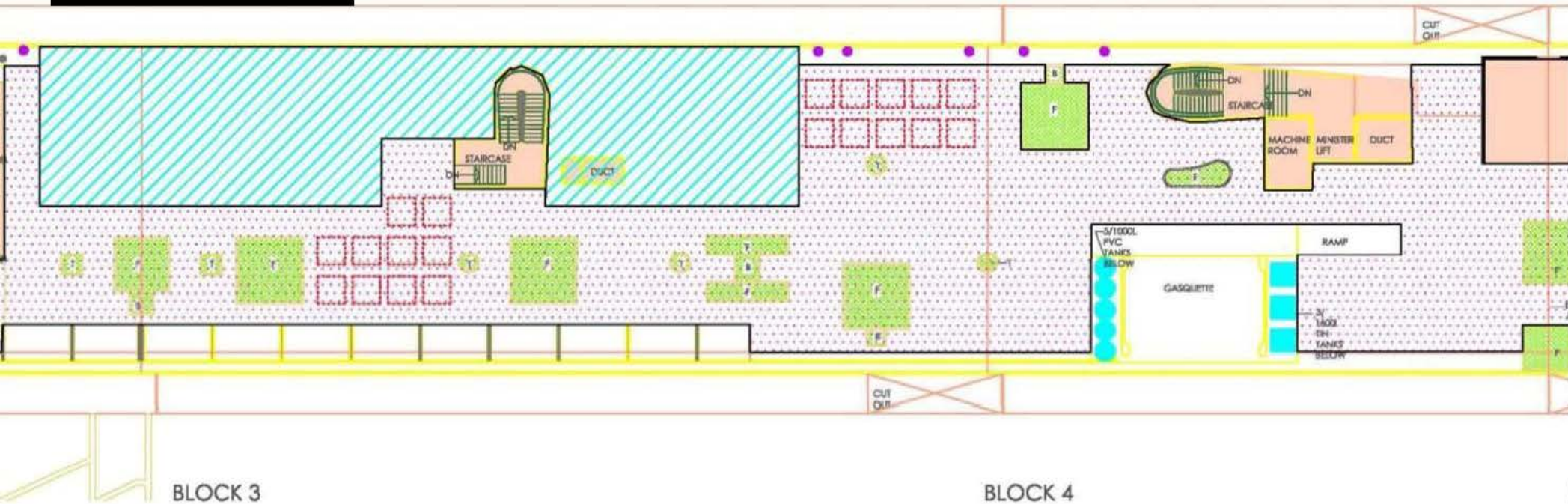
TERRACE PLAN:



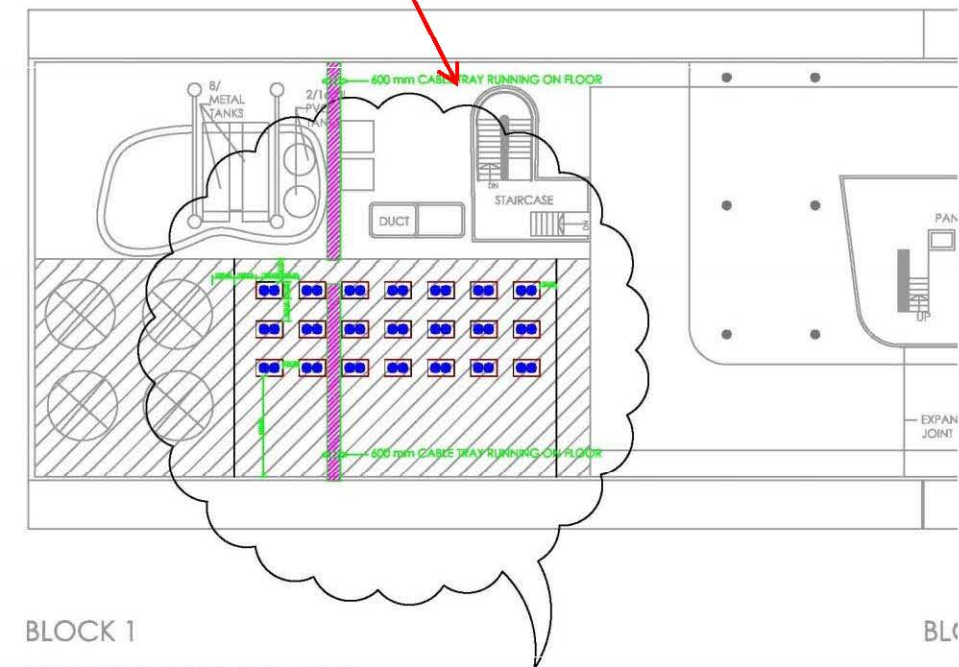
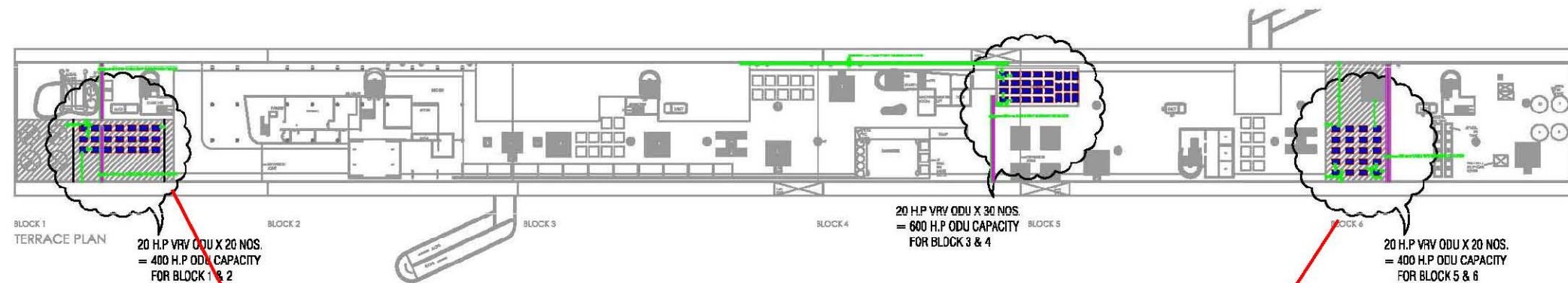
- Area to be allocated for housing new services such as HVAC outdoor units. The area shall be visually barricaded in order to maintain clean sight lines
 - Area to be allocated for relocation of existing services such as telecommunication devices and water tanks as required. The area shall be visually barricaded in order to maintain clean sight lines
- BLOCK 6

BLOCK 6

TERRACE PLAN:



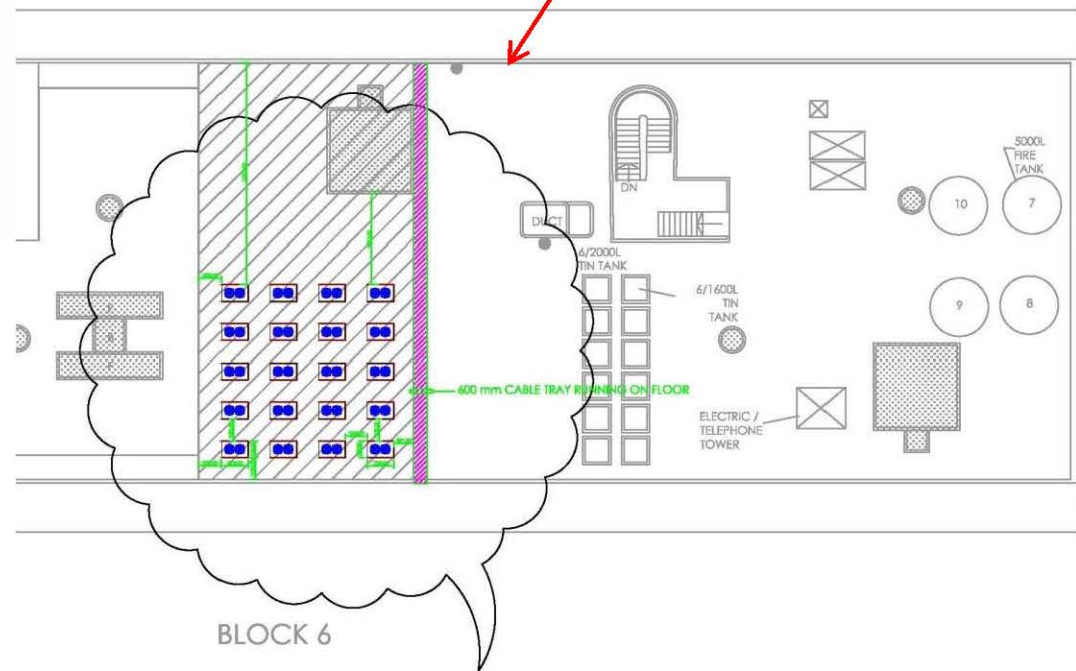
TERRACE HVAC PLAN:



BLOCK 1
TERRACE PLAN

BLOCK 1

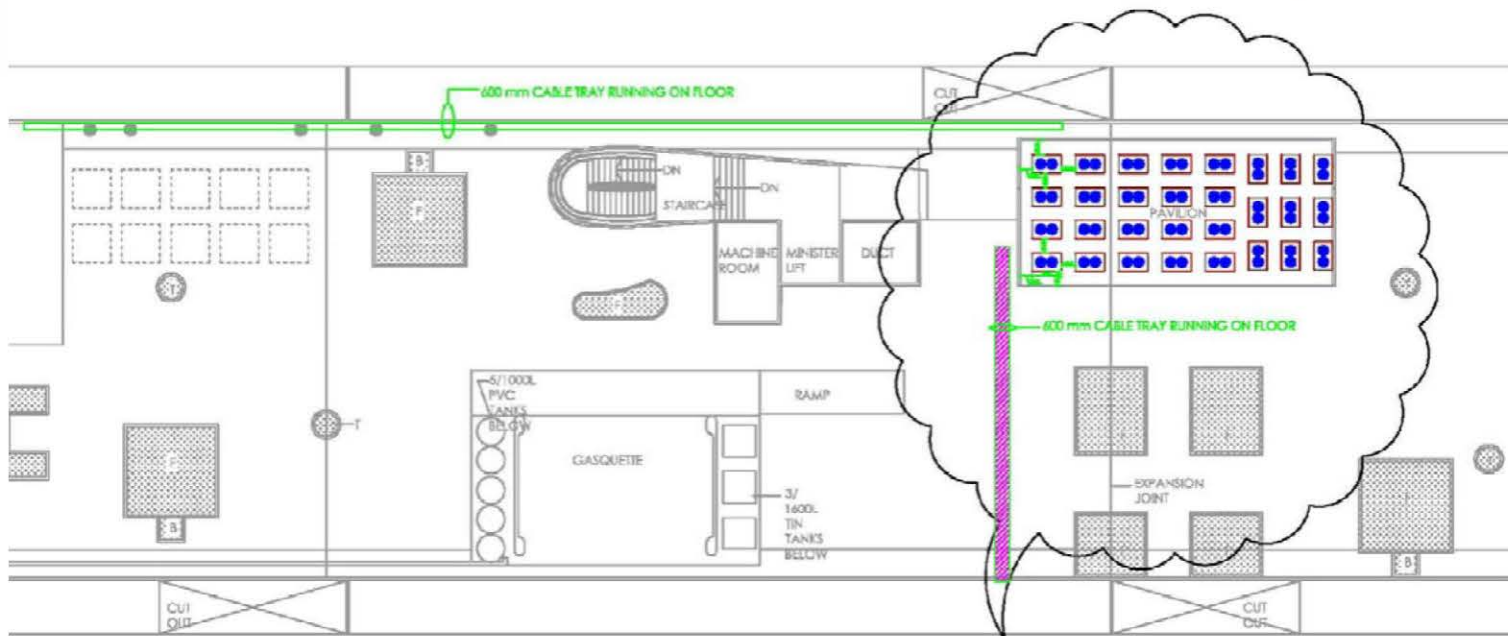
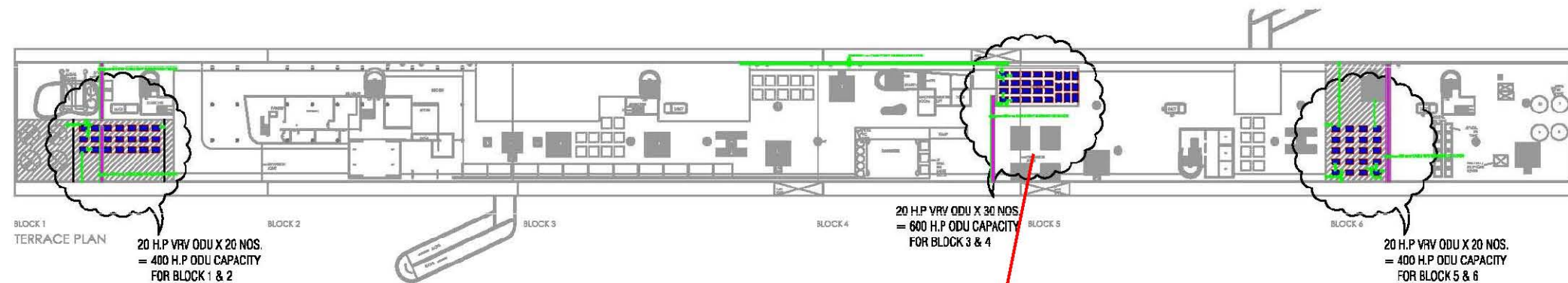
20 H.P VRV ODU X 20 NOS.
= 400 H.P ODU CAPACITY
FOR BLOCK 1 & 2



BLOCK 6

20 H.P VRV ODU X 20 NOS.
= 400 H.P ODU CAPACITY
FOR BLOCK 5 & 6

TERRACE HVAC PLAN:



BLOCK 4

BLOCK 5

BLOCK 5

INDOOR HVAC BLOCK PLAN:



BLOCK 3

BLOCK 3

INDOOR HVAC BLOCK PLAN:



BLOCK 3

SITE IMAGES: TERRACE



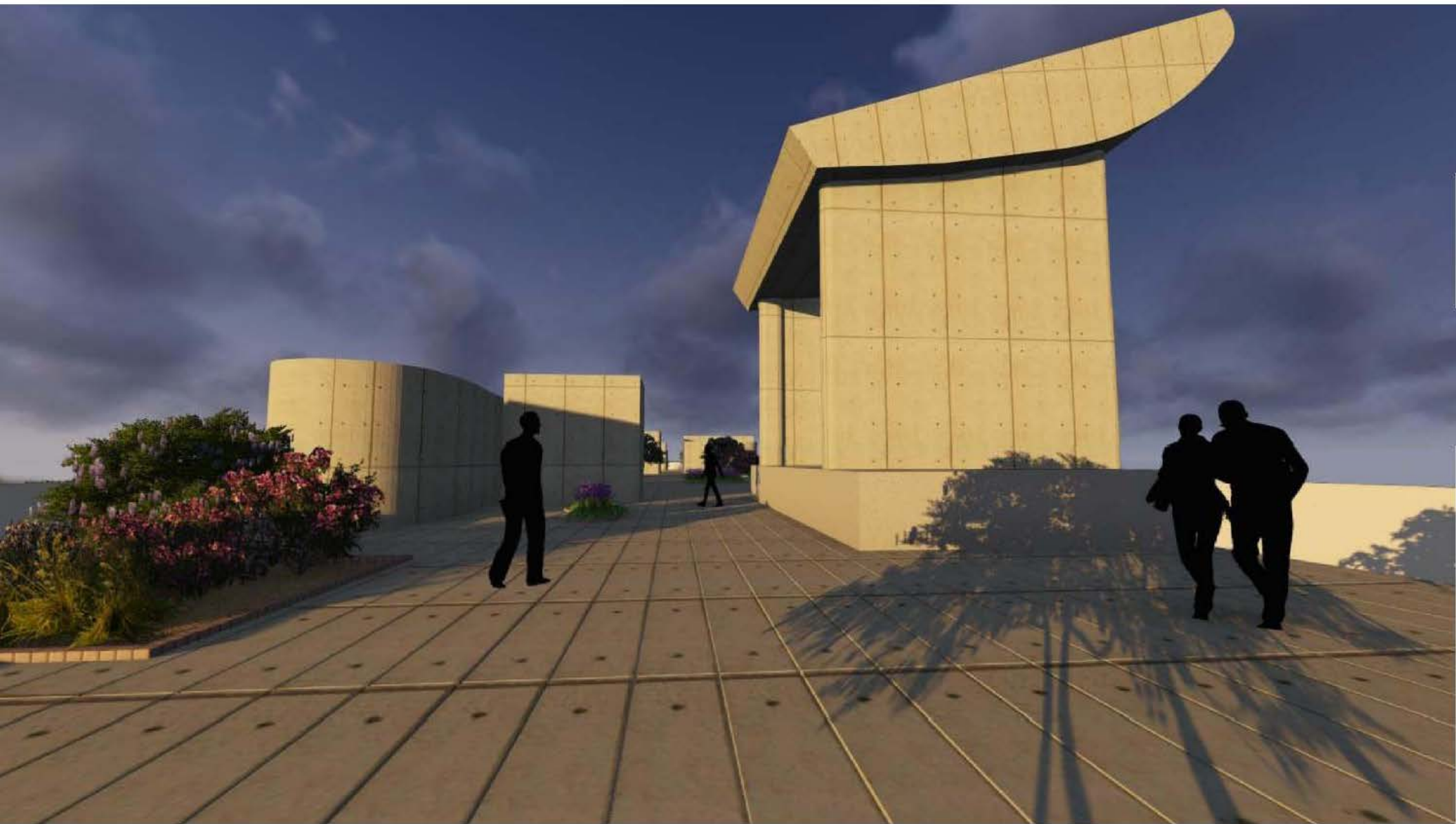
TERRACE AFTER PROPOSED CLEARING:



TERRACE AFTER PROPOSED CLEARING:



TERRACE AFTER PROPOSED CLEARING:



TERRACE AFTER PROPOSED CLEARING:



LIST OF WORKS PROPOSED:

Secretariat works proposed:

- Entrance canopies to be removed, public entrances diverted and areas redesigned as entrance lobbies
- Toilets on all floors to be redesigned and historic material palette to be used i.e terrazzo vitrified for flooring and dado
- In both ramps flooring to be restored and new railing to be provided where necessary
- Removing all encroachments from facade i.e. blocking of balconies
- Comprehensive design of HVAC for entire building and execution for removal of units on the facades
- All lobbies in all 6 blocks inclusive of lift areas, toilets, staircase to be restored using historic material palette i.e industrial PVC flooring, toughened glass, enamel painted MS cladding on lift walls
- Ground floor area to be completely restored- entrance lobbies, public and VIP etc
- Terrace club – Canteen seating area
- Facade Illumination
- Comprehensive signage design for the entire building

BLOCK ESTIMATE FOR PUNJAB & HARYANA SECRETARIAT, CAPITOL COMPLEX

SR. NO	DESCRIPTION	QUANTITY	RATE	UNIT	AMOUNT
1	INTERIOR RESTORATION AND UPGRADATION				
a	mobilization			lumpsum	5000000.00
b	ground floor lobby	2440	30000	SQ.M	73200000.00
c	upper floor lobbies (8 floors) including staircase , lift lobbies etc on all floors	3874	22000	SQ.M	85228000.00
d	corridors 1-5 floor	4194	22000	SQ.M	92268000.00
e	toilets on all floors	1350	33000	SQ.M	44550000.00
f	terrace club	500	22500	SQ.M	11250000.00
g	ramps	2000	7000	SQ.M	14000000.00
h	signage			lumpsum	3000000.00
i	terrace landscape and other works	5000	3500	SQ.M	17500000.00
j	cleaning of concrete in the interiors	2800	3000	SQ.M	8400000.00
k	civil works for HVAC			lumpsum	5000000.00
l	façade illumination	20000	3000	SQ.M	60000000.00
	TOTAL				419396000.00
	5% night charges				20969800.00
	10% contingences (over total + night charges)				44036580.00
	TOTAL 1				484402380.00
2	SERVICES UPGRADATION WORKS				
a	New HVAC systems for existing air conditioned areas	775	125000	TR	96875000.00
b	New HVAC systems for non air conditioned areas (NOT INCLUDED IN TOTAL)	2023	125000	TR	252875000.00
c	terrace plumbing for tanks			lumpsum	5000000.00
	TOTAL				101875000.00
	10% contingences (over total + night charges)				10187500.00
	TOTAL 2				112062500.00
	TOTAL 1+2				596464880.00

Legislative Assembly

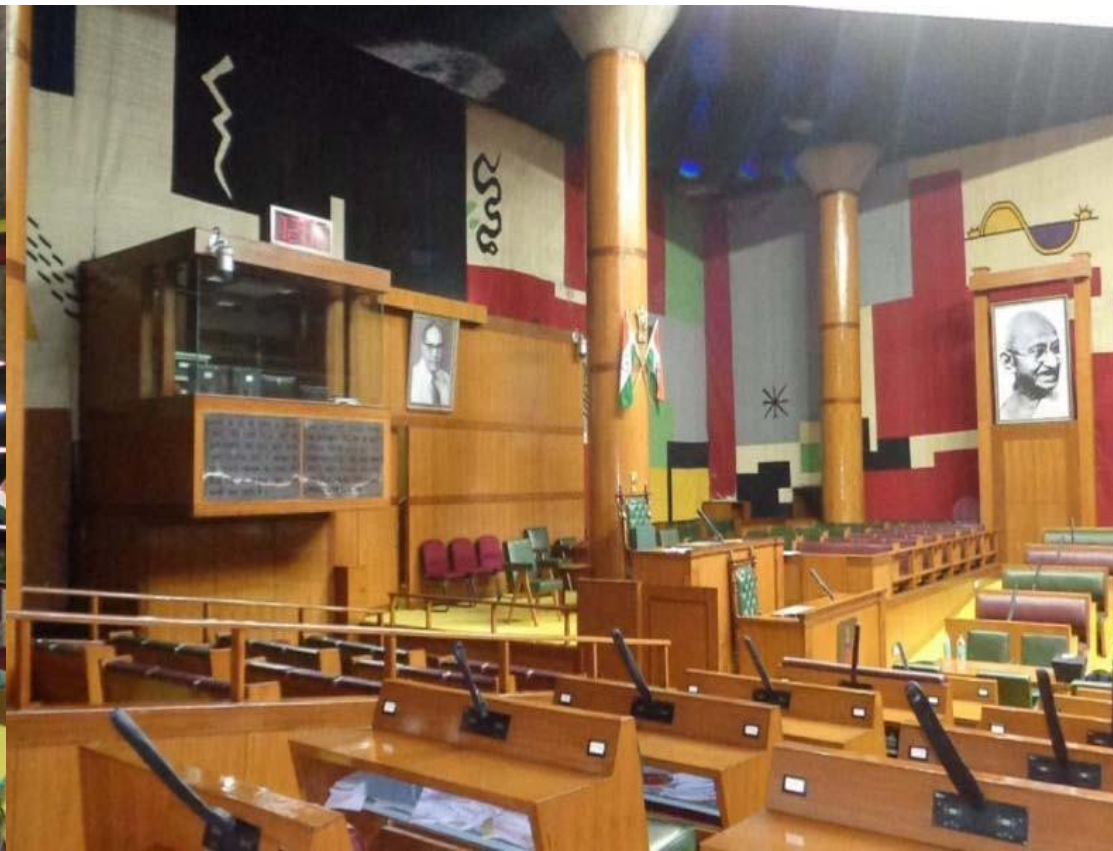


CURRENT ISSUES – ASSEMBLY HALL



PUNJAB ASSEMBLY HALL

1. Restoration of the acoustic panels
2. removal of the aluminum edging on the carpets
3. removal and relocation of the lights on the balconies



HARYANA ASSEMBLY HALL

1. Removal of the wooden cladding to restore the historic concrete surface
 2. Removal of the aluminum edging on the carpets
- Removal and relocation of the lights on the balconies
4. restoration of the damaged tapestry

CURRENT ISSUES – FACADES



FACADES

1. removal & relocation of HVAC outdoor units
2. Removal and relocation of the Television transmission antenna
3. Facade Illumination



CURRENT ISSUES – MEMBERS LOUNGE: PUNJAB & HARYANA



PUNJAB MEMBERS LOUNGE

1. redesigning the partitions enclosing the lounge
2. redesigning of the furniture
3. redesigning the signages photos of the dignitaries
4. removing of the granite flooring and relaying the historic terrazzo flooring

HARYANA MEMBERS LOUNGE

1. redesigning the partitions enclosing the lounge
2. redesigning of the furniture
3. redesigning the signages photos of the dignitaries
4. removing of the wooden flooring and relaying the historic terrazzo flooring

CURRENT ISSUES – PRESS LOUNGE: PUNJAB & HARYANA



PRESS/MEDIA LOUNGE

- 1.Redesigning the partitions enclosing the lounge
- 2.Redesigning of the furniture
- 3.Redesigning the electrical and HVAC systems
- 4.Removing of the vitrified tile flooring and relaying the historic terrazzo flooring
- 5.Providing a pantry and service area for the same



CURRENT ISSUES – LOBBIES



LOBBIES

1. Removal of adhoc flooring, relaying of pre cast terrazzo is historic pattern
2. removal of wooden/ aluminum partitions
3. removal and relocation of the adhoc toilets
4. removal of the drinking water station
5. removal & relocation of the AC outdoor units
6. redesigning the toilets as per Historic materials
7. Signage to be standardized



CURRENT ISSUES – LOBBIES



CURRENT ISSUES – LOBBIES



TOILETS

1. Vitrified tile flooring/ dado to be restored to Granite/Terrazzo finish



HARYANA MEMBERS LOUNGE
1. redesigning the partitions enclosing the lounge
2. redesigning the furniture
3. redesigning the signage photos of the dignitaries
4. removing of the wooden flooring and relaying the historic terrazzo flooring



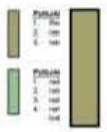
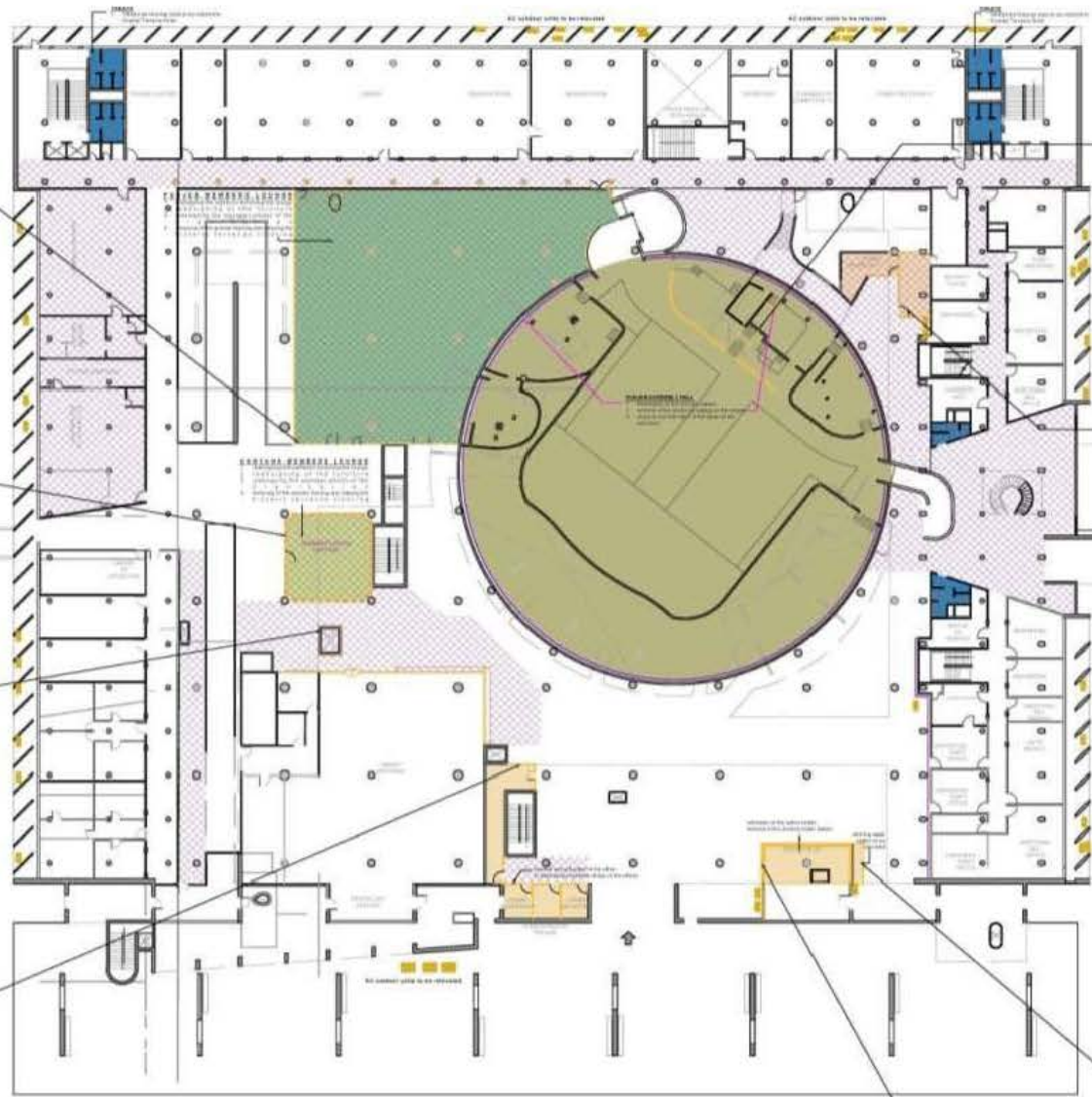
HARYANA MEMBERS LOUNGE
1. redesigning the partitions enclosing the lounge



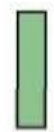
HARYANA MEMBERS LOUNGE
1. Removal of adhuc flooring, relaying of pre cast terrace is historic pattern
2. removal & relocation of the AC outdoor units
3. signage to be standardized



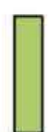
HARYANA MEMBERS LOUNGE
1. Removal of adhuc flooring, relaying of pre cast terrace is historic pattern
2. removal of the discomconcretes partitions



- PUNJAB ASSEMBLY HALL**
1. Restoration of the acoustic panels
 2. removal of the aluminum edging on the carpets
 3. removal and relocation of the lights on the balconies



- PUNJAB MEMBERS LOUNGE**
1. redesigning the partitions enclosing the lounge
 2. redesigning of the furniture
 3. redesigning the signage photos of the dignitaries
 4. removing of the granite flooring and relaying the historic terrazzo flooring



- HARYANA MEMBERS LOUNGE**
1. redesigning the partitions enclosing the lounge
 2. redesigning of the furniture
 3. redesigning the signage photos of the dignitaries
 4. removing of the wooden flooring and relaying the historic terrazzo flooring



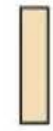
- LOBBIES**
1. Removal of adhuc flooring, relaying of pre cast terrace is historic pattern
 2. removal of the aluminum partitions
 3. removal and relocation of the adhuc toilets
 4. removal & relocation of the drinking water station
 5. removal & relocation of the AC outdoor units
 6. Signage to be standardized



- TOILETS**
1. Vitrified tile flooring/ dado to be restored to Granite/ Terrazzo finish



- CANTEEN**
1. Vitrified tile flooring/ dado to be restored to Granite/ Terrazzo finish



- OFFICES & TOILETS**
1. Removal & relocation of blocked spaces,



PUNJAB ASSEMBLY HALL
1. removal of the aluminum edging on the carpets



LOBBIES
1. Removal of adhuc flooring, relaying of pre cast terrace is historic pattern
2. removal of the wooden partitions
3. removal & relocation of the AC outdoor units
4. Relaying the historic terrazzo wall



LOBBIES
1. Removal of adhuc floor panels, relaying of lights

AREAS OF WORKS ON GROUND FLOOR



Works to be undertaken in RECEPTION
1. Restoration of the space



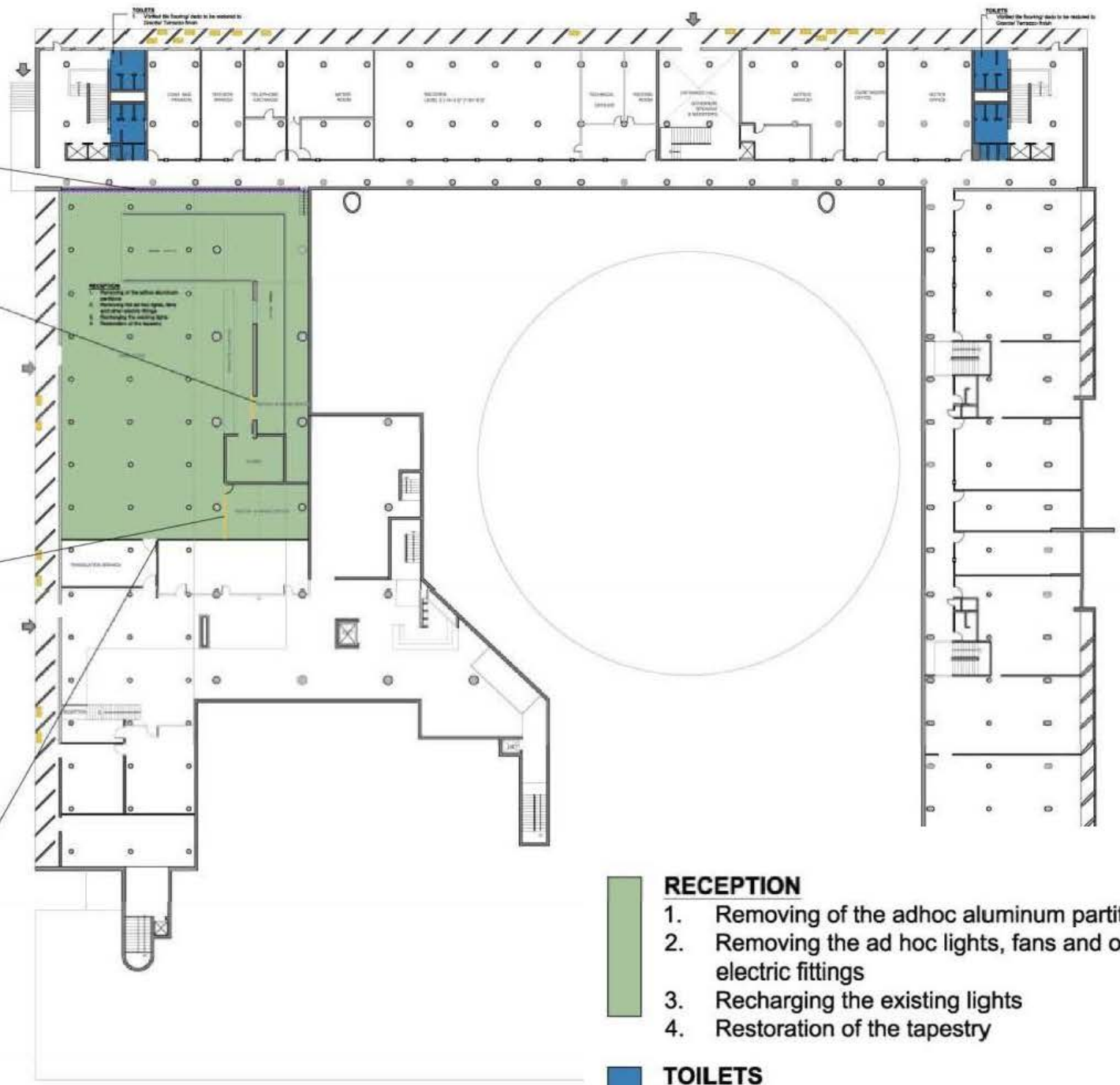
Works to be undertaken in RECEPTION
1. Removing of the adhoc aluminum partition
2. Removing of the electric conduits



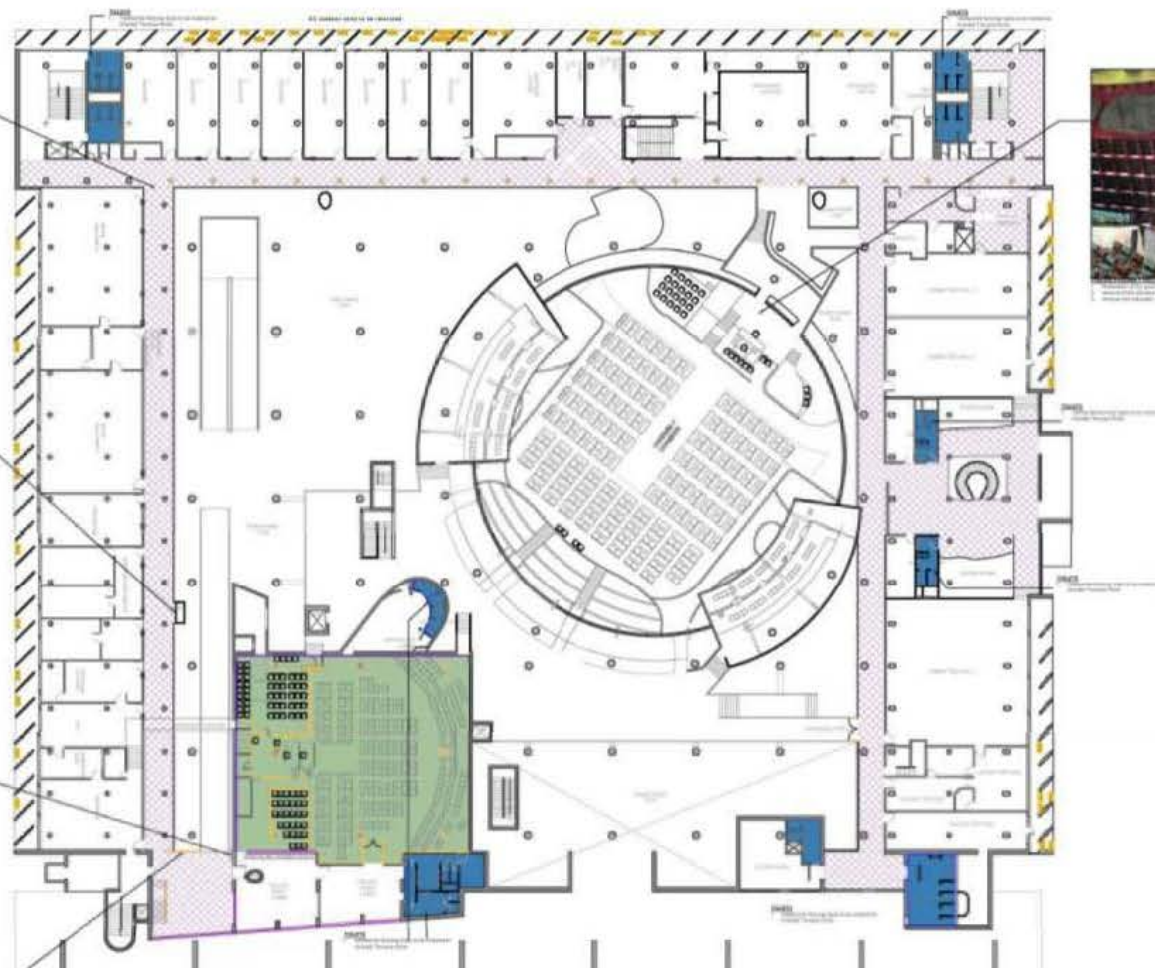
Works to be undertaken in RECEPTION
1. Removing of the adhoc electric partition
2. Restoring of the AC
3. Removing of the electric conduits



Works to be undertaken in RECEPTION
1. Removing of the adhoc glass partition
2. Restoring the existing lights
3. Removing of the electric conduits



AREAS OF WORKS ON BASEMENT FLOOR



1. Vitrified tile flooring/ dado to be restored to Granite/ Terrazzo finish

1. Restoration of the historic flooring
2. redesigning the toilets as per Historic materials
3. Signage to be standardized

1. Removal of the wooden cladding to restore the historic concrete surface
2. Removal of the aluminum edging on the carpets
3. Removal and relocation of the lights on the balconies
4. restoration of the damaged tapestry

1. Vitrified tile flooring/ dado to be restored to Granite/ Terrazzo finish

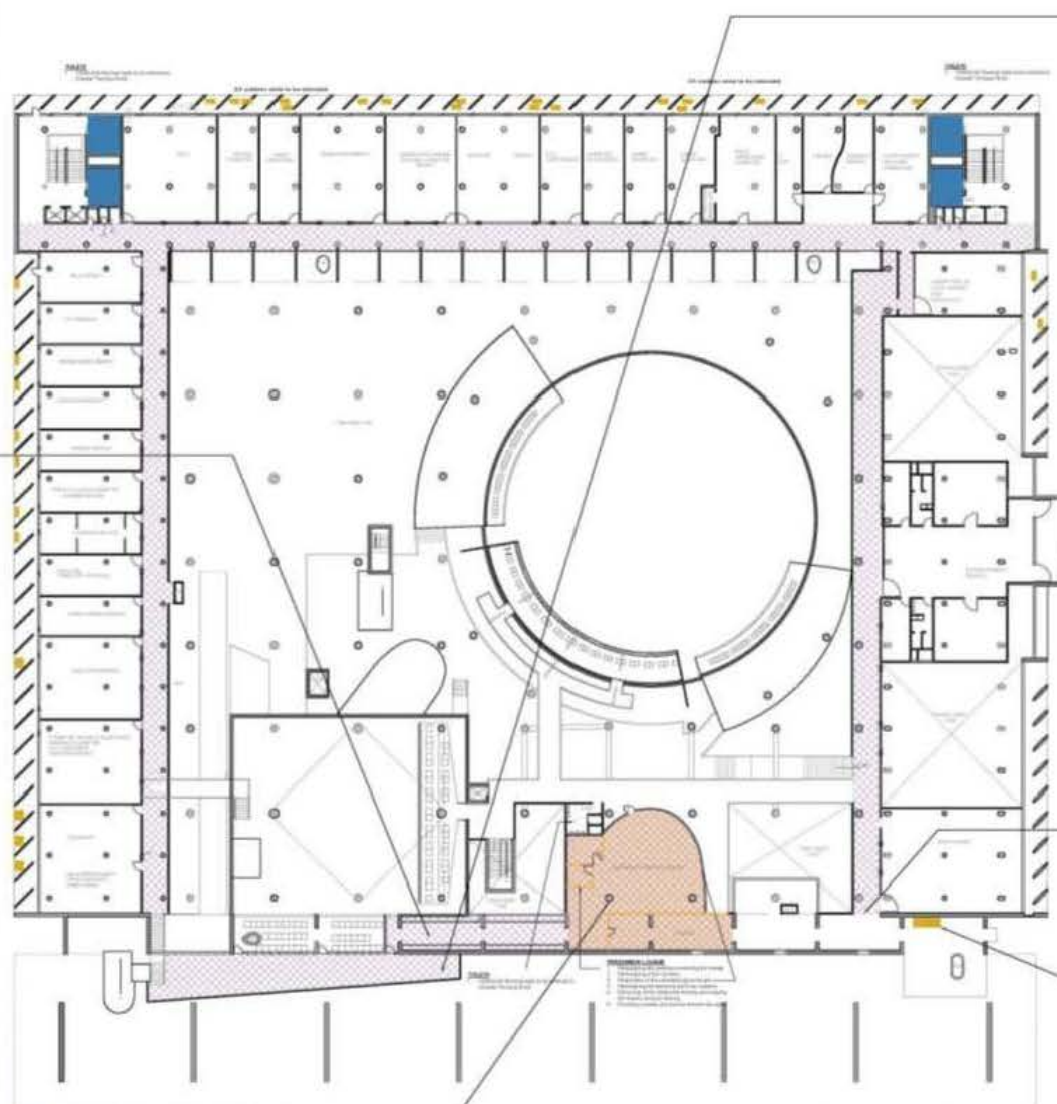
AREAS OF WORKS ON FIRST FLOOR



1. Restoration of the historic flooring
2. redesigning the toilets as per Historic materials
3. Signage to be standardized



1. Redesigning the partitions enclosing the lounge
2. Redesigning of the furniture
3. Redesigning the electrical and hvac systems
4. Removing of the vitrified tile flooring and relaying the historic terrazzo flooring
5. Providing a pantry and service area for the same



PRESS/MEDIA LOUNGE

1. Redesigning the partitions enclosing the lounge
2. Redesigning of the furniture
3. Redesigning the electrical and hvac systems
4. Removing of the vitrified tile flooring and relaying the historic terrazzo flooring
5. Providing a pantry and service area for the same

LOBBIES

1. Restoration of the historic flooring
2. redesigning the toilets as per Historic materials
3. Signage to be standardized

CANTEEN

1. Vitrified tile flooring/ dado to be restored to Granite/ Terrazzo finish

TOILETS

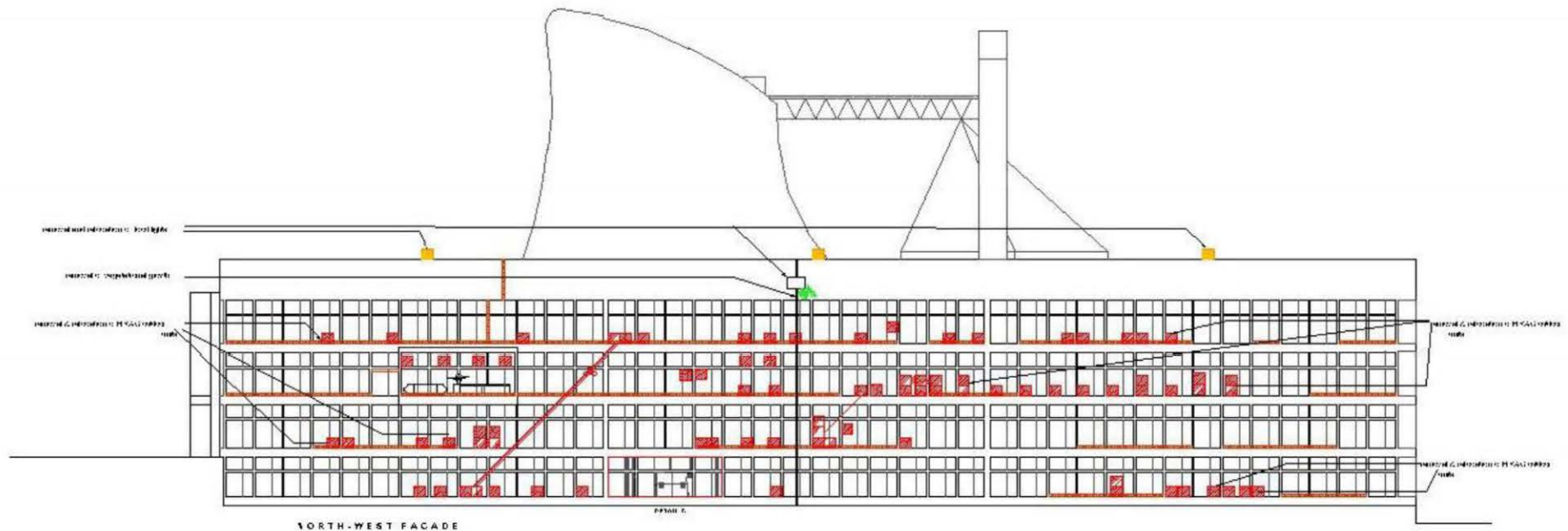
1. Vitrified tile flooring/ dado to be restored to Granite/ Terrazzo finish



AREAS OF WORKS ON SECOND FLOOR

Addition To FAÇADES:

- AC Units installed along some windows, with AC Ducts & Electrical Wires running along shorter facades
- Dish Antennae, light fixtures along the parapet

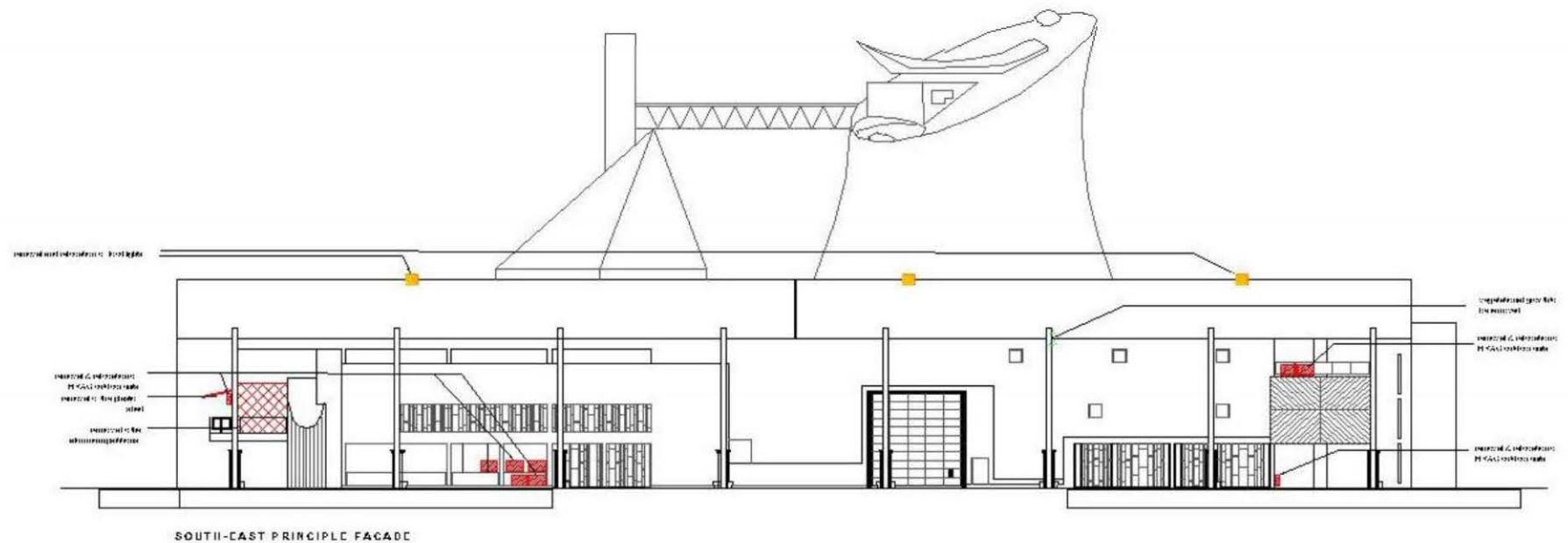


LEGEND

Signage to be Relocated / Redesigned	Ad-hoc Additions to be Removed	Vegetation Growth to be Removed	Communication / Dish Antennas to be Re-located
Existing AC Outdoor Units to be removed after installing VRV System	Existing Wet Risers & Hose Reels to be Re-routed / Re-located	Exhaust Fans to be Removed	Loose Furniture to be Removed
Electrical Conduits & Wiring to be Re-routed	AC Ducts / Pipes to be Dismantled after Installing VRV System	External Illumination Lights to be replaced with new system	

Addition To FAÇADES:

- AC Units installed along some windows, with AC Ducts & Electrical Wires running along shorter facades
- Dish Antennae, light fixtures along the parapet



LEGEND

- | | | | |
|---|---|---|--|
| Signage to be Relocated / Redesigned | Ad-hoc Additions to be Removed | Vegetation Growth to be Removed | Communication / Dish Antennas to be Re-located |
| Existing AC Outdoor Units to be removed after installing VRV System | Existing Wet Risers & Hose Reels to be Re-routed / Re-Located | Exhaust Fans to be Removed | Loose Furniture to be Removed |
| Electrical Conduits & Wiring to be Re-routed | AC Ducts / Pipes to be Dismantled after Installing VRV System | External Illumination Lights to be replaced with new system | |

ARCHIVAL ELEVATIONS:



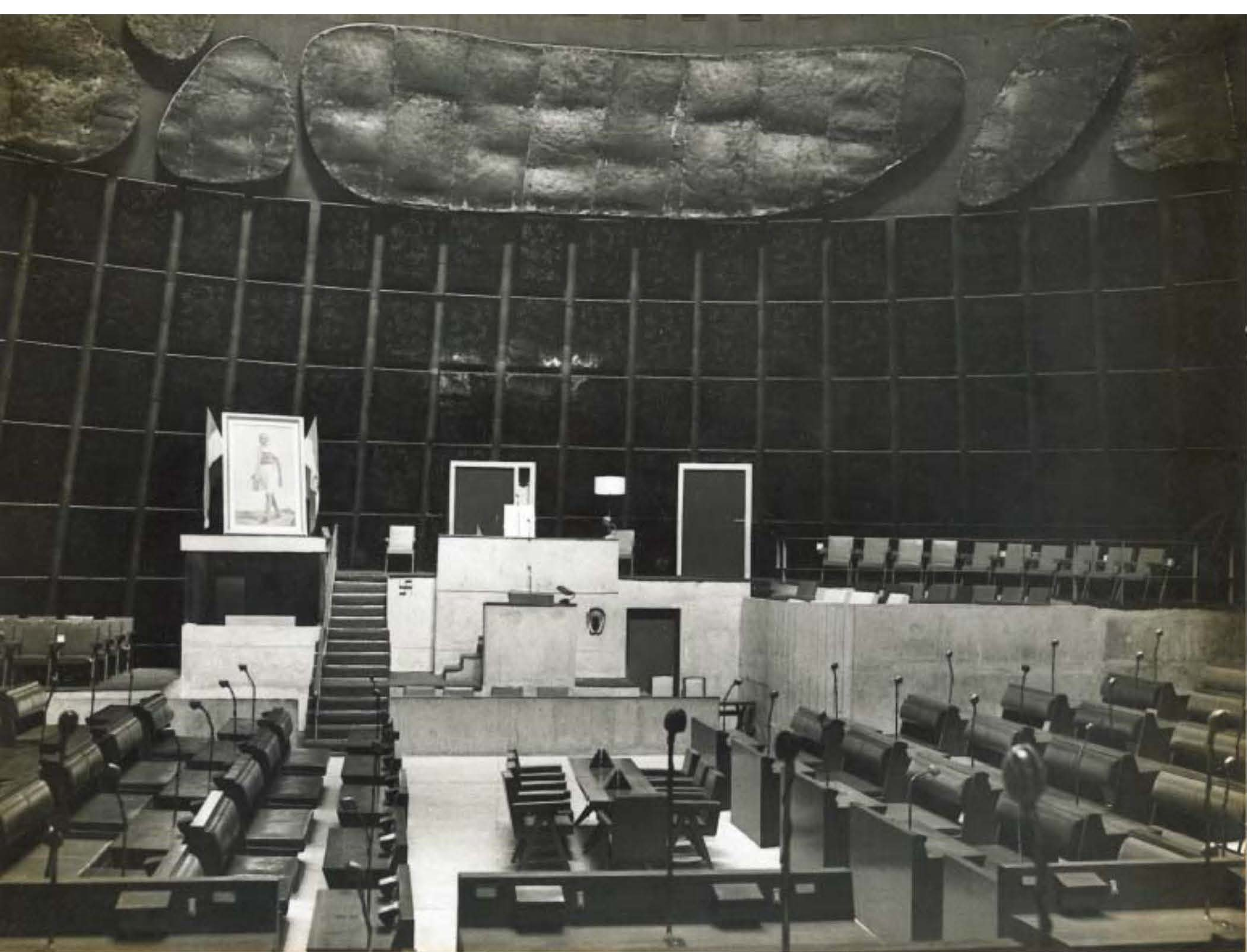
PRESENT CONDITION OF ELEVATIONS:

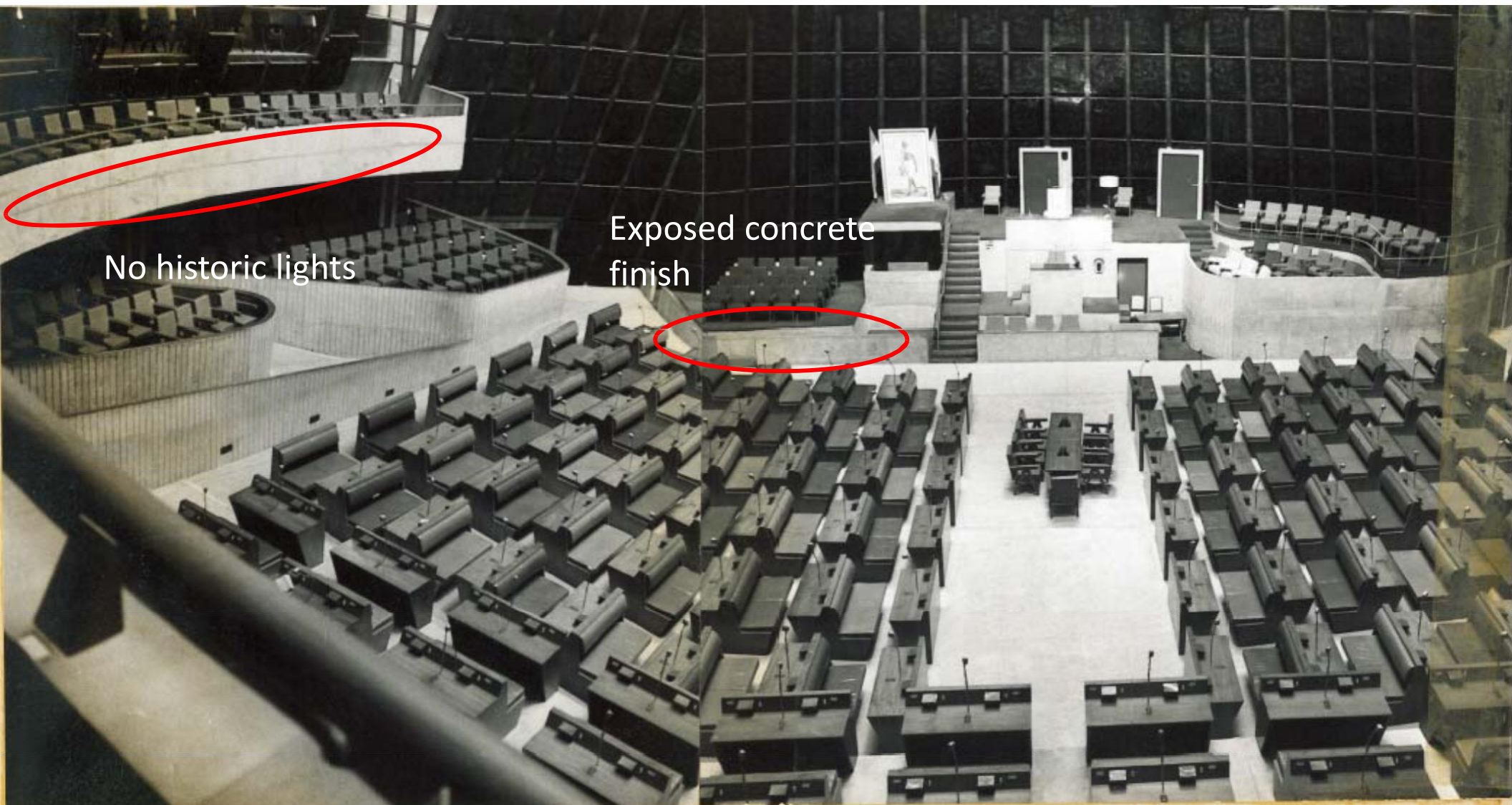




ARCHIVAL ELEVATIONS:



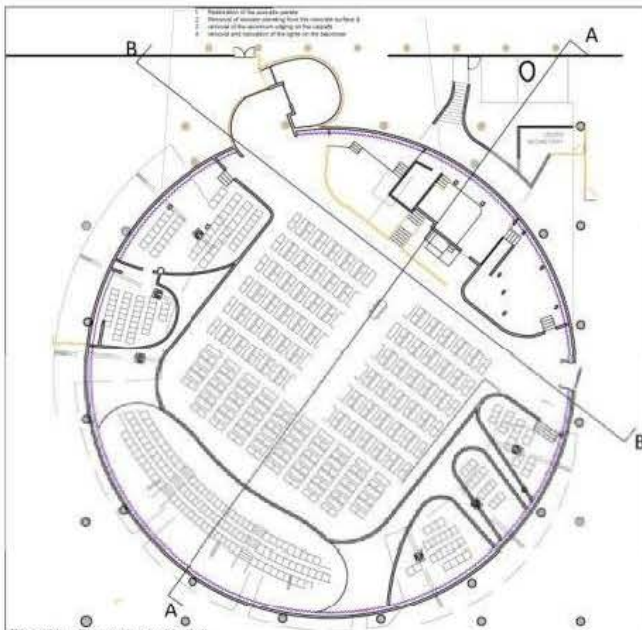




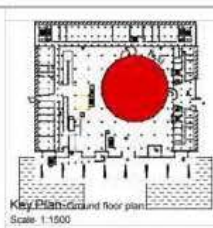
No historic lights

Exposed concrete
finish

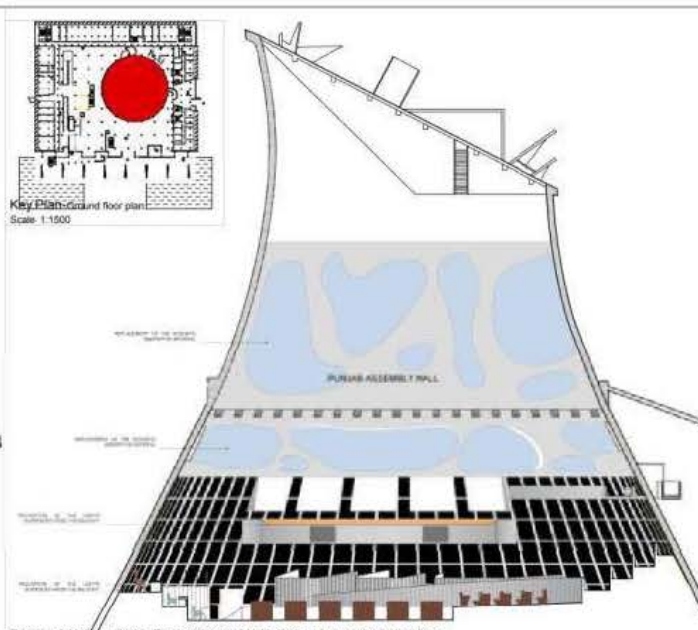




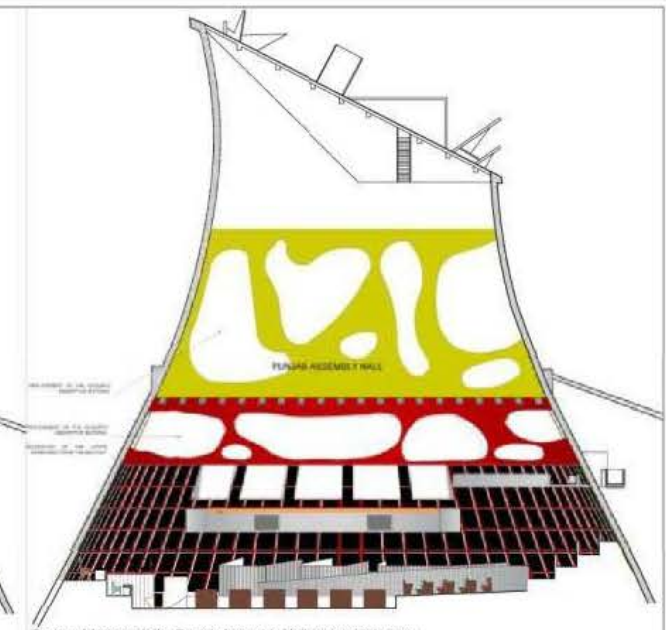
Plan of the Punjab Assembly Hall
Scale: 1:200



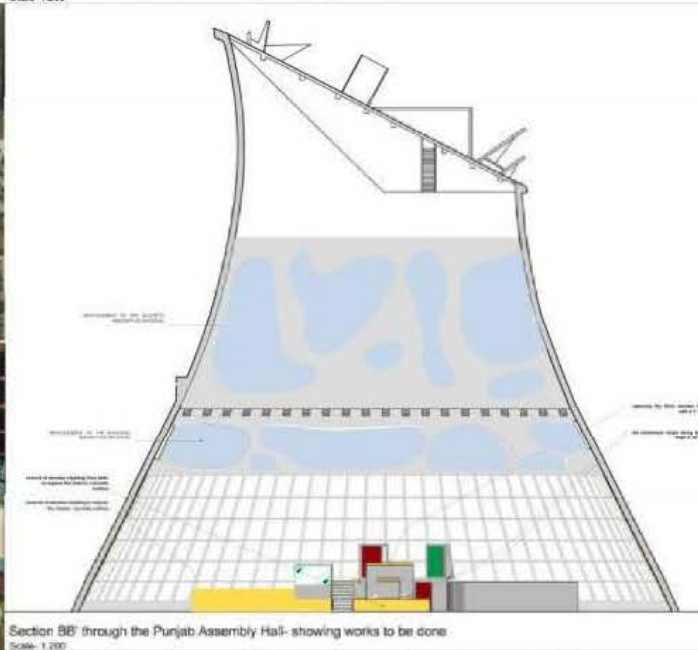
Key Plan-ground floor plan
Scale: 1:1500



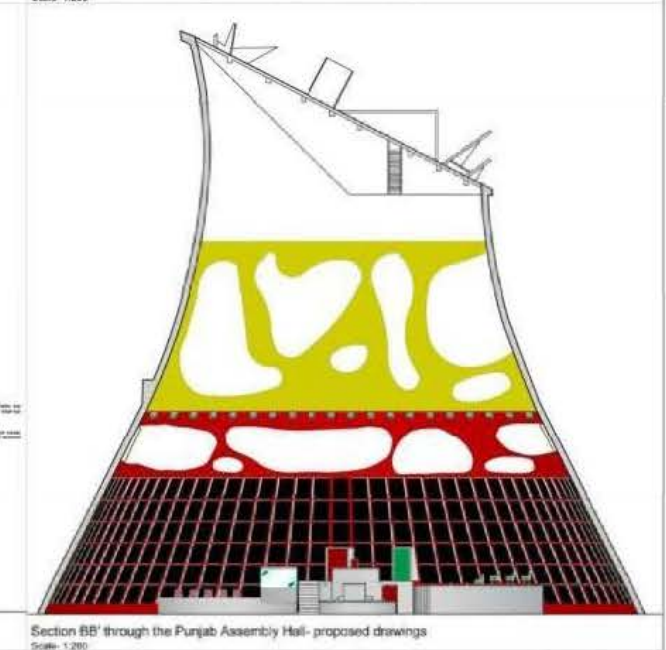
Section AA' through the Punjab Assembly Hall-showing works to be done
Scale: 1:200



Section AA' through the Punjab Assembly Hall-proposed drawing
Scale: 1:200



Section BB' through the Punjab Assembly Hall-showing works to be done
Scale: 1:200



Section BB' through the Punjab Assembly Hall-proposed drawings
Scale: 1:200

**HERITAGE COMMITTEE DRAWING, LEGISLATIVE ASSEMBLY,
CAPITOL COMPLEX, CHANDIGARH**

DRAWING TITLE:
SCOPE DRAWING-
Punjab Assembly Hall

SCALE:varing

DATE: MAR 2017



CLIENT:
UT, CHANDIGARH

REVISION:

DRAWN
BY:

Abha Narain Lambah Associates

Conservation Architects & Historic Building Consultants

201 B - Wing, Anand Cartor Road, Khur(W), Mohali-140052

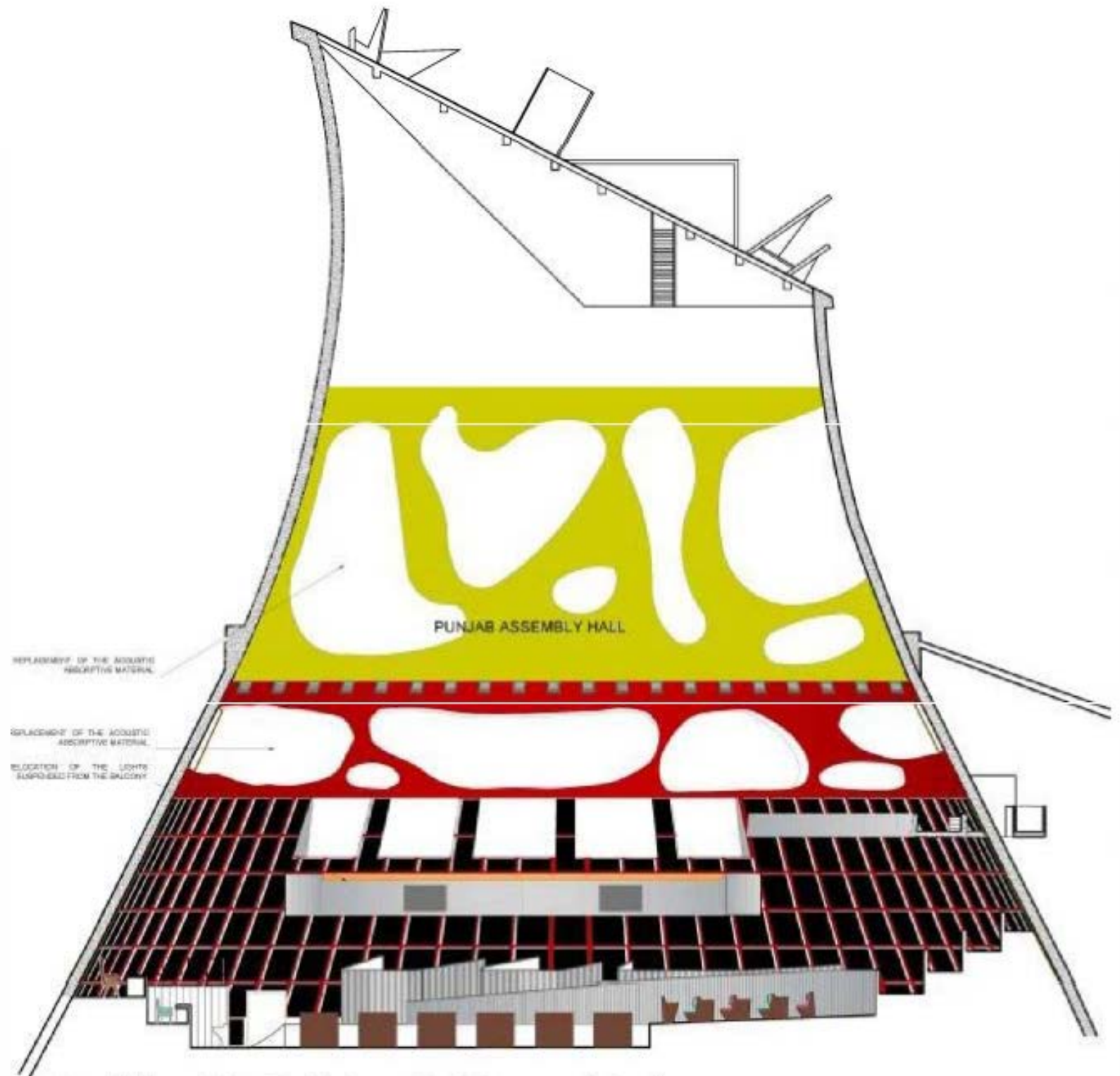
Tel: 2605 5756 Fax: 2604 5667

Email: anllassociates@gmail.com

Website: anllassociates.com

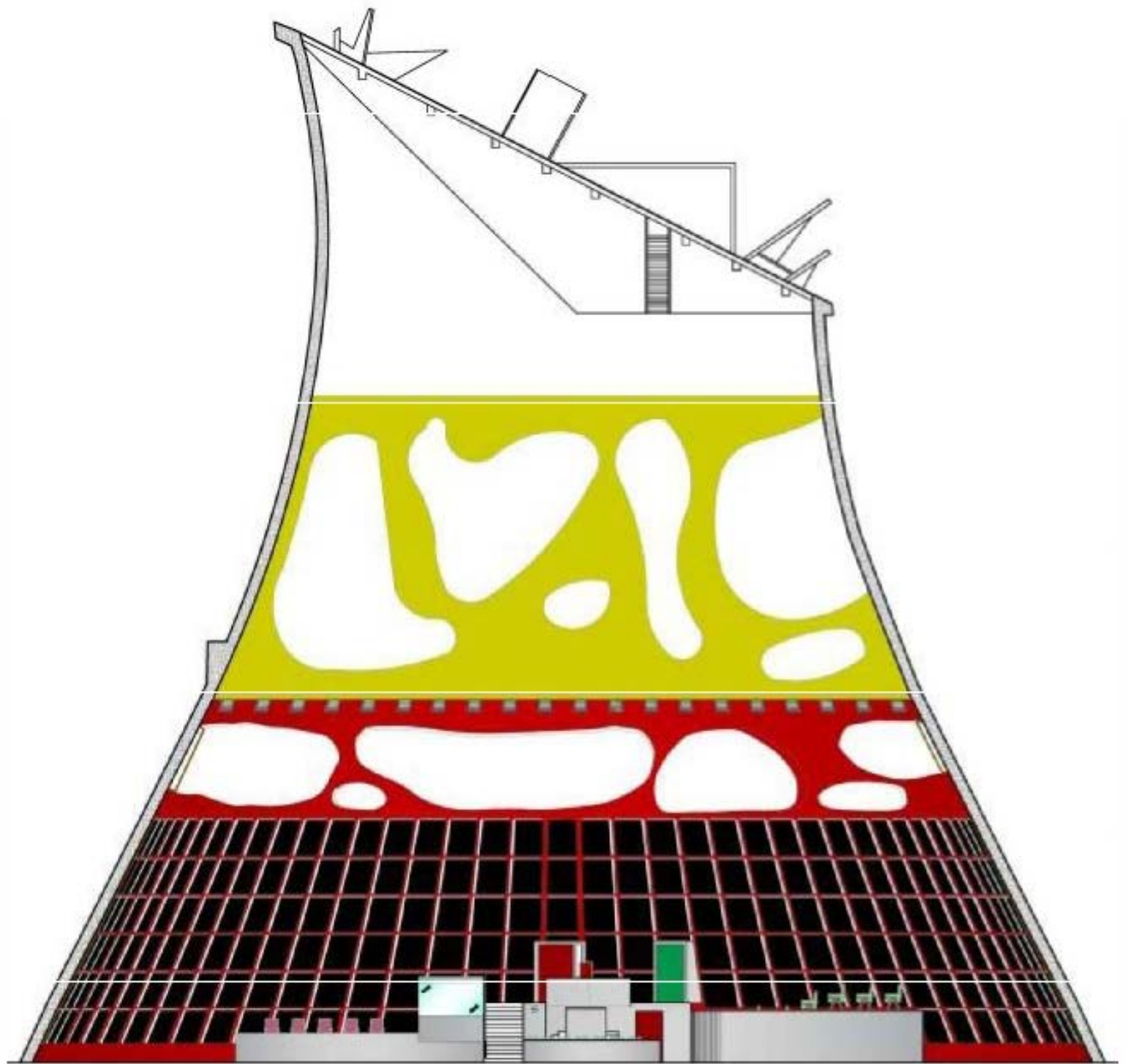
©The drawing is
copyright of Abha
Narain Lambah
Associates

SHEET
NO:
1.SF.FD



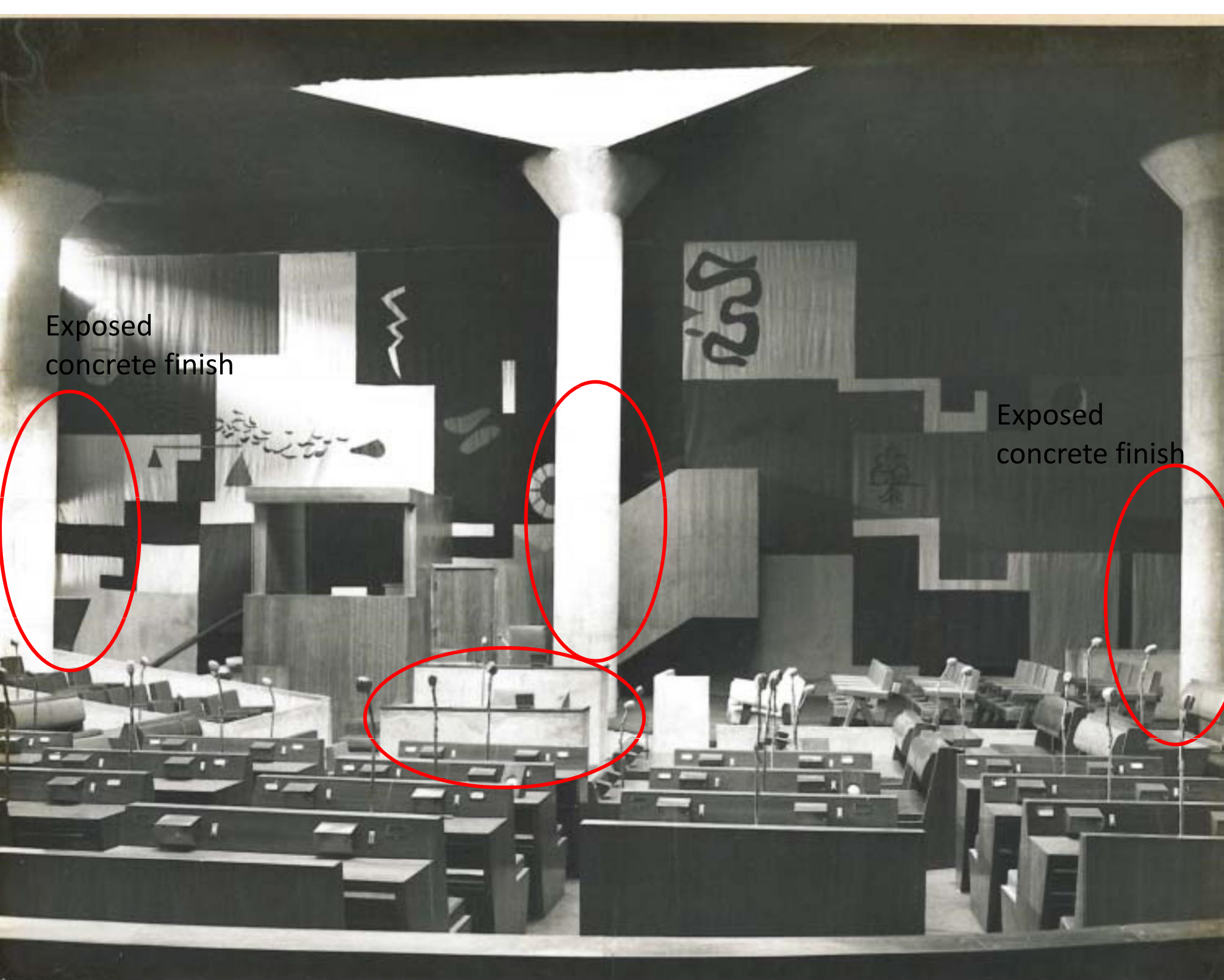
Section AA' through the Punjab Assembly Hall-proposed drawing
Scale: 1:200





Section BB' through the Punjab Assembly Hall- proposed drawings
Scale- 1:200

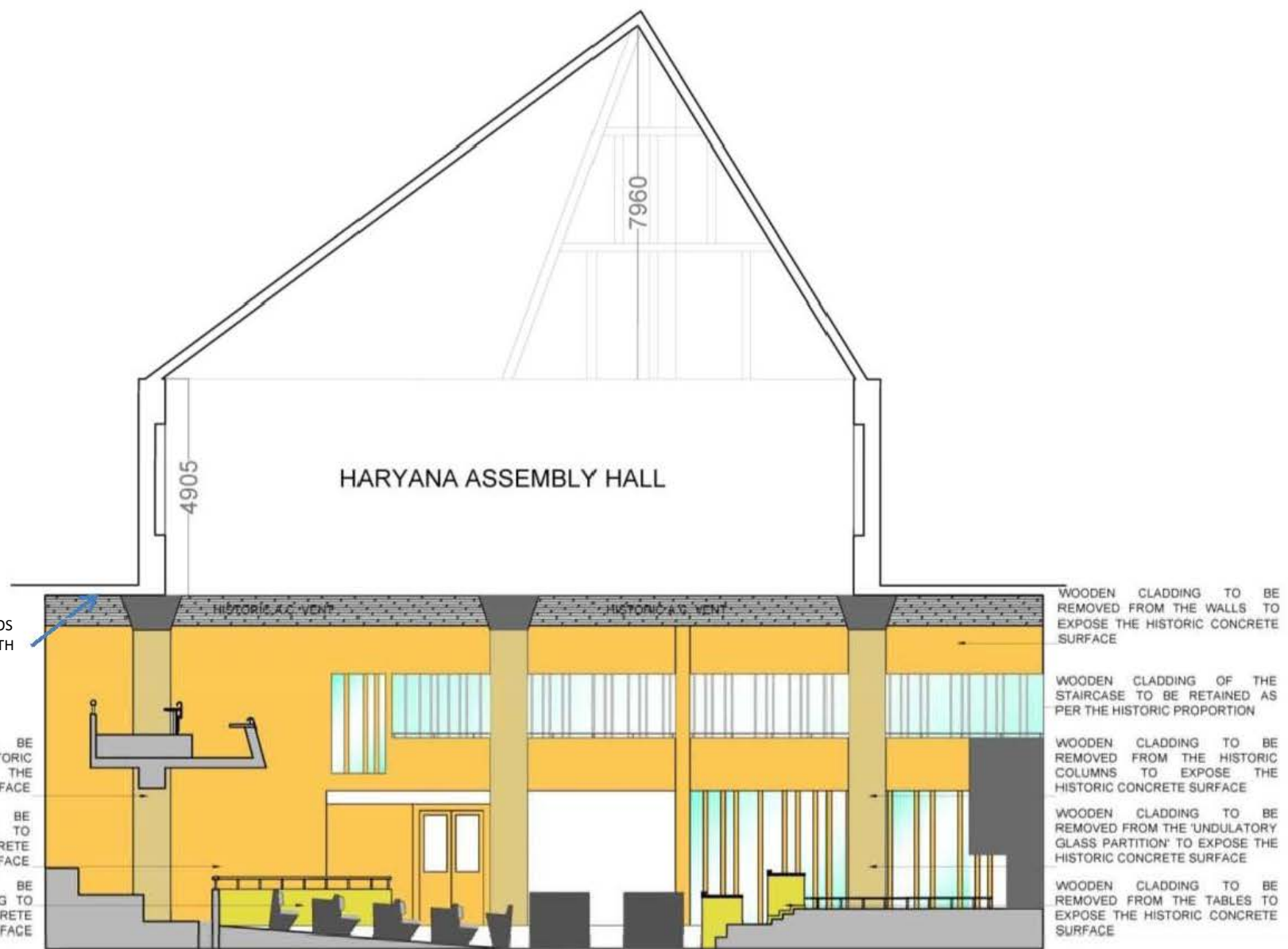




Exposed
concrete finish

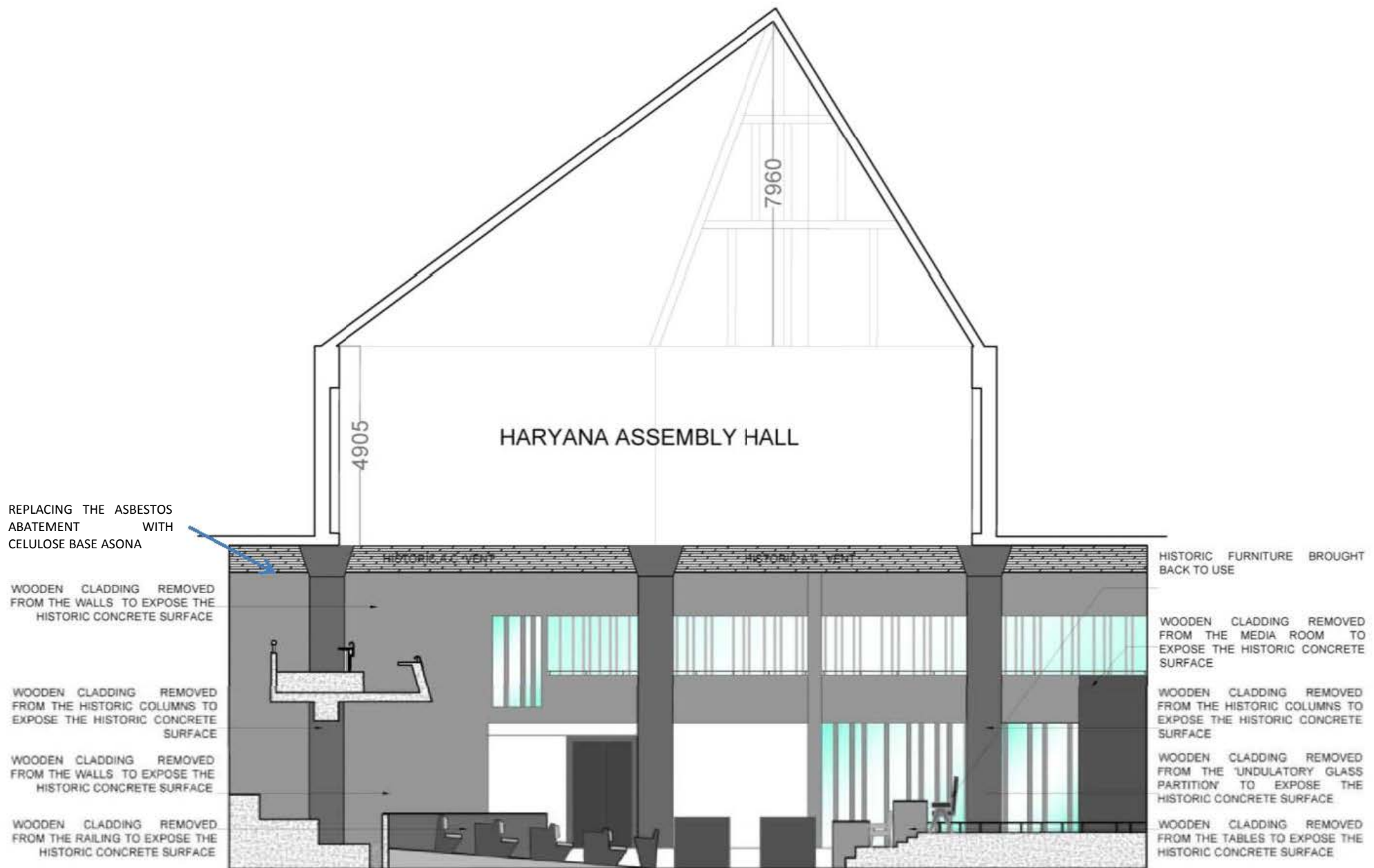
Exposed
concrete finish





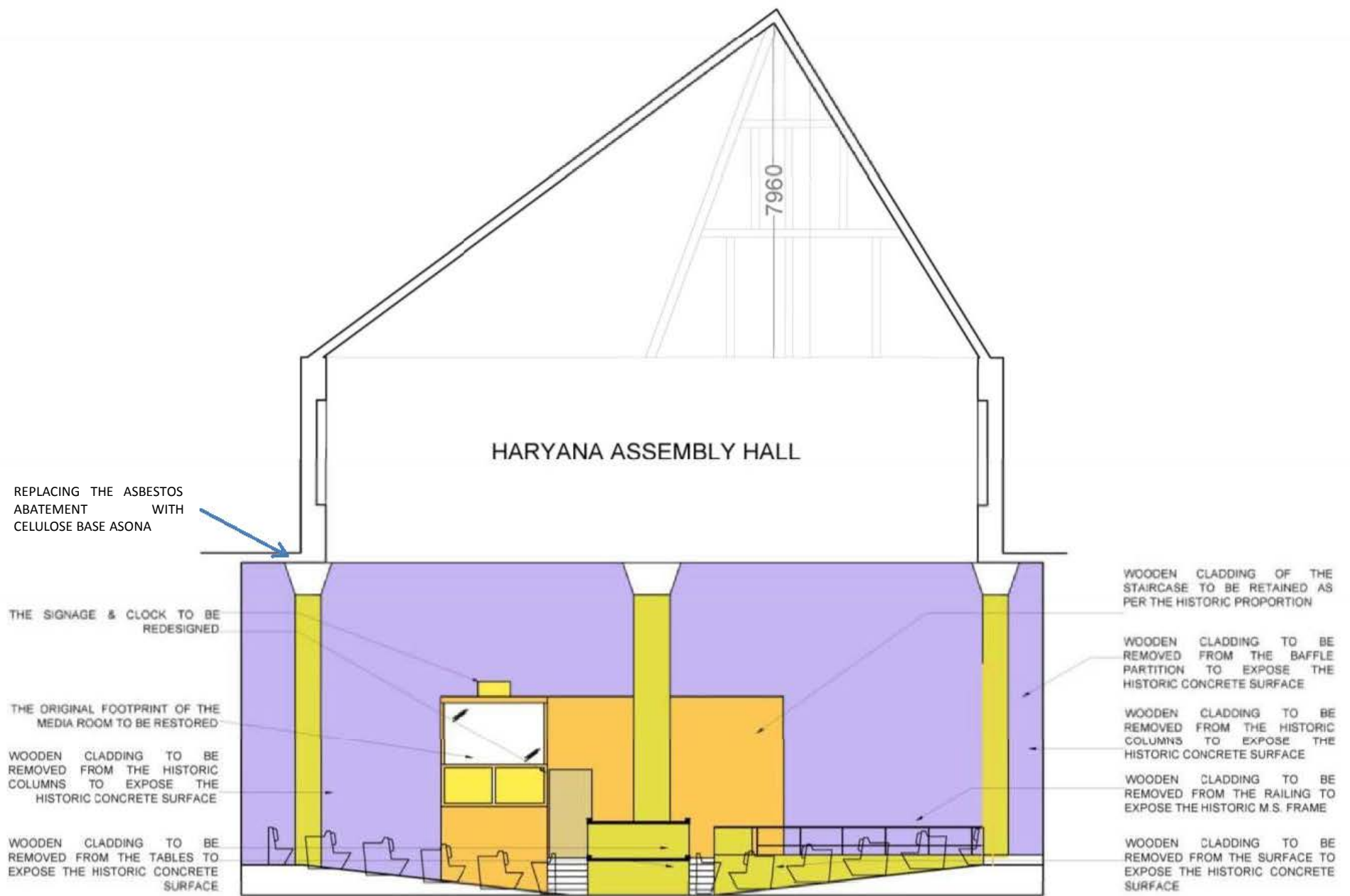
Elevation AA' of Haryana Assembly Hall-showing works to be done

Scale- 1:200

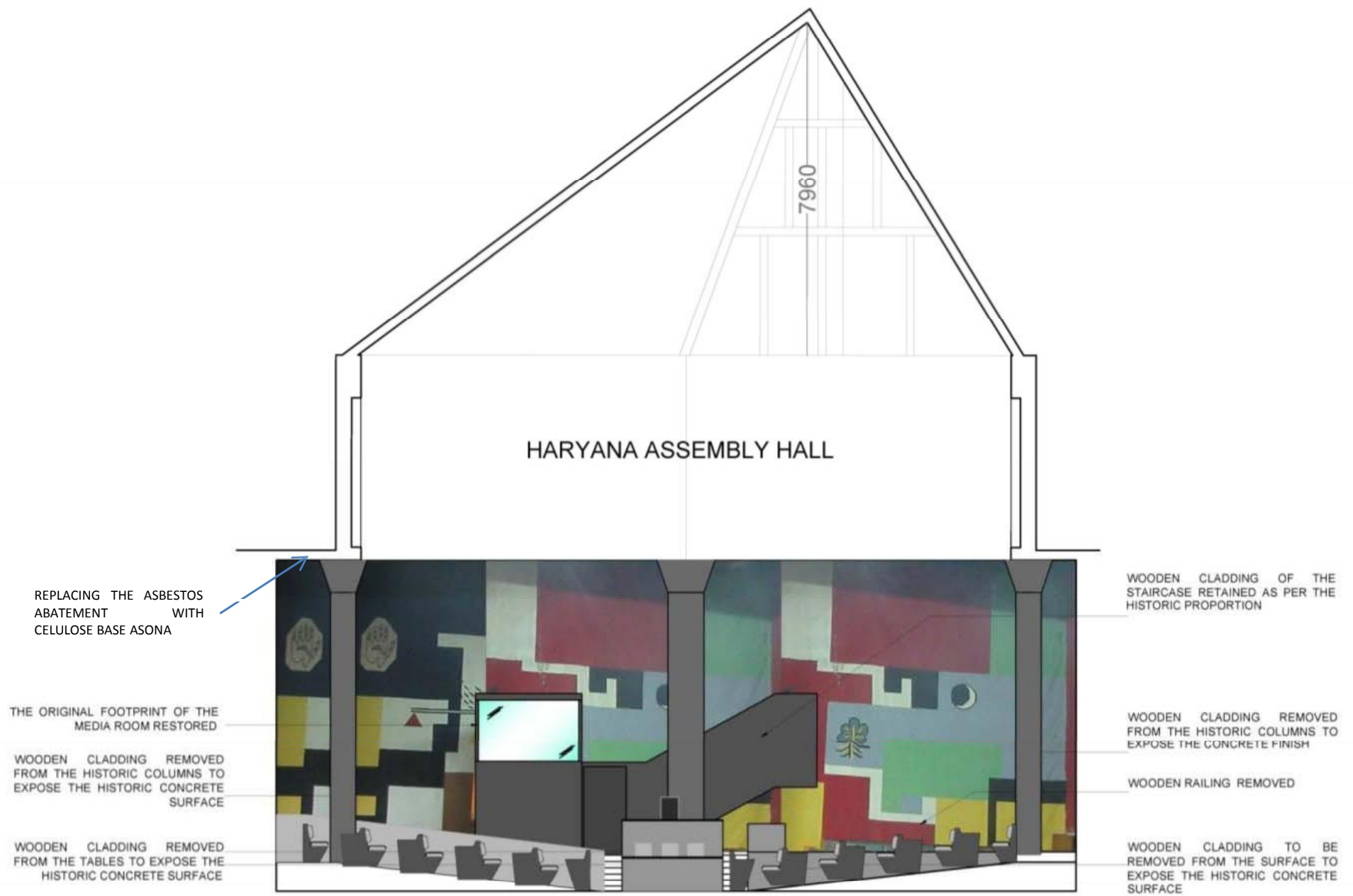


Elevation AA' of Haryana Assembly Hall-proposed drawing
Scale- 1:200





Elevation BB' of Haryana Assembly Hall-showing works to be done
Scale- 1:200



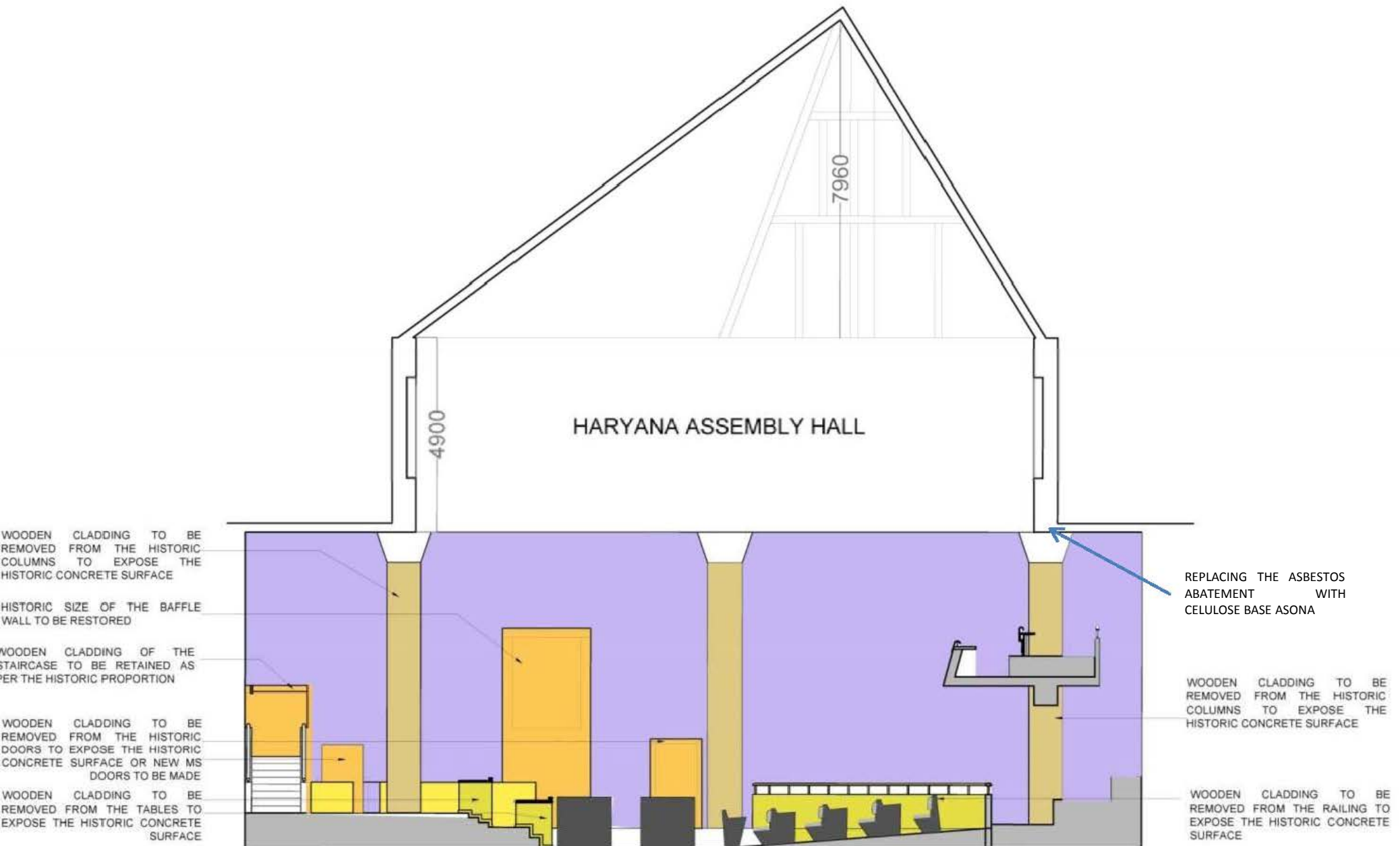
Elevation BB' of Haryana Assembly Hall-proposed drawing
Scale- 1:200



Height of the
doorway

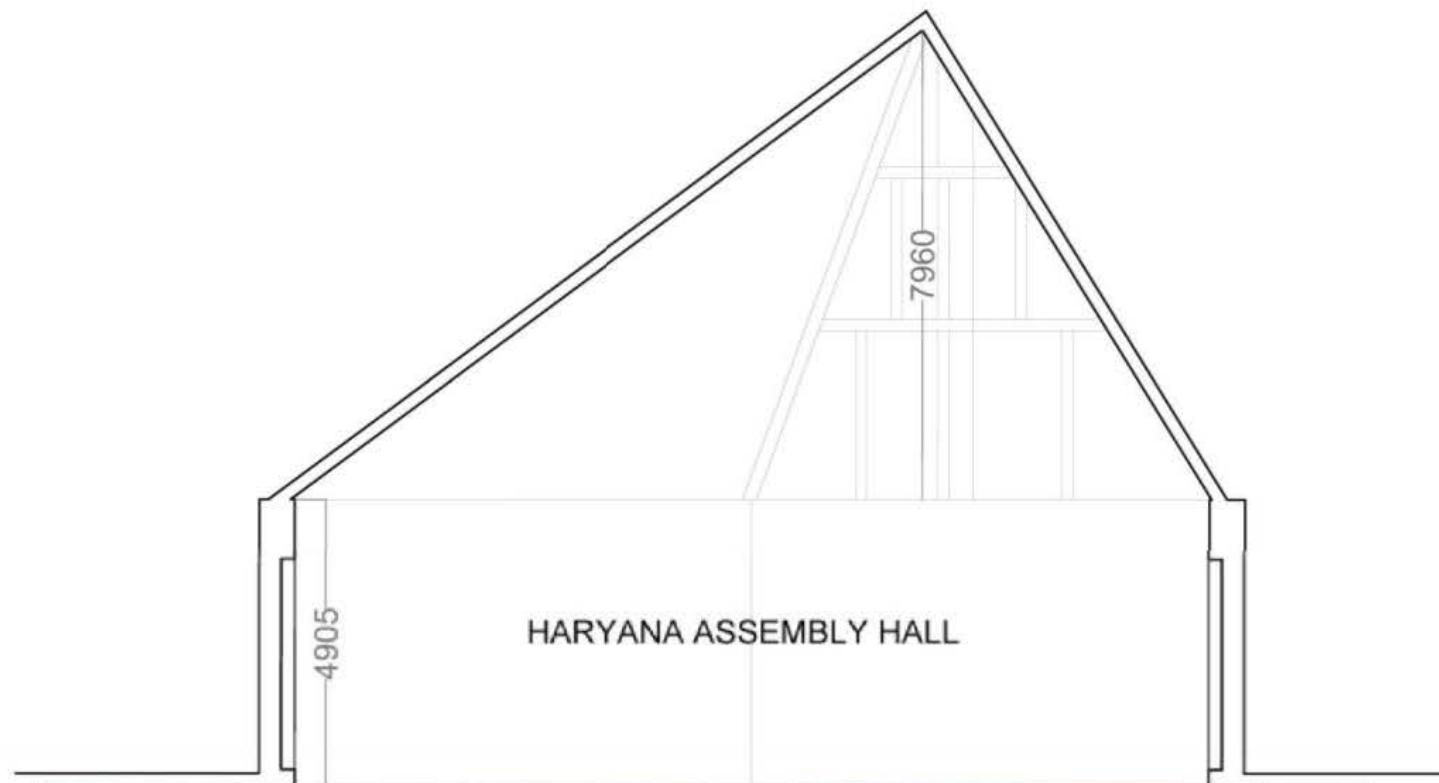






Elevation CC' of Haryana Assembly Hall-showing works to be done

Scale- 1:200



WOODEN CLADDING REMOVED FROM THE HISTORIC COLUMNS TO EXPOSE THE HISTORIC CONCRETE SURFACE
THE HISTORIC SIZE OF THE BAFFLE WALL RESTORED

WOODEN CLADDING THE STAIRCASE RETAINED AS PER THE HISTORIC PROPORTION

WOODEN CLADDING TO BE REMOVED FROM THE HISTORIC DOORS TO EXPOSE THE HISTORIC CONCRETE SURFACE OR NEW MS DOORS TO BE MADE

WOODEN CLADDING TO BE REMOVED FROM THE TABLES TO EXPOSE THE HISTORIC CONCRETE SURFACE



REPLACING THE ASBESTOS ABATEMENT WITH CELULOSE BASE ASONA

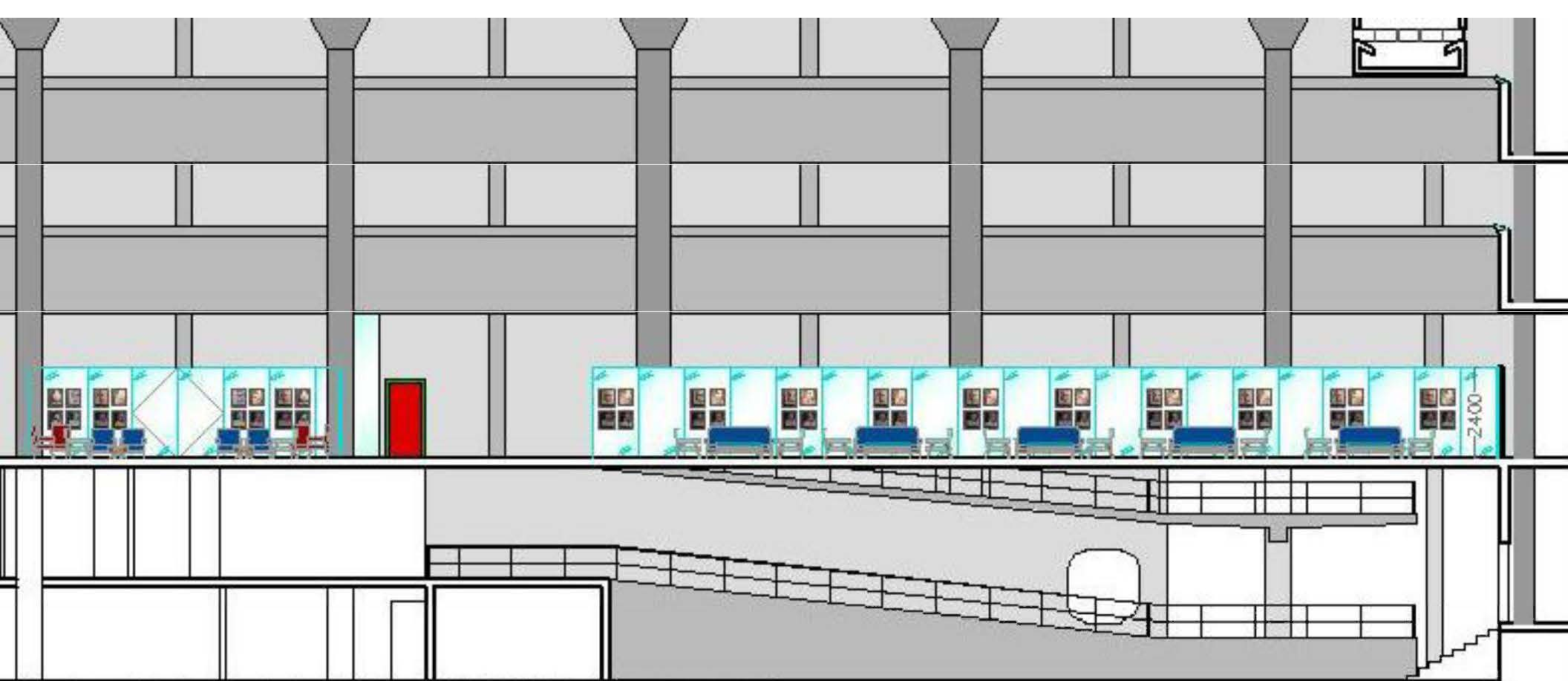
WOODEN CLADDING REMOVED FROM THE HISTORIC COLUMNS TO EXPOSE THE HISTORIC CONCRETE SURFACE

WOODEN CLADDING REMOVED FROM THE RAILING TO EXPOSE THE HISTORIC CONCRETE SURFACE

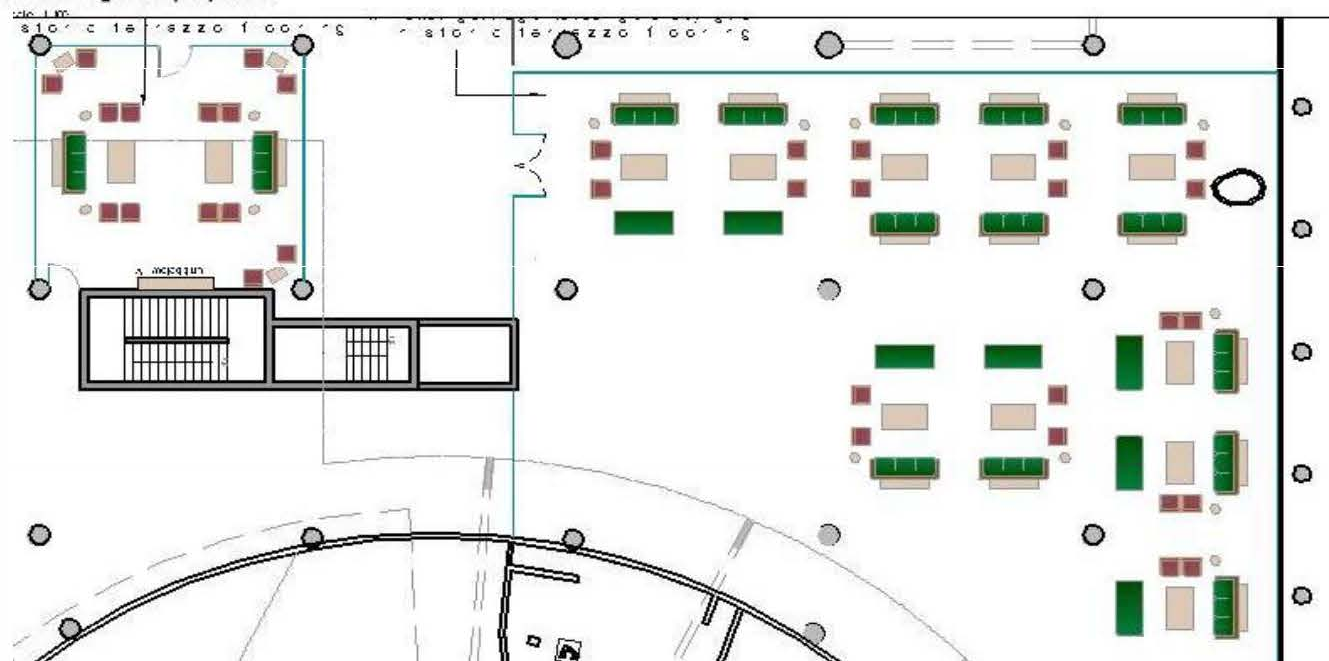
Elevation CC' of Haryana Assembly Hall-proposed drawing
Scale- 1:200

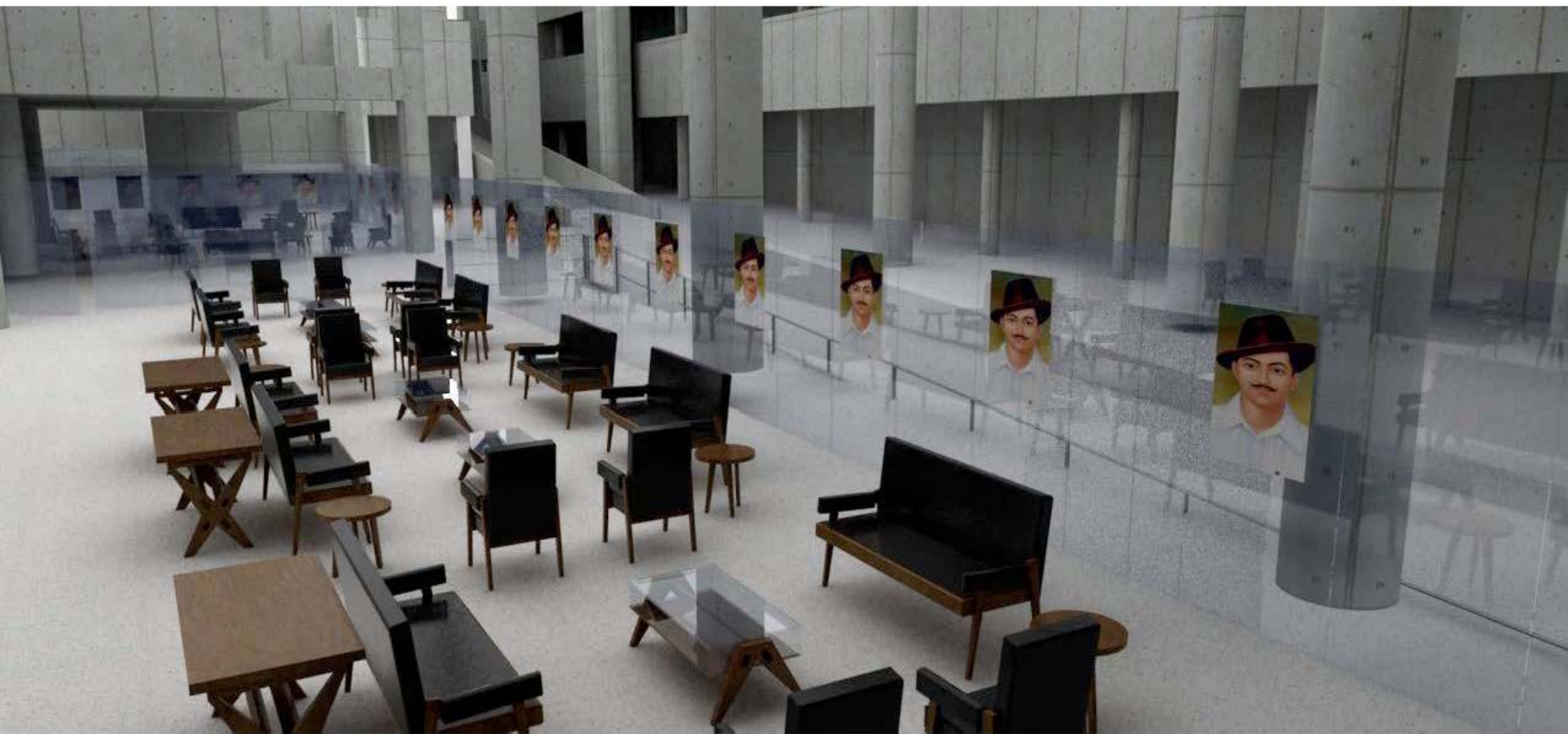




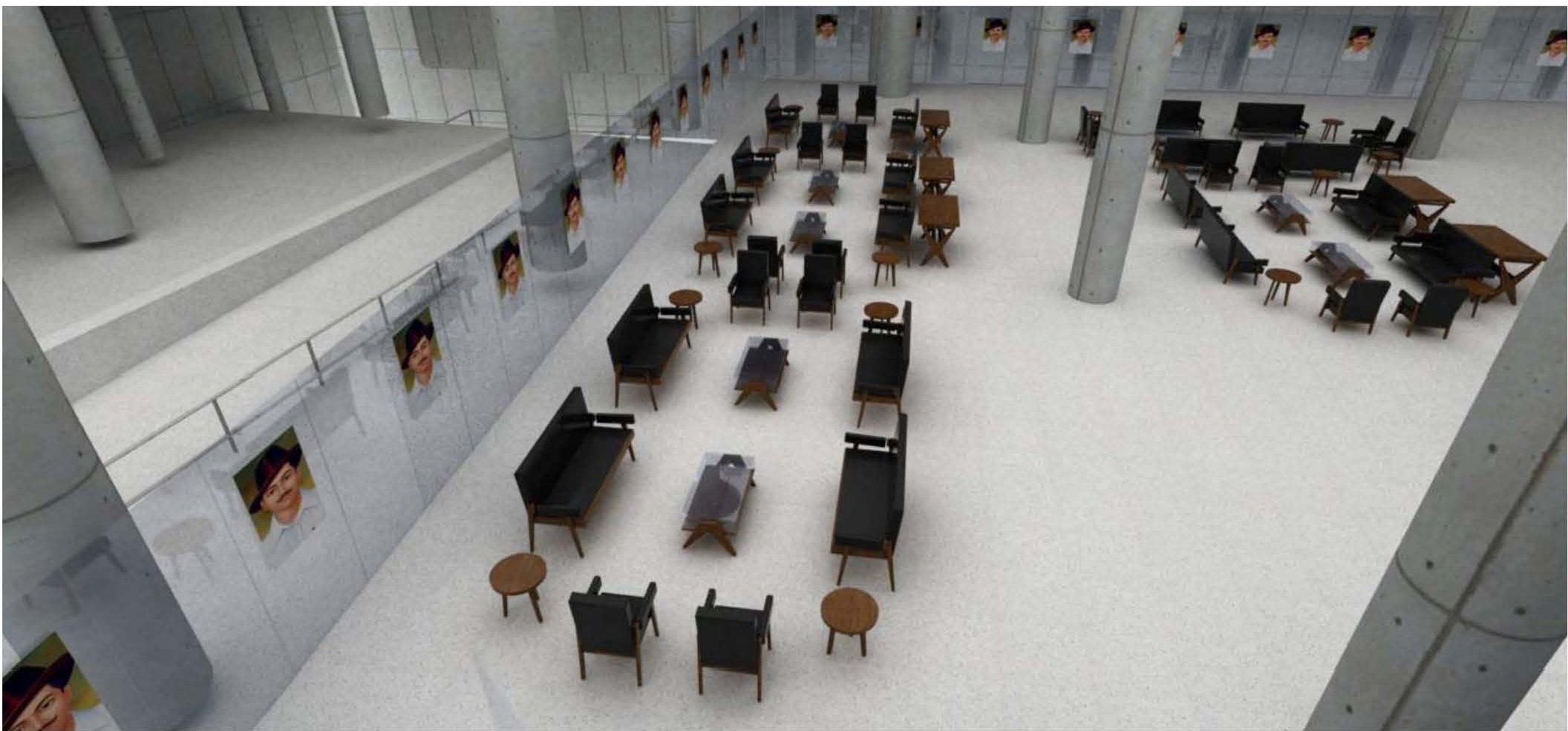


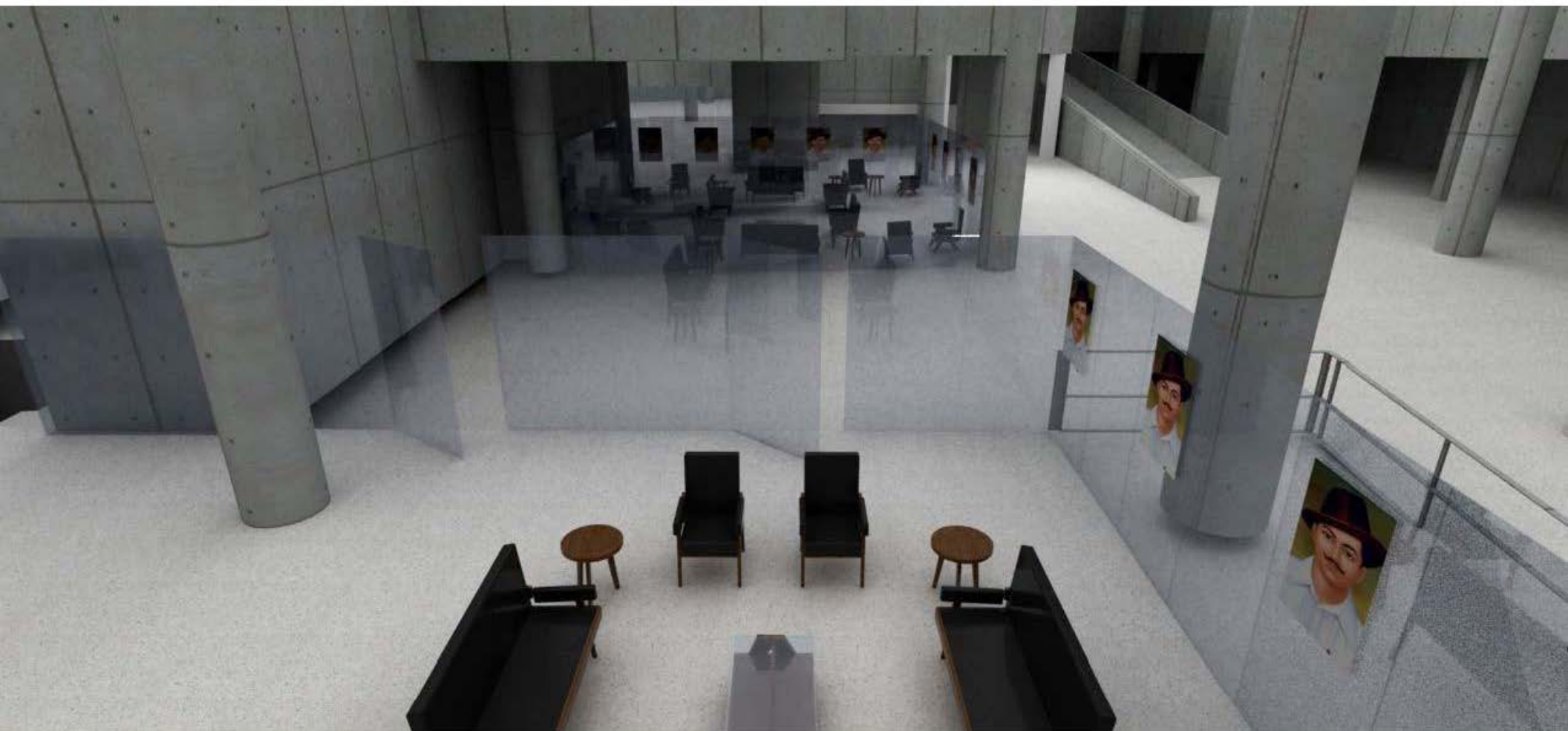
Section through the Lobby showing the Haryana & Punjab Members Lounge- as proposed

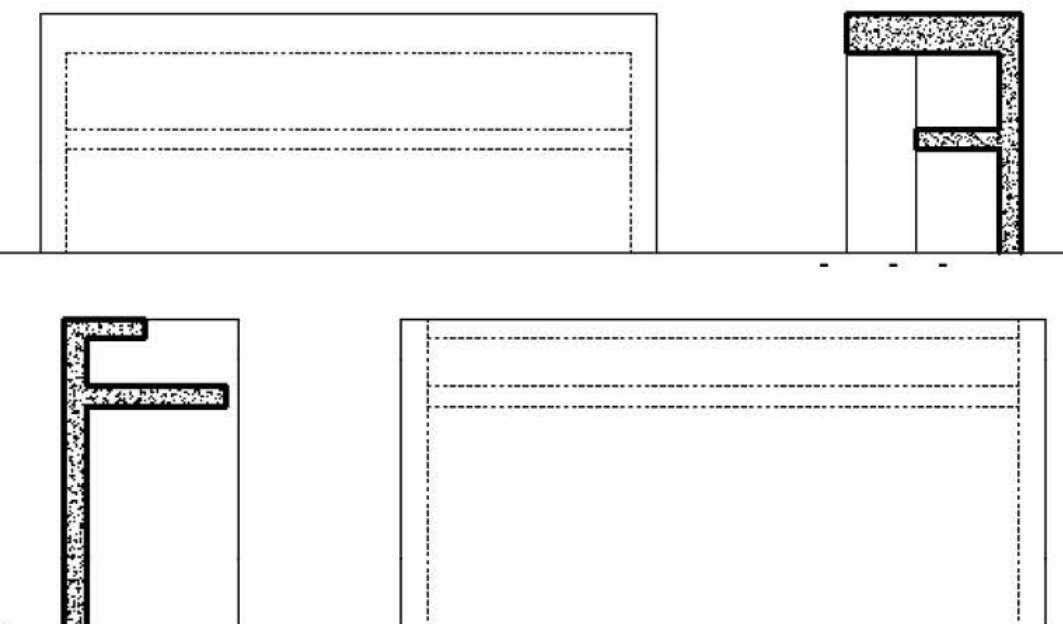






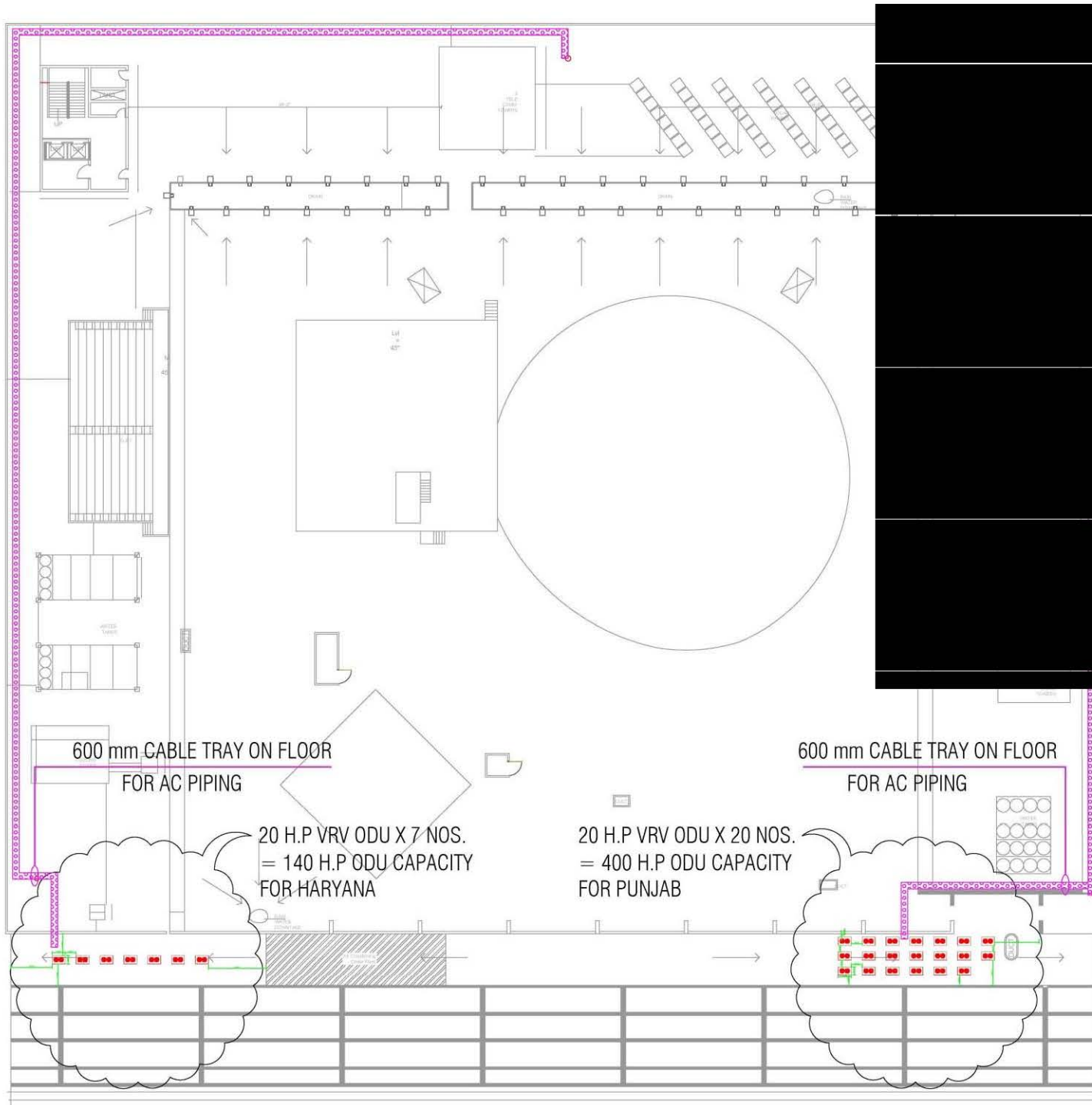






FURNITURE TO BE REVIVED- from the Haryana Store

Location of the HVAC Outdoor Units- between the canopy and terrace



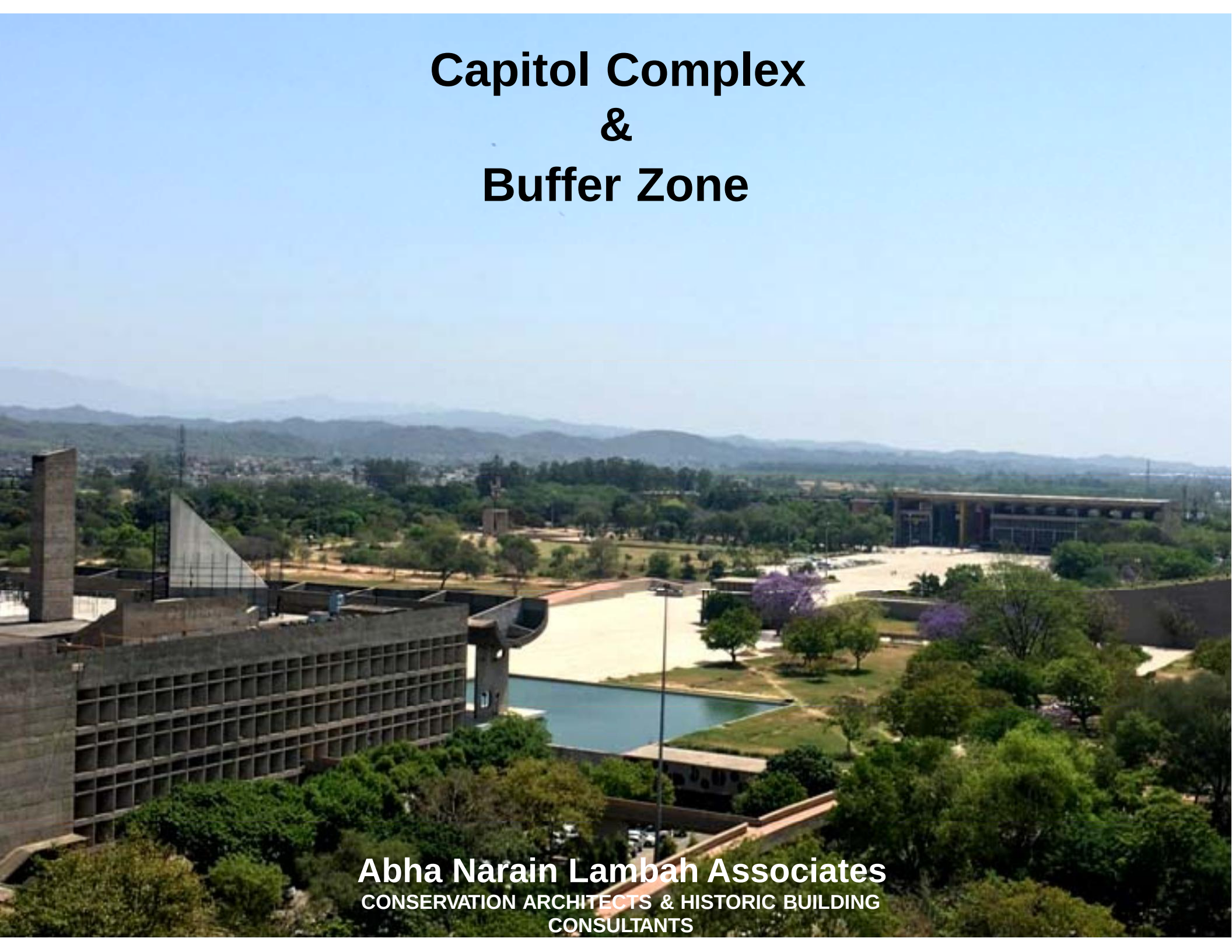
LIST OF WORKS PROPOSED:

Legislative Assembly as proposed by Consultants in addition to client list :

1. Restoration of acoustic panels in Punjab assembly
2. Restoration of Tapestry and Furniture
3. Proposed Zoning to remove adhoc interventions, (shuffling Punjab- Haryana Zones)
4. Incongruous Flooring,
5. HVAC, Removal of outdoor units from the facades
6. Restoration of Members Lounge- (Punjab & Haryana)
7. Restoration of Entrance Lobbies
8. Restoration of Toilets
9. Restoration of Press Lounges
10. Signage

BLOCK ESTIMATE FOR LEGISLATIVE ASSEMBLY, CAPITOL COMPLEX					
SR. NO	DESCRIPTION	QUANTITY	RATE	UNIT	AMOUNT
1	INTERIOR RESTORATION AND UPGRADATION				
	MOBILISATION			LUMPSUM	8,000,000.00
	State member Lounges & Press Lounge Restoration and Interior upgradation	775	33000	SQ.M	25,575,000.00
	Public corridors Removal of adhoc Flooring and reviving the historic flooring restoring the false ceiling	3050	12000	SQ.M	36,600,000.00
	Public Toilet & Drinking water stations Upgradation Works	350	33000	SQ.M	11,550,000.00
	Misc works, touching up, Shifting Etc of the Punjab Assembly hall	1500	4500	SQ.M	6,750,000.00
	Restoration of Acoustic Material in the Punjab Assembly Hall	375	5000	SQ.M	1,875,000.00
	Misc works, touching up, Shifting Etc of the d Haryana Assembly hall	500	10000	SQ.M	5,000,000.00
	Restoration of Tapestry	400	16500	SQ.M	6,600,000.00
	Restoration of Existing Furniture	350	15000	No	5,250,000.00
	Asona Cellulose Acoustic cladding on the Haryana Assembly Hall and Central Lobby ceiling	4000	5500	SQ.M	22,000,000.00
	REMOVAL OF AD HOC INTERVENTIONS TO EXPOSE HISTORIC FABRIC like panelling, partitions, photoframes,victorian lights, Acs. water stations			LUMPSUM	2,000,000.00
	SPECIALIZED CLEANING OF WALL SURFACES	1500	3000	SQ.M	4,500,000.00
	TOTAL				135,700,000.00
2	SERVICES UPGRADATION WORKS				
	HVAC Systems	465	125000	SQ.M	58,125,000.00
	Electric upgradation in the Public Areas			LUMPSUM	3,000,000.00
	Revival and addition of light fittings in the public spaces			LUMPSUM	10,000,000.00
	External Illumination	5500	3000	SQ.M	16,500,000.00
	TOTAL				87,625,000.00
4	RECHARGING WATER TANKS & NEW SYSTEM			Lumpsum	5,000,000.00
5	PROVIDING & UPGRADING VISITOR FACILITIES			Lumpsum	3,500,000.00
	TOTAL				231,825,000.00
	Night Charges		5%		11,591,250.00
	Sub Total				243,416,250.00
	CONTINGENCY		10%		24,341,625.00
	GRAND TOTAL				267,757,875.00

Capitol Complex & Buffer Zone

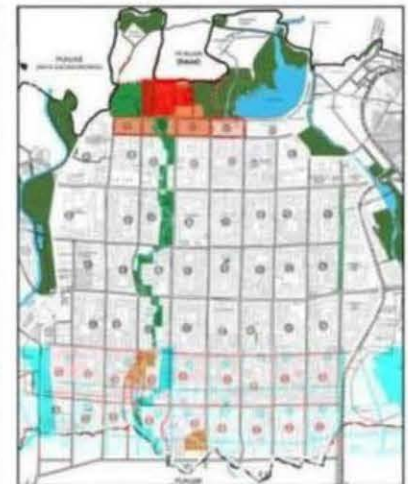
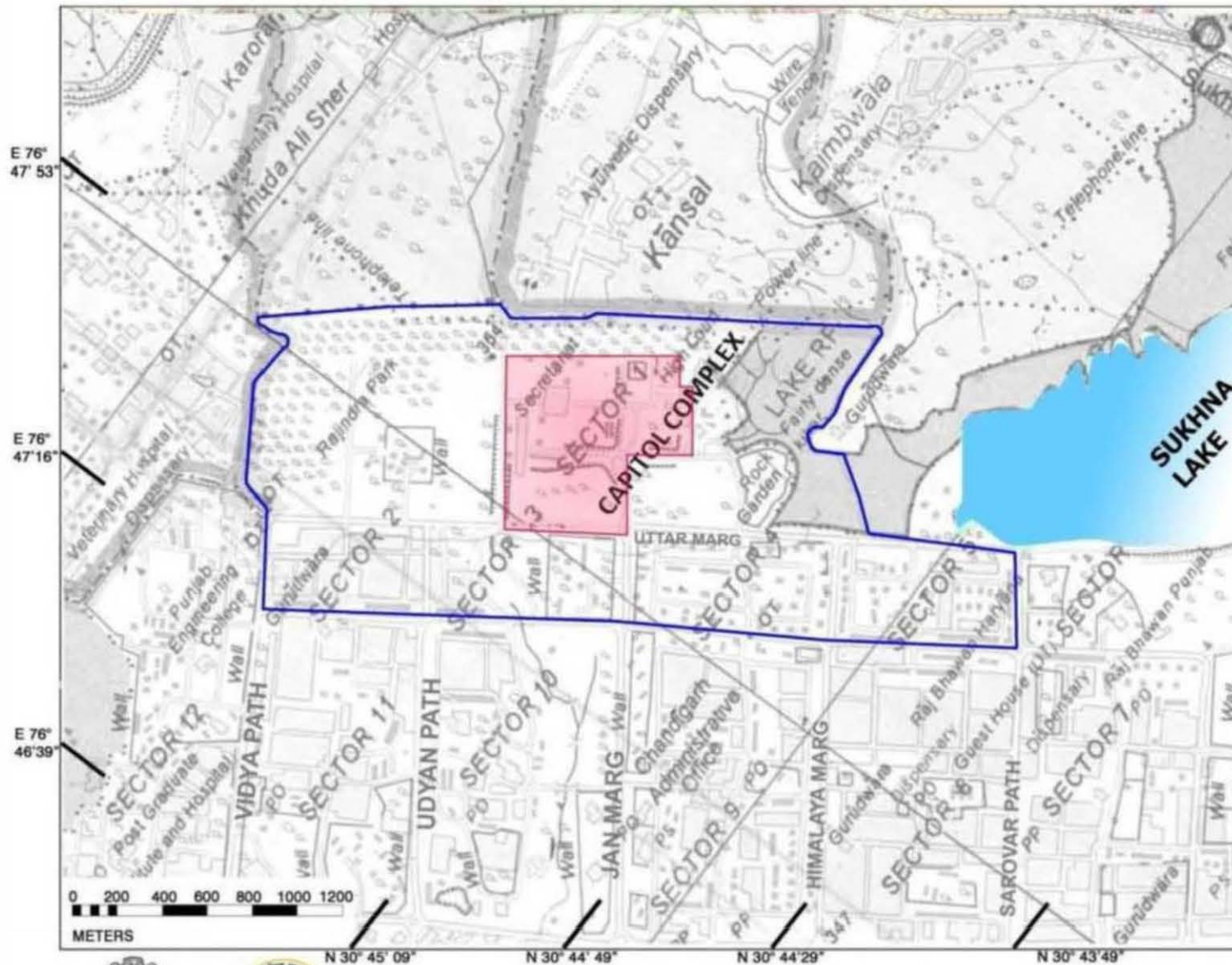


Abha Narain Lambah Associates
CONSERVATION ARCHITECTS & HISTORIC BUILDING
CONSULTANTS

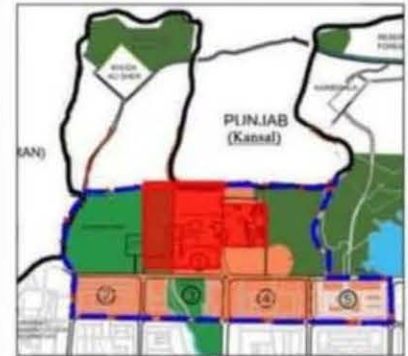
Capitol Complex & Buffer Zone

Site Extent

11a - The Capitol Complex, Chandigarh : Delimitation of the Property and Buffer Zone



Delimitation of the Property and Buffer Zones



The Property and Buffer Zone

- Nominated property
(Area = appr. 50 Hectares)
- Buffer Zone
(Area = appr. 195 Hectares)

Total Area = appr. 245 Hectares



Map realised for the dossier for the nomination for inscription on the World Heritage List Conception and Realisation
: World Heritage Dossier project, Chandigarh College of Architecture, Chandigarh - December 2014
Source of Map : Survey of India, Date : 1997



Capitol Complex & Buffer Zone

Archival Images



Brutalism & Barren Ground Cover

Capitol Complex & Buffer Zone

Archival Images



Brutalism & Barren Ground Cover

Capitol Complex & Buffer Zone

Archival Images



Buildings as Hierarchy ; Expanse of Landscape

Capitol Complex & Buffer Zone

Archival Images



Unidentified Signage & Navigation

Capitol Complex & Buffer Zone

Archival Images



Un-manicured Landscape- Brutalism



Parking Lots

Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Incoherent Campus**

Considering the every growing functions and add on in terms of security and management, the campus have been divided into various fragments on account of feasibility. That has left the campus with a lesser sense of coherence as one entity. The idea is to identify common units to re-stitch the campus .



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Improper or Obsolete Navigation System**

The Entire complex sans navigation system. The complex segregation of movements as per various departments and hierarchy makes it even worse for someone who is not acquainted with existing system. Moreover introducing a system of navigation is of utmost importance as it would also help as a binding factor.

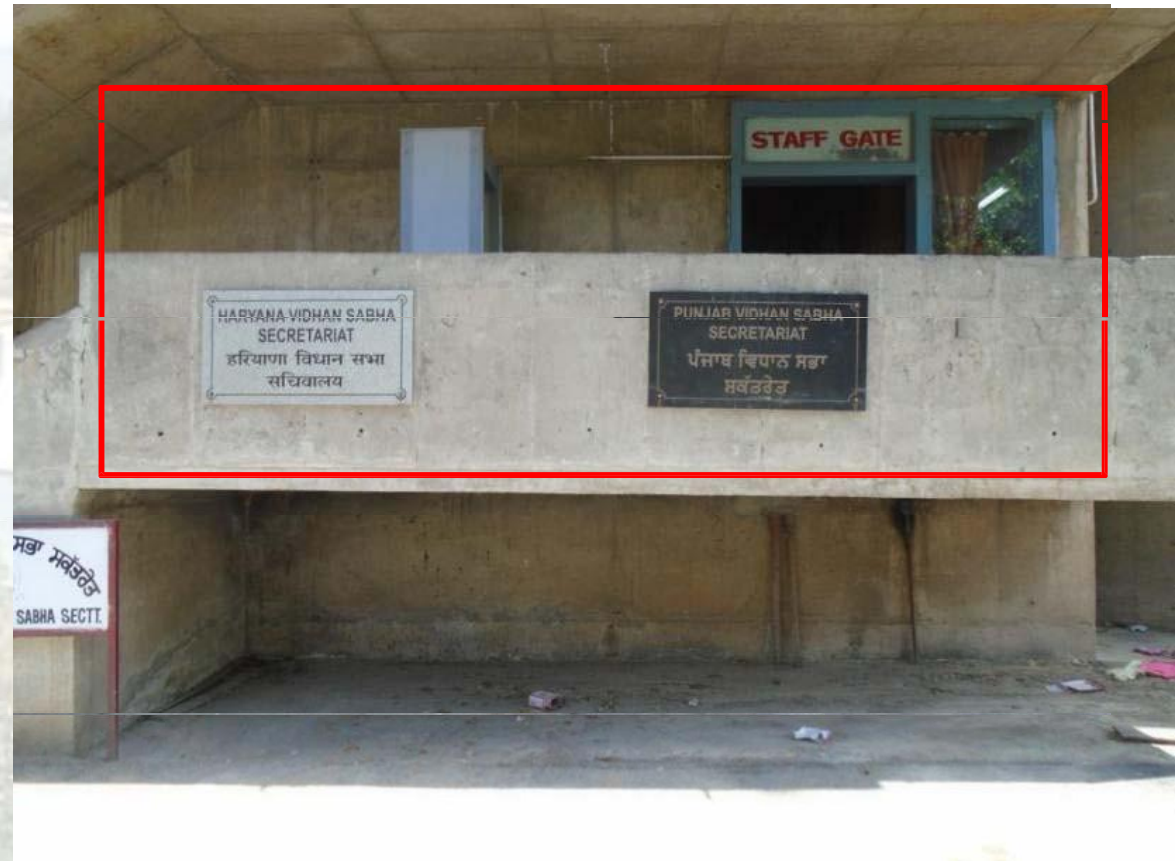


Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- Improper or Obsolete Navigation System



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Neglected boundaries and Edges**

The entire capitol complex is bigger than the area it covers functionally. There have been divisions on account of states and functions like assembly, High Court and Secretariat. Also, the hierarchal system of movement and navigation needs partitions. The campus uses barb wires to divide and hence the edges are observed to be not-so well kept seeing the condition of the partitions and wires.



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Neglected boundaries and Edges**



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Un identical Design of Barracks and Posts**

Being a one of high security, the campus has various levels for security networks overlapping or working in coexistence. So do their infrastructure. The infrastructure is alien to the campus in terms of design language and needs an attention to not to promote adhoc additions anymore.



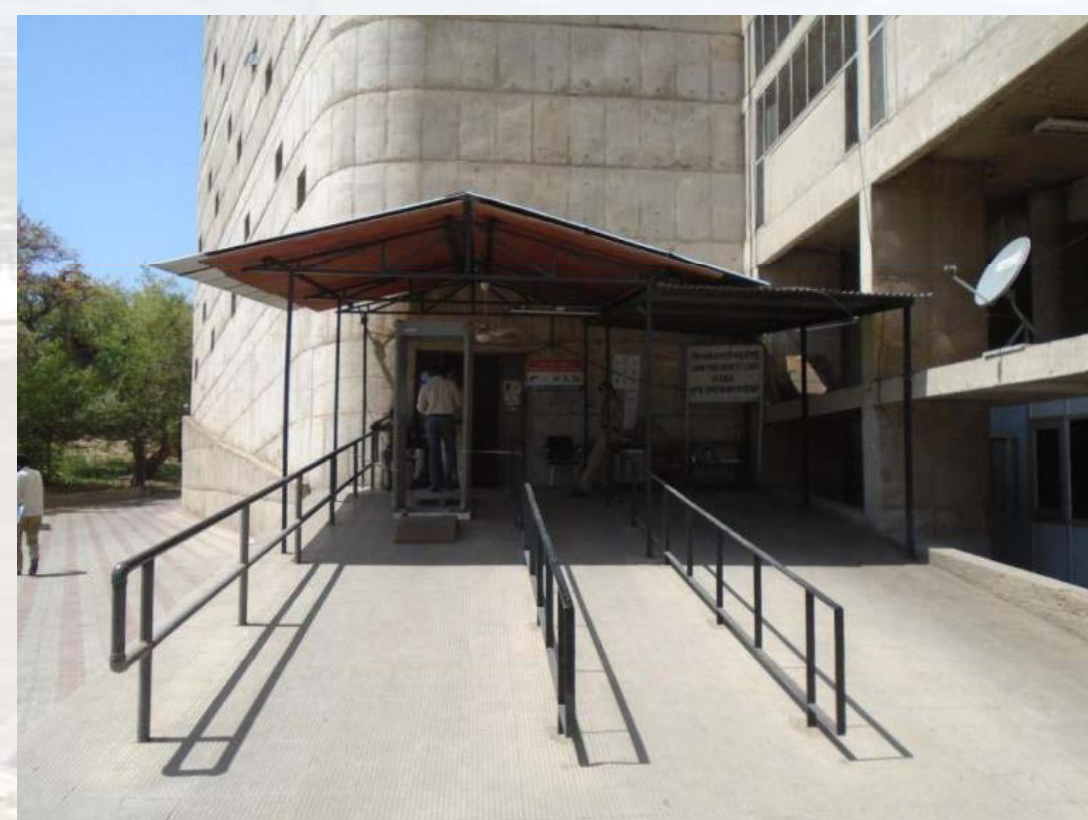
Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Improper Ad hoc elements and utilities**

Various Ad hoc's have been observed on site with no sense of association to built language and such factors play an improper role in losing the identity of a campus. An important consideration has to be given to such cases and alternate design or removal is probable primary step.



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- Improper Ad hoc elements and utilities



Alien Elements to the Campus

Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- Improper Ad hoc elements and utilities



Alien Elements to the Campus

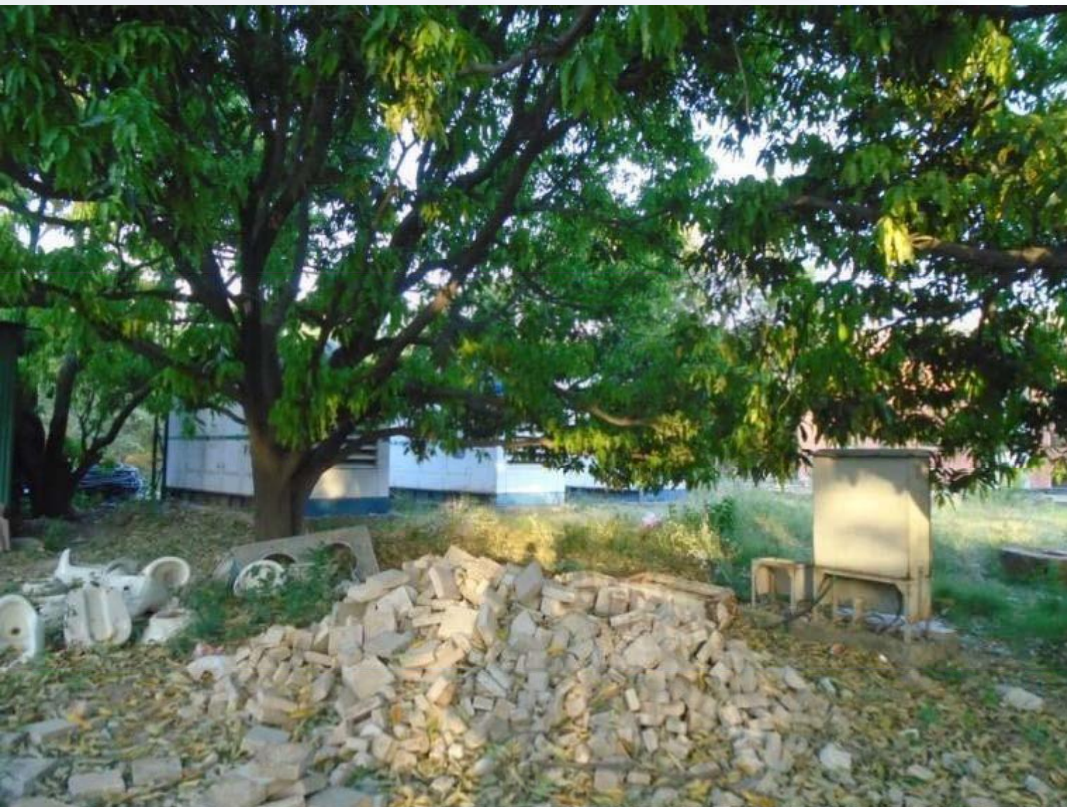
Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Leftover Spaces and Garbage Dumps**

Considering the scale of the campus, there are various leftover spaces which eventually have been converted into dump bases or uncured landscape. Proper Site Management Plan would account such areas and keep in consideration for maintenance.



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

- **Leftover Spaces and Garbage Dumps**



Capitol Complex & Buffer Zone

Site Issues

Following are the issues observed and analyzed considering Capitol Complex as one entity.

•Other Common Site issues:

- Inadequate tourism infrastructure
- Inadequate parking infrastructure
- Pedestrian discomfort
- Encroached spaces for parking and utilities
- Exposed services and utilities
- Vanishing original site features

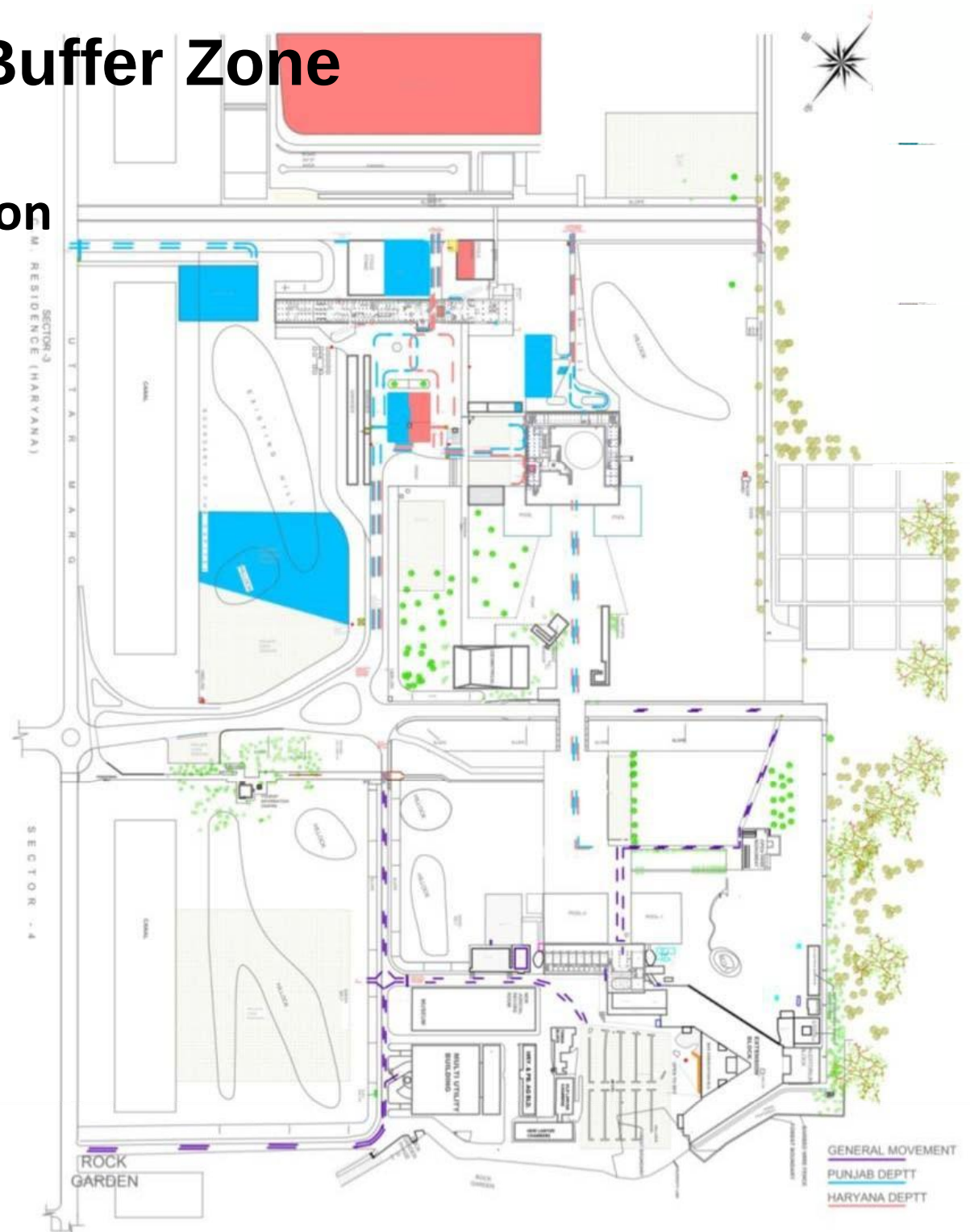


Capitol Complex & Buffer Zone

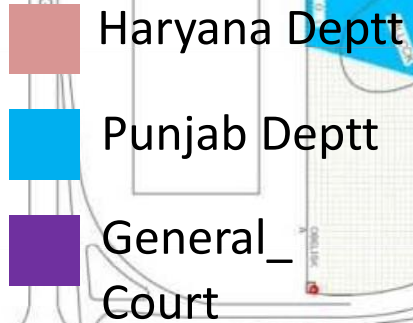
Existing case

- Movement & Circulation

-  Haryana Deptt
-  Punjab Deptt
-  General_High Court



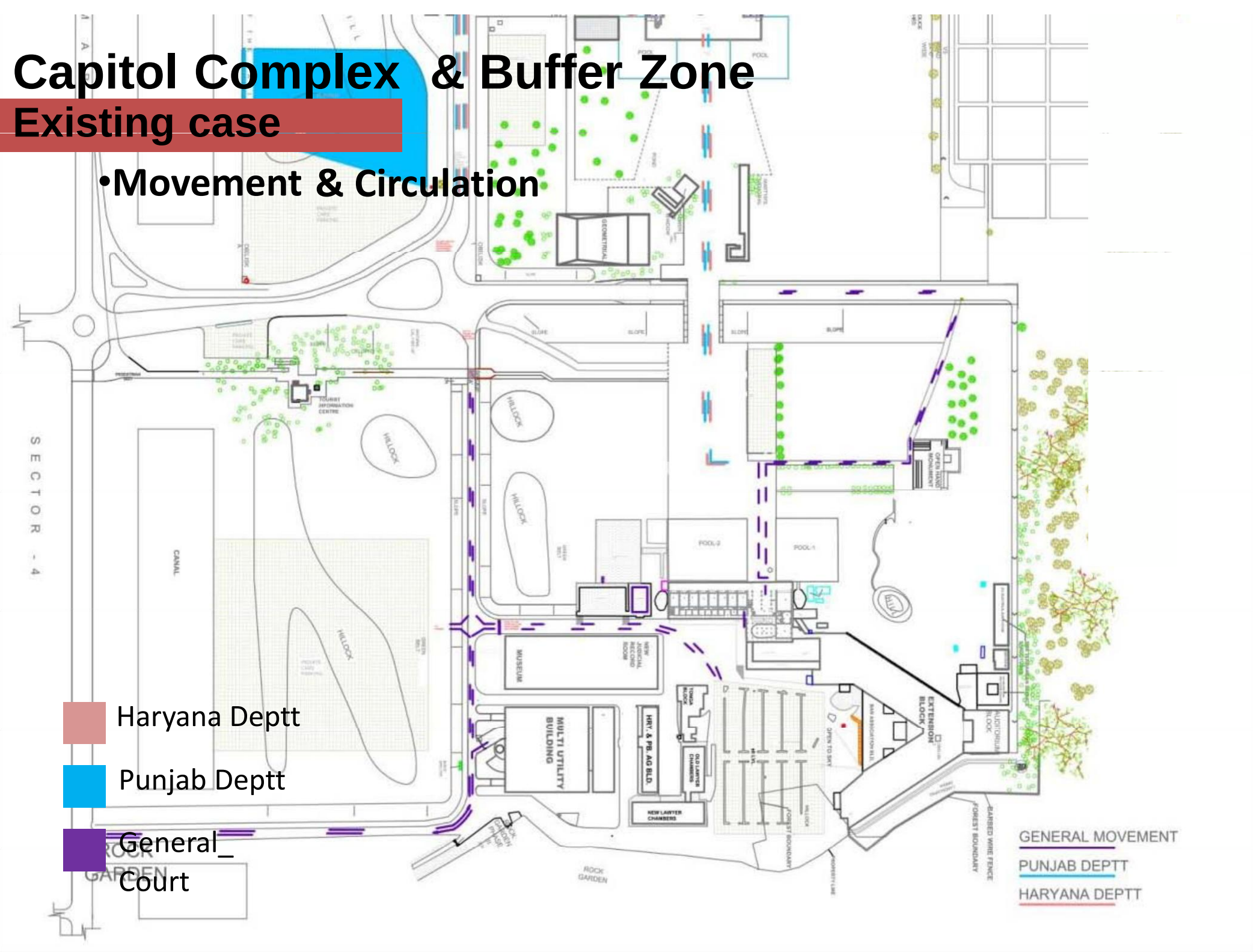
SECTOR-3
C.M. RESIDENCE (HARYANA)



Capitol Complex & Buffer Zone

Existing case

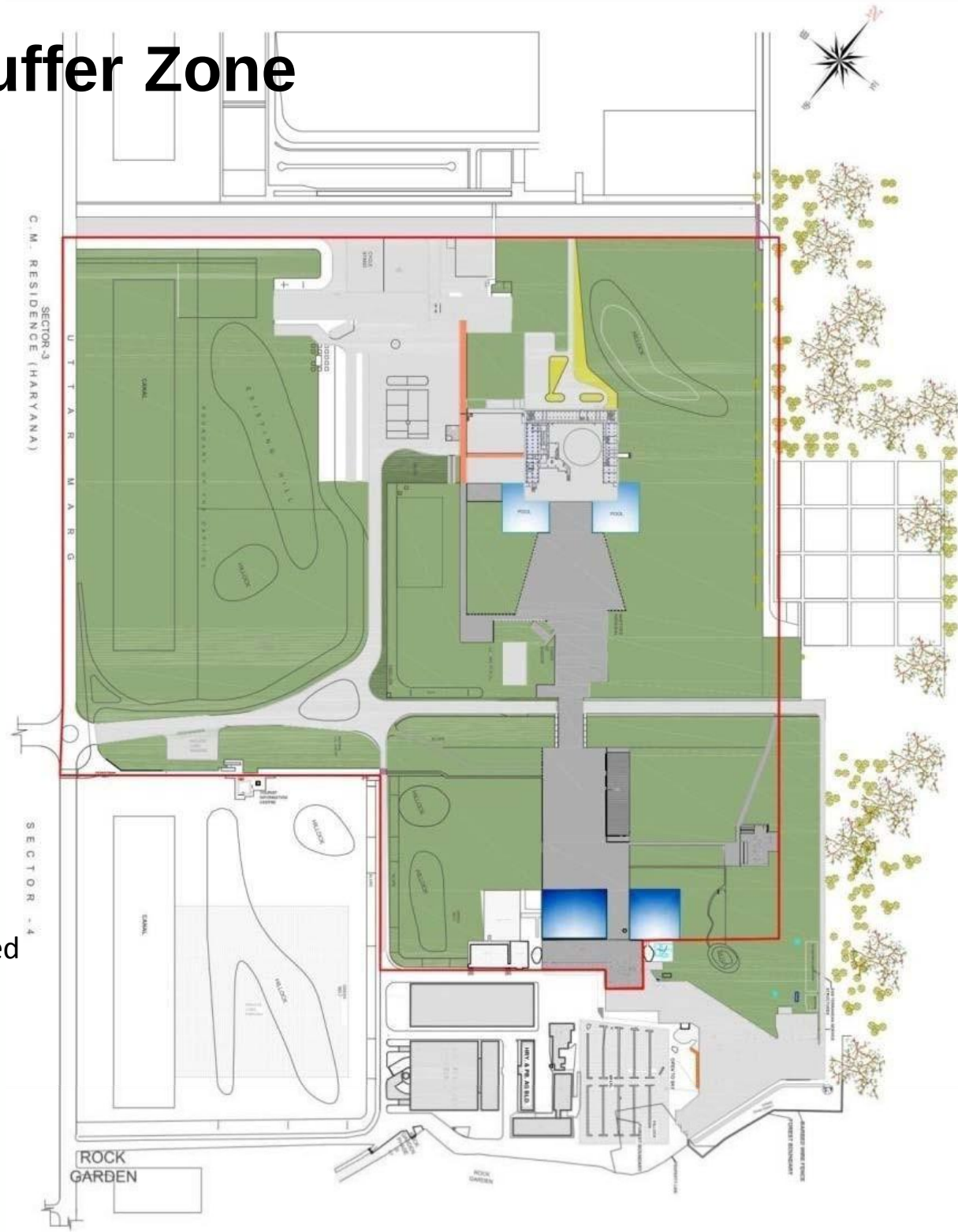
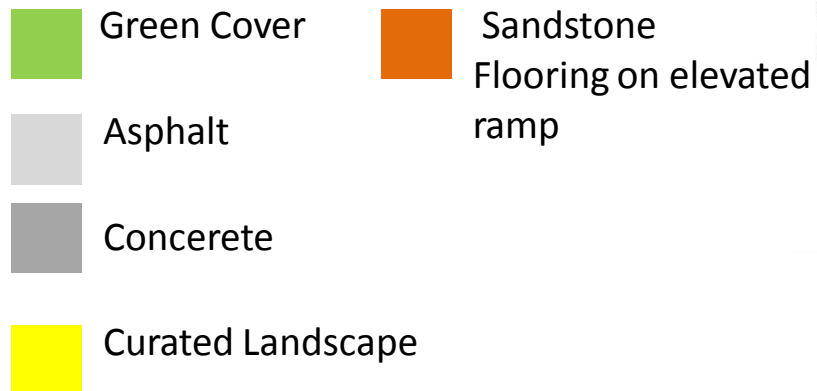
•Movement & Circulation



Capitol Complex & Buffer Zone

Existing case

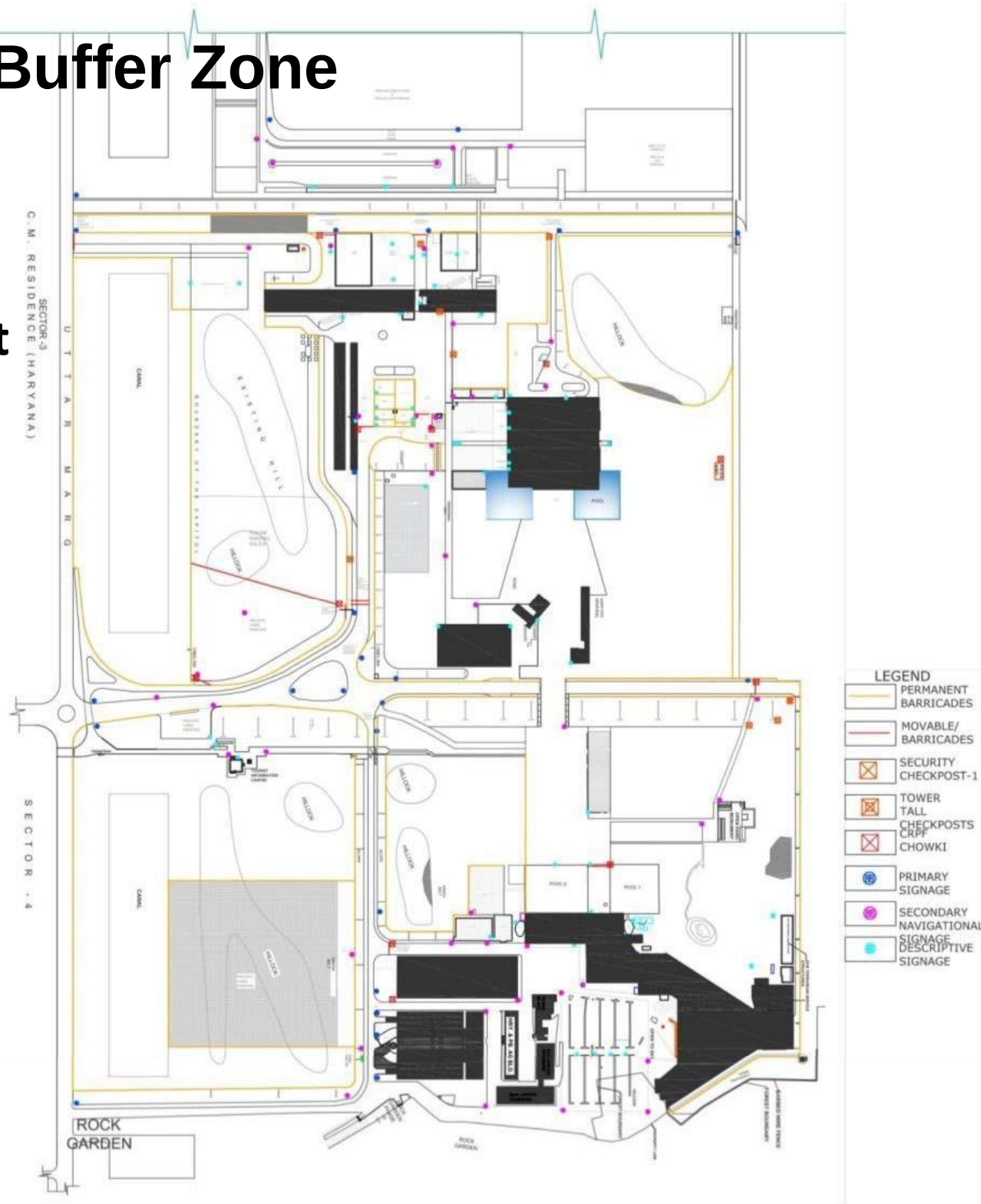
- Landscape Elements



Capitol Complex & Buffer Zone

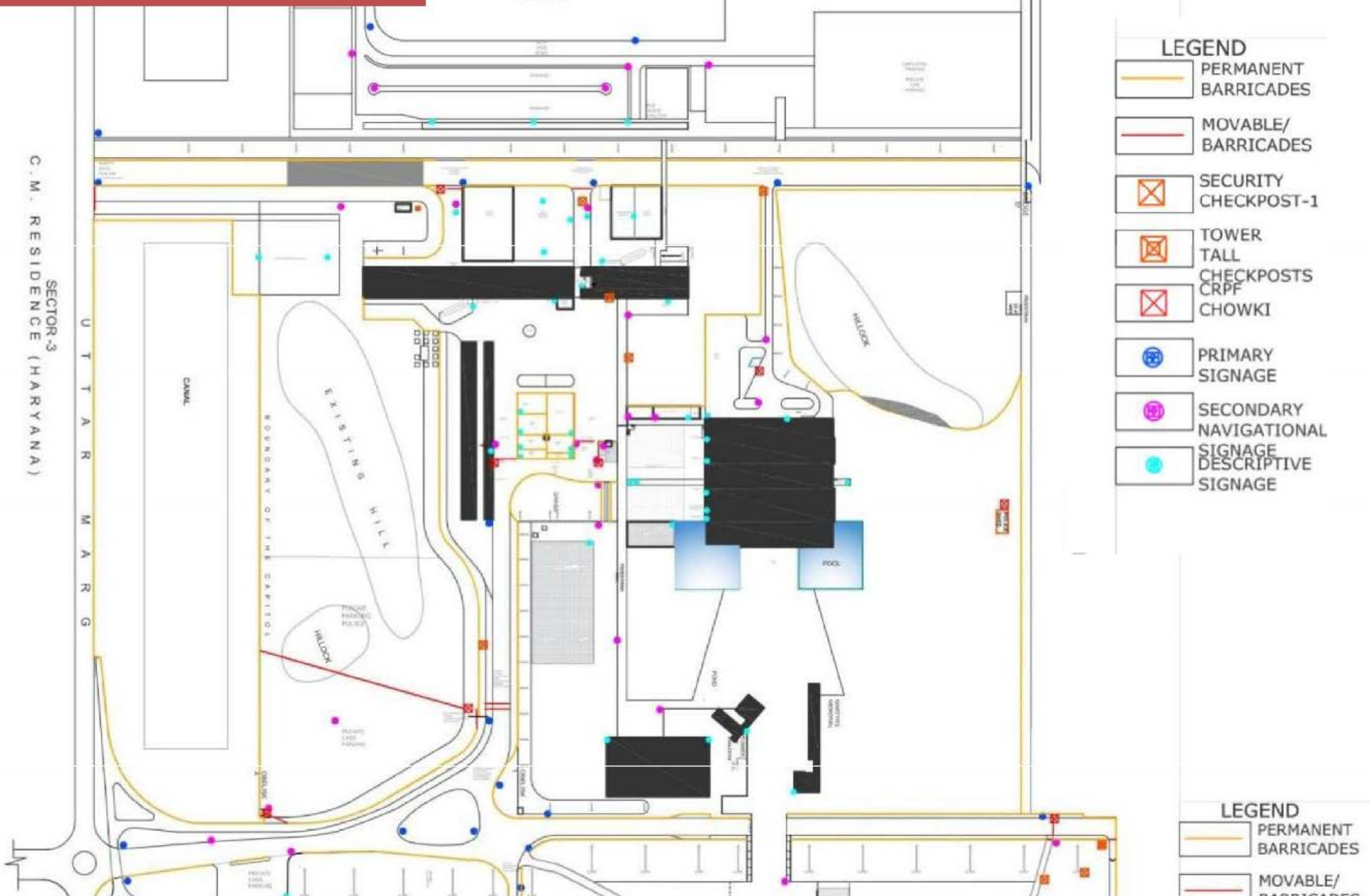
Proposed case

- Signage System
- Barricading
- Chowkis & Check post



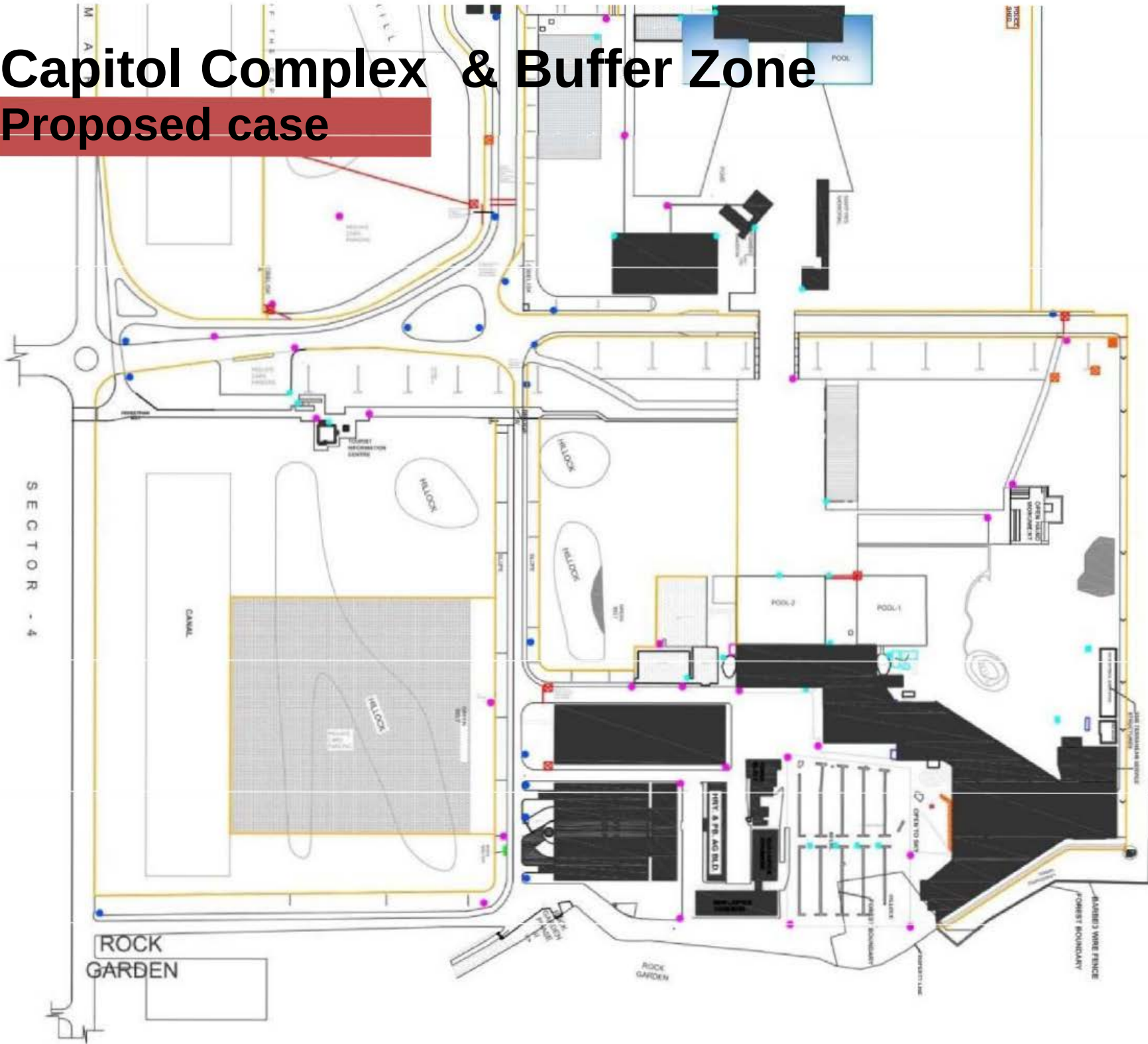
Capitol Complex & Buffer Zone

Proposed case



Capitol Complex & Buffer Zone

Proposed case

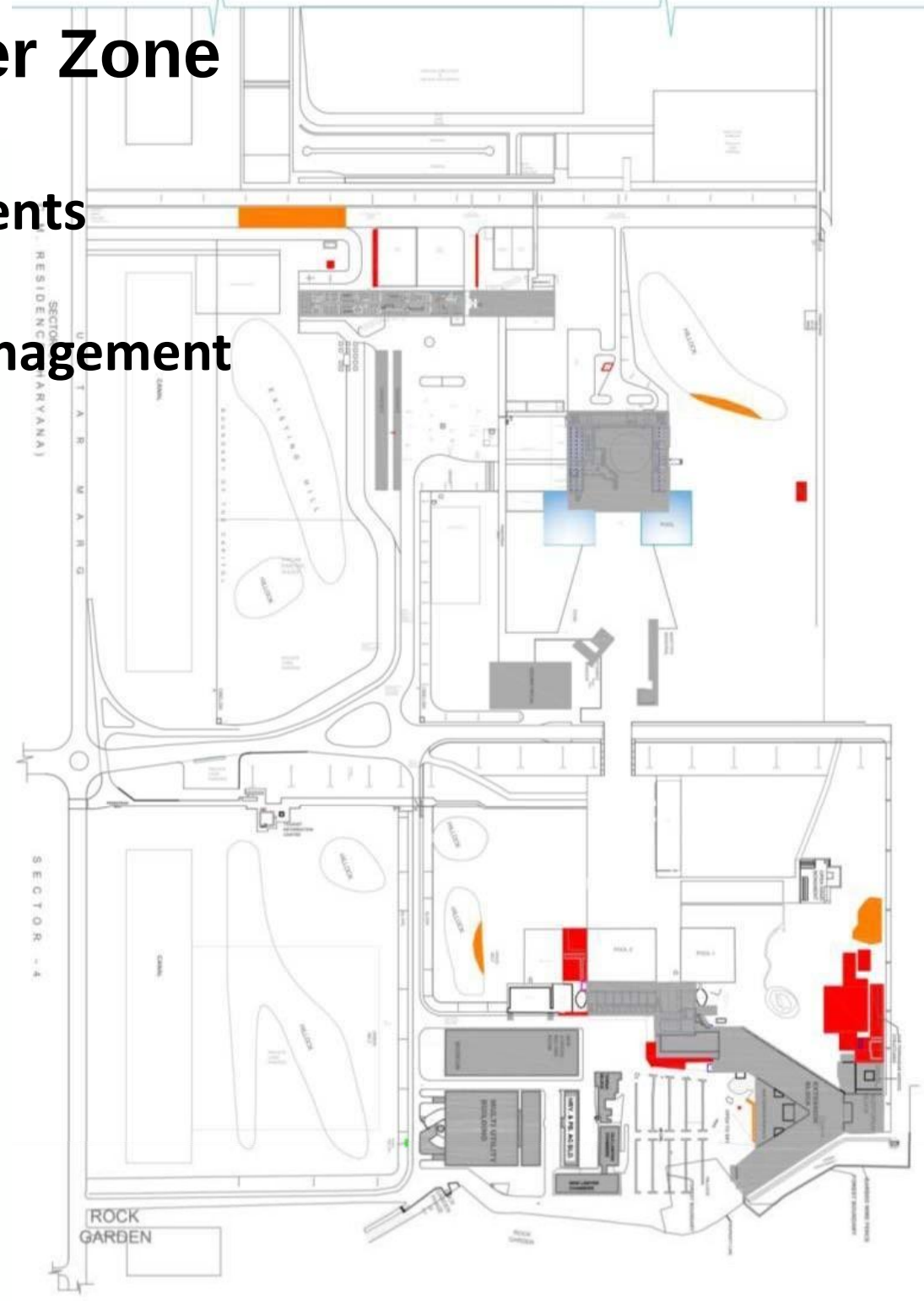
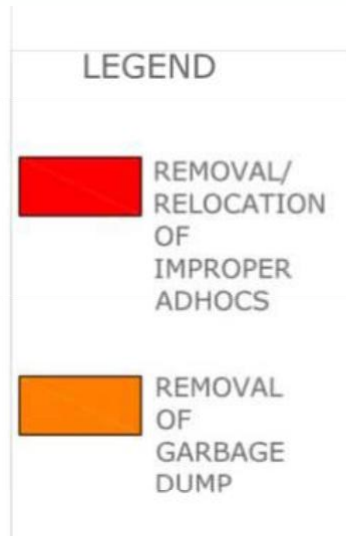


LEGEND	
	PERMANENT BARRICADES
	MOVABLE/ BARRICADES
	SECURITY CHECKPOST-1
	TOWER TALL CHECKPOSTS
	CRPF CHOWKI
	PRIMARY SIGNAGE
	SECONDARY NAVIGATIONAL SIGNAGE
	DESCRIPTIVE SIGNAGE

Capitol Complex & Buffer Zone

Proposed case

- Adhoc Structures and elements management
- Garbage dump disposal management

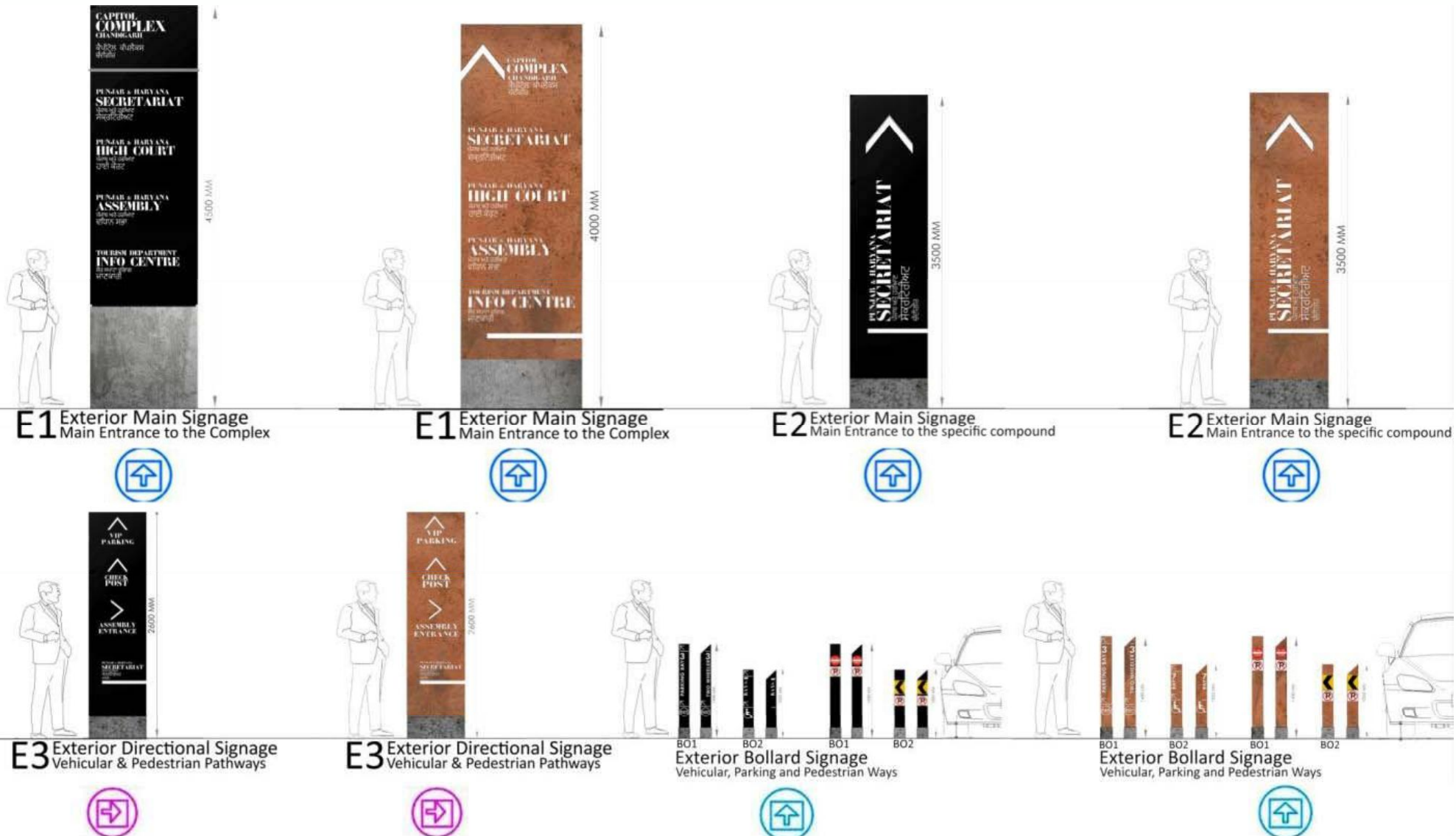


Capitol Complex & Buffer Zone

Proposed Works

•Navigation & Signage System

LEGENDS



Capitol Complex & Buffer Zone

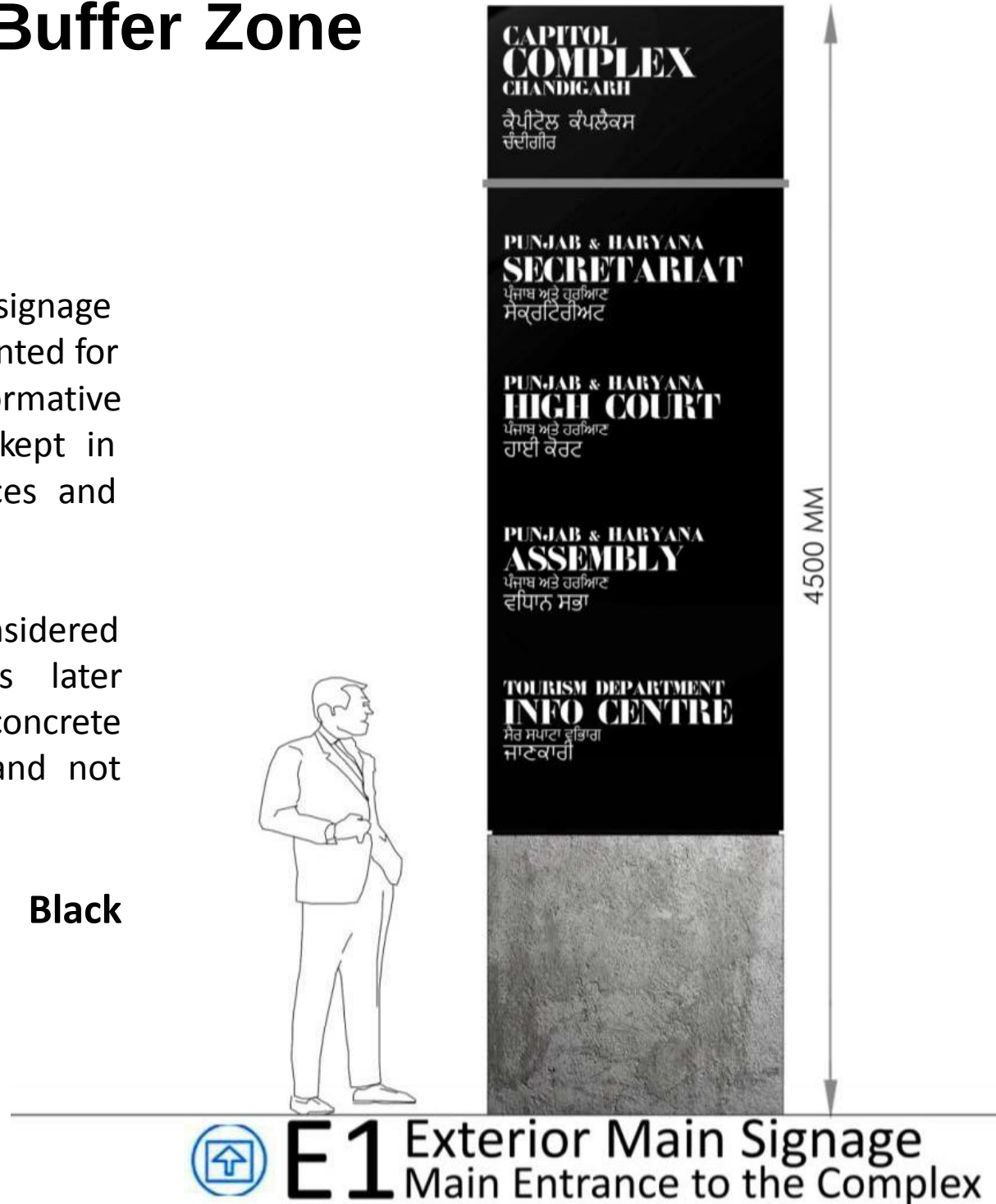
Proposed Works

•Navigation & Signage System

A coherent system of uniform signage design is proposed to be implemented for vehicular, pedestrian and informative purpose. The design has been kept in flexibility to meet various choices and approvals.

The material palette has been considered so as to look distinctive as later interventions and complement concrete and Le Corbusier's Originality and not contradict it.

Option 1 deals with Black background and Concrete



Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System

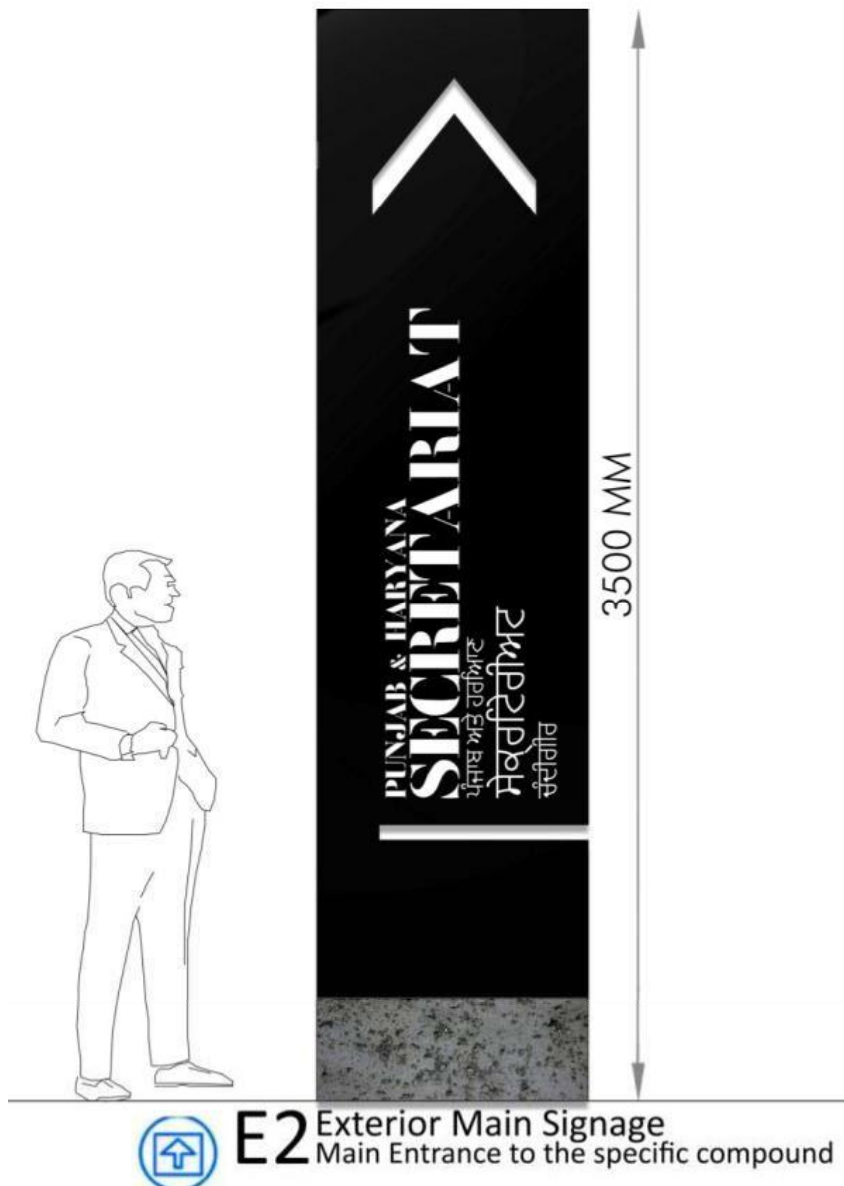
Option 2 deals with Cotton Steel and Cut-Through Letters in Charette Font; le Corbusier's typeface



Capitol Complex & Buffer Zone

Proposed Works

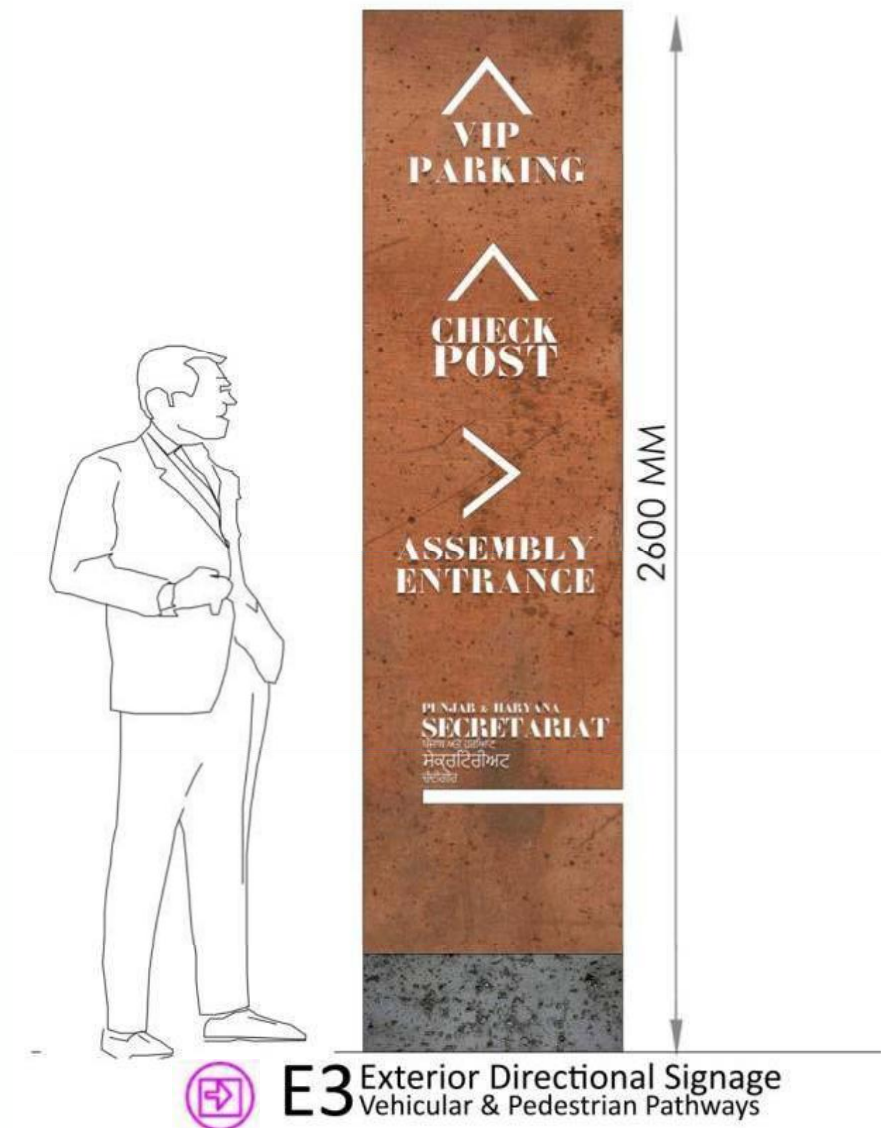
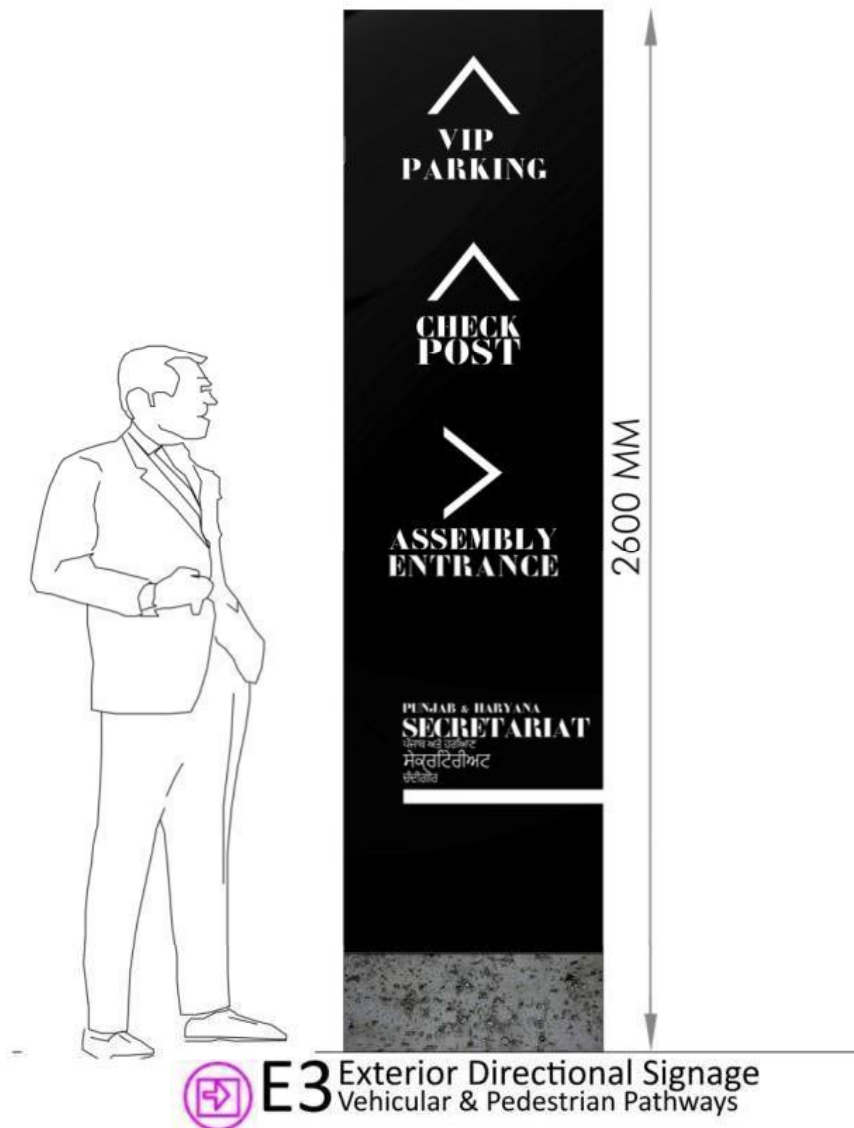
•Navigation & Signage System



Capitol Complex & Buffer Zone

Proposed Works

•Navigation & Signage System



Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System



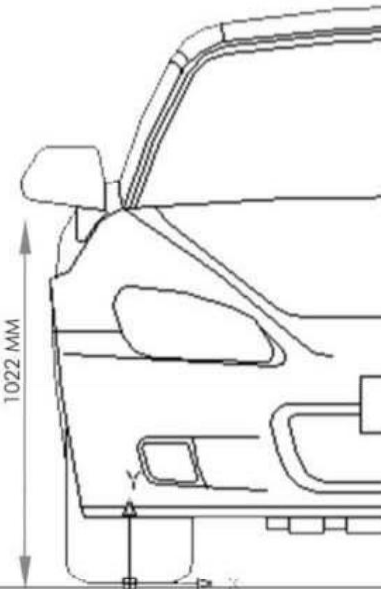
BO1

BO2

BO1

BO2

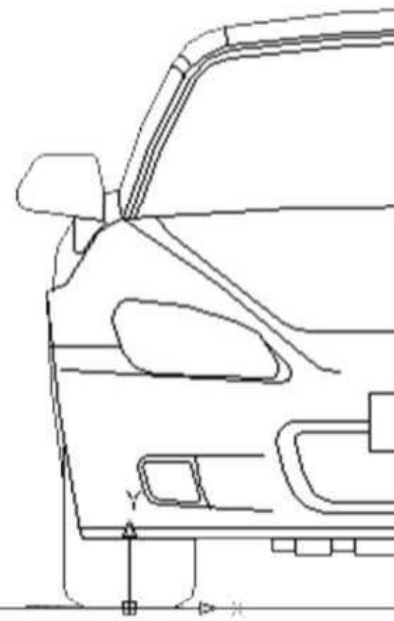
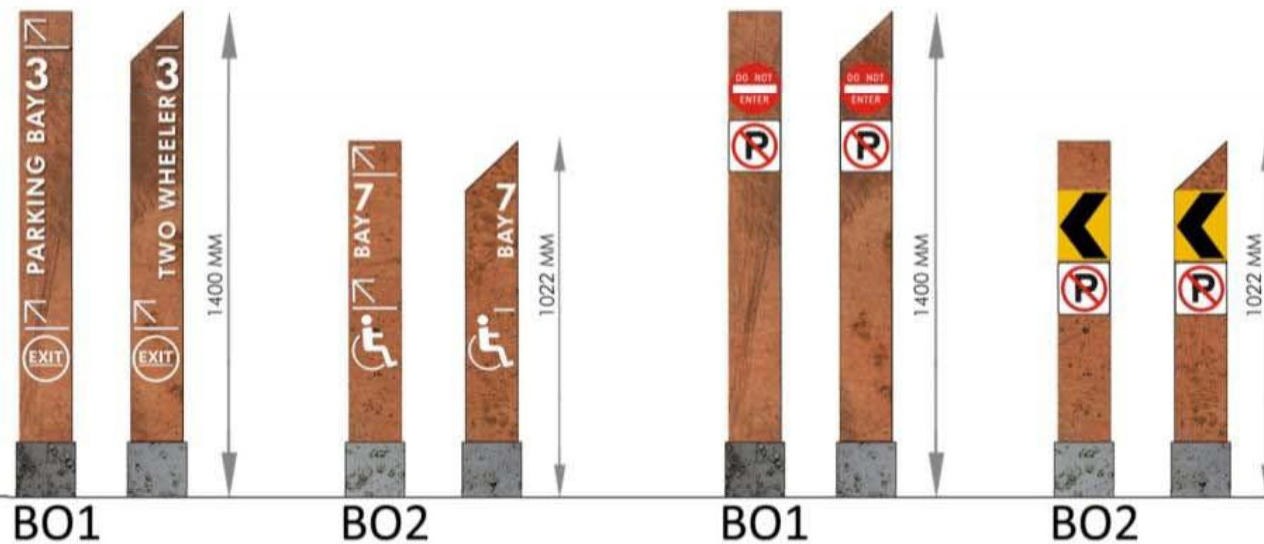
Exterior Bollard Signage
Vehicular, Parking and Pedestrian Ways



Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System



Exterior Bollard Signage
Vehicular, Parking and Pedestrian Ways

Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System

Interior Signage



1770 MM
1570 MM



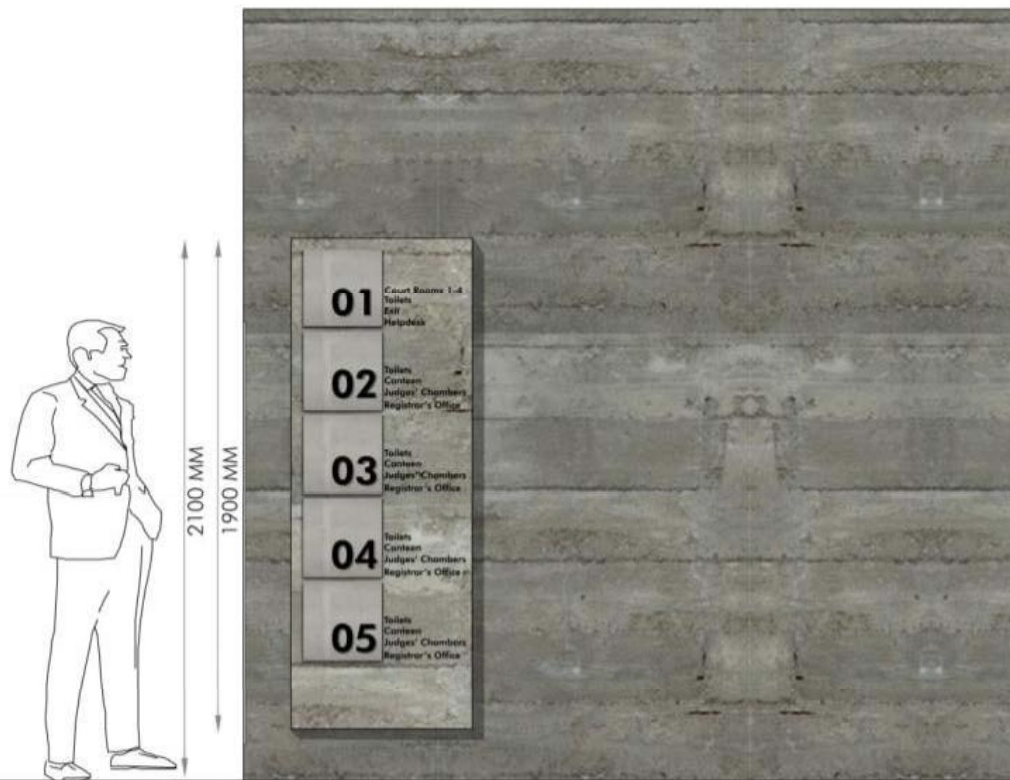
E4 Building Entrance Signage
Main Entrance to the Specific Buildings

Capitol Complex & Buffer Zone

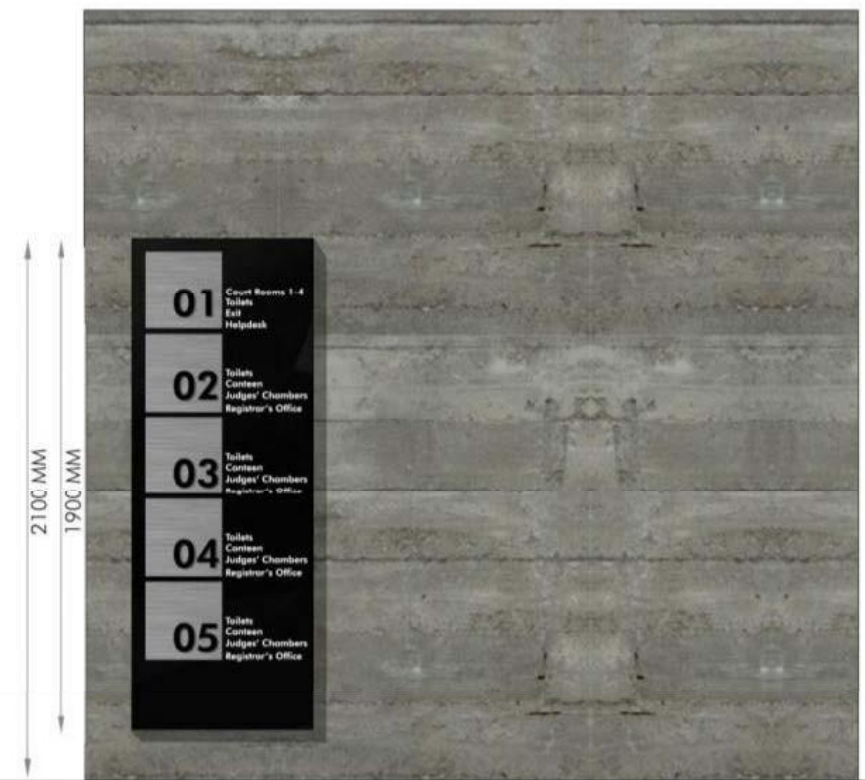
Proposed Works

•Navigation & Signage System

Interior Signage



D1 Exterior Main Signage
Main Entrance to the Complex



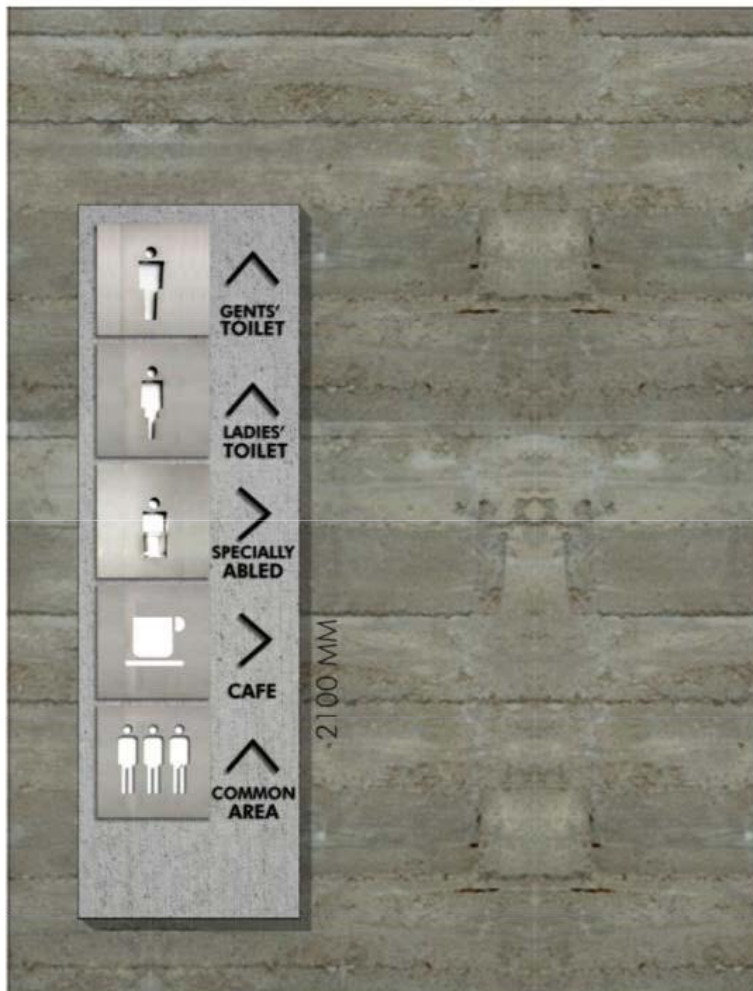
D1 Exterior Main Signage
Main Entrance to the Complex

Capitol Complex & Buffer Zone

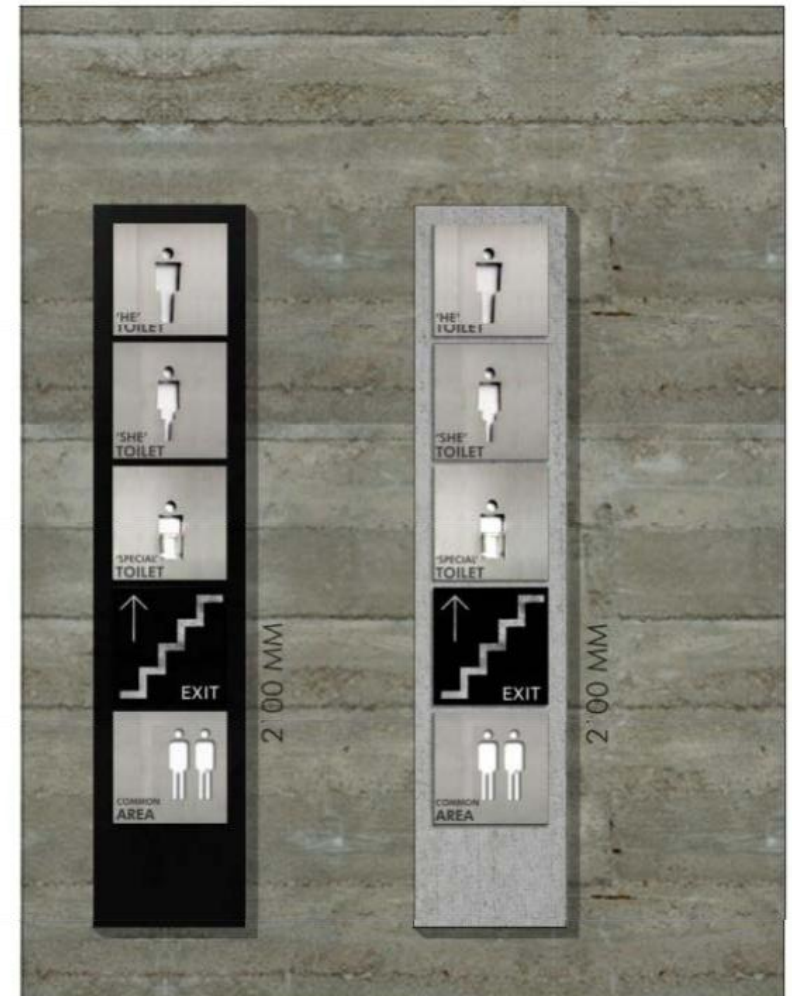
Proposed Works

•Navigation & Signage System

Interior Signage



T4 Interior Directional Signage
Interior Corridors and Courtyards



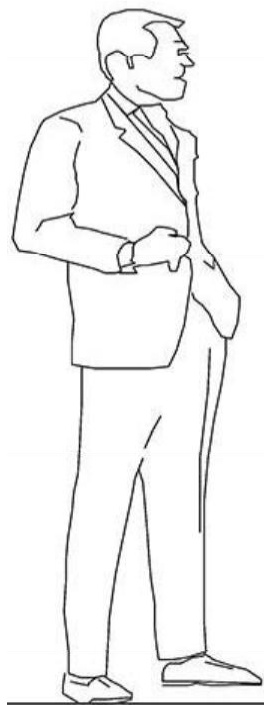
T4 Interior Directional Signage
Interior Corridors and Courtyards

Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System

Interior Signage



1770 MM



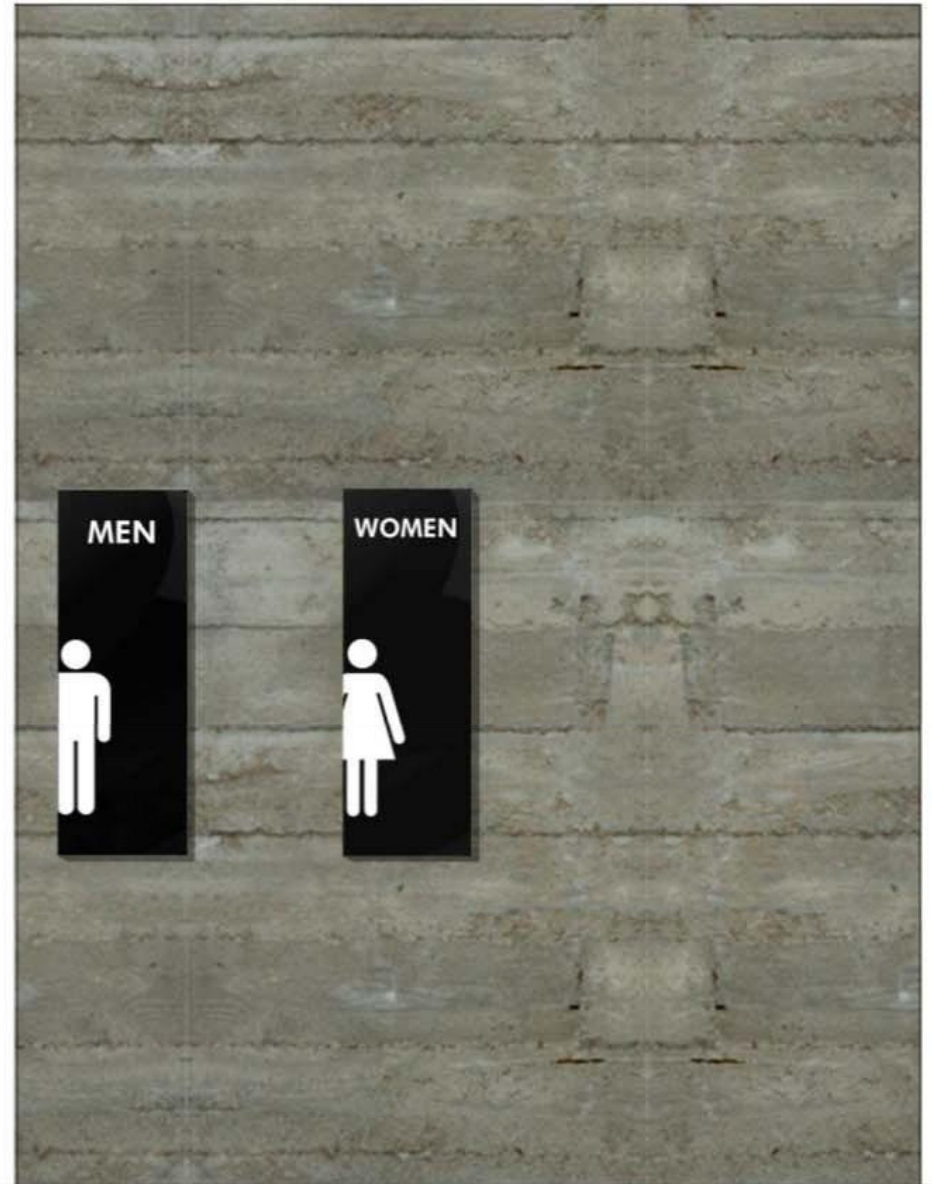
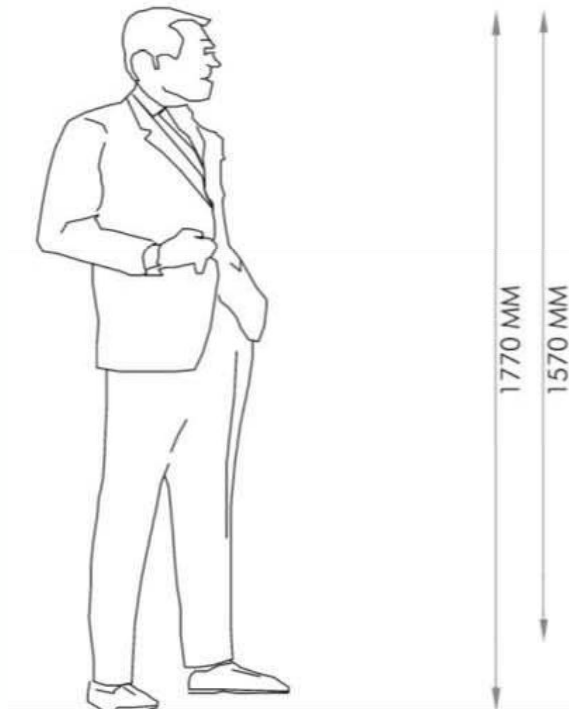
T1 Interior Destination Signage
Destinations & Navigations

Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System

Interior Signage



T2 Interior Destination Signage
Washrooms, Pantries & Similar

Capitol Complex & Buffer Zone

Proposed Works

- Navigation & Signage System

Interior Signage

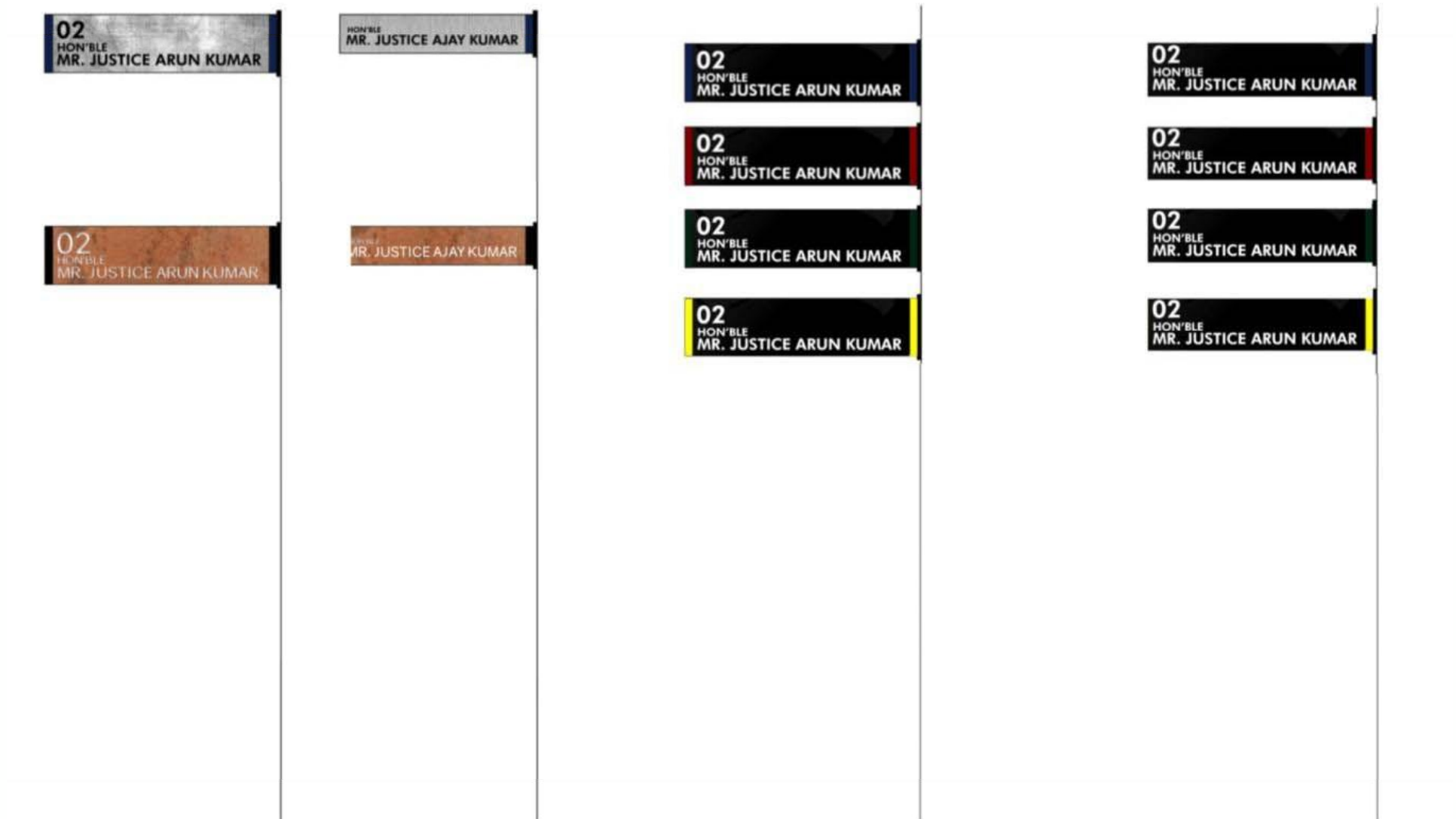


T3 Interior Destination Signage
Courtrooms

Capitol Complex & Buffer Zone

Proposed Works

•Navigation & Signage System



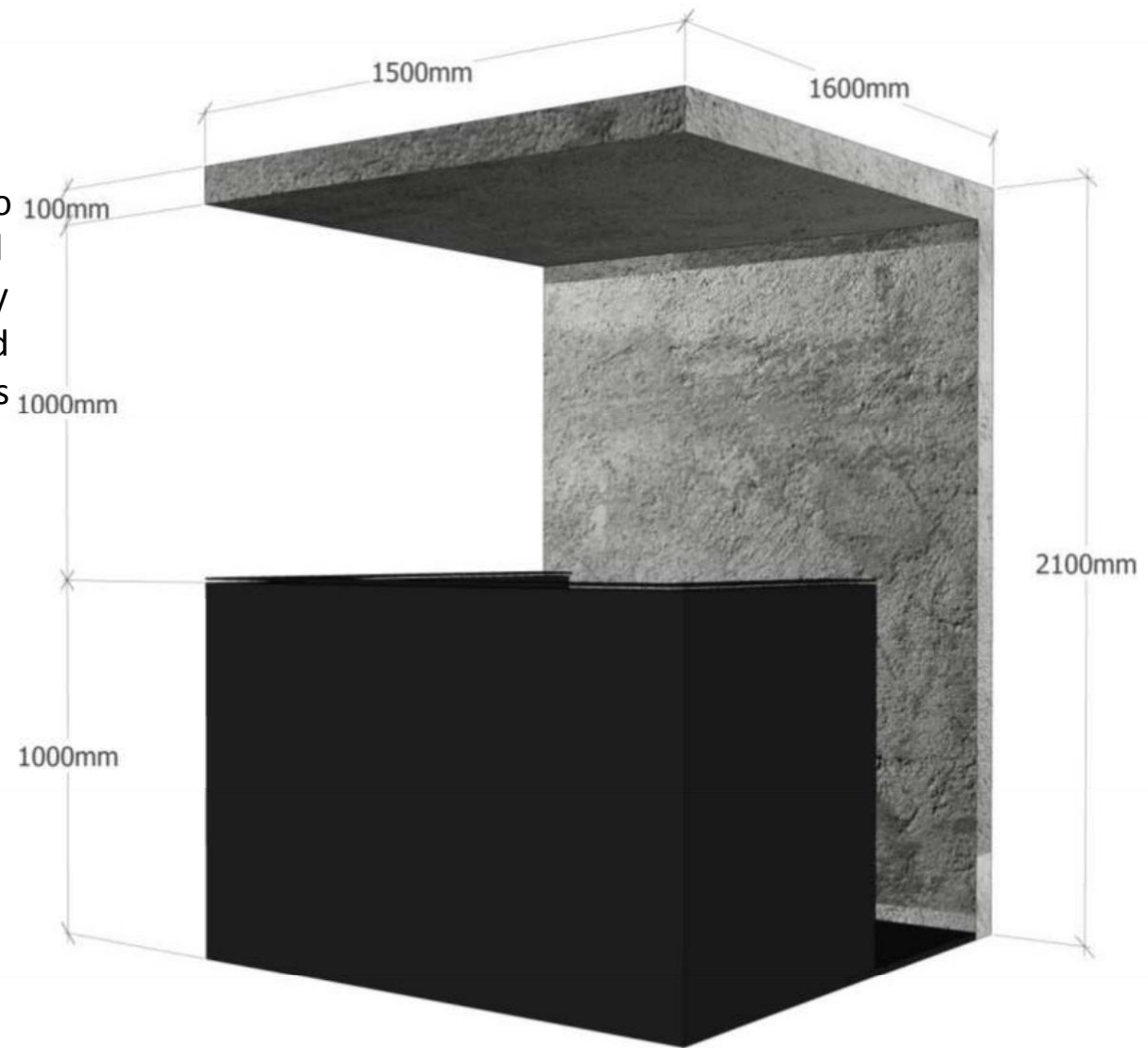
T1 Name & Number Plates
Entrance to the Offices and Cabins

Capitol Complex & Buffer Zone

Proposed Works

•Chowkis & Checkposts

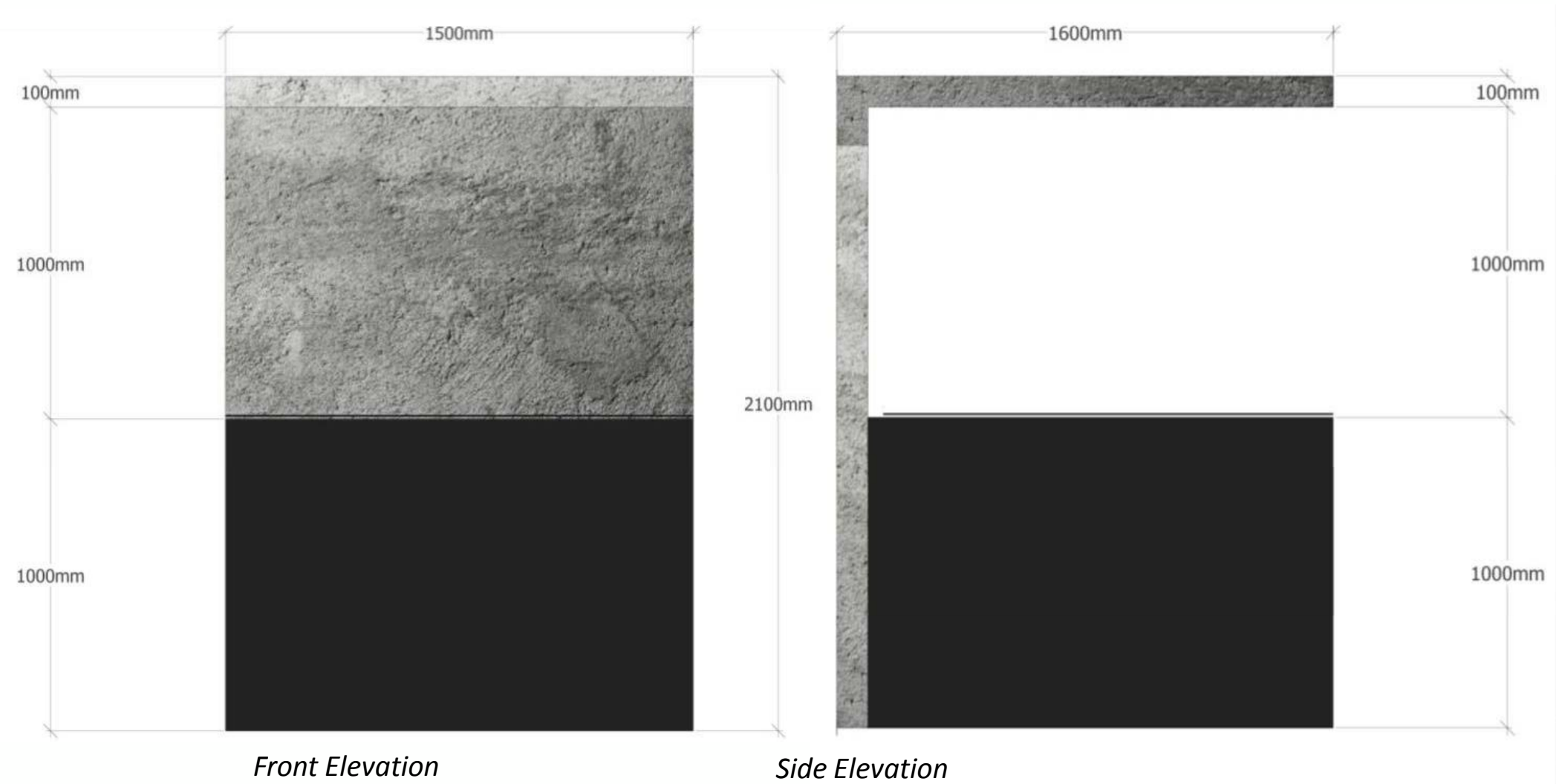
The Checkposts have been kept heavy at the base with concrete as material so as to correspond to the existing landscape and provide ample strength for the security purposes. Moreover the top is considered light and floating so as to keep the base as prominent and shift the mass to the base



Capitol Complex & Buffer Zone

Proposed Works

•Chowkis & Checkposts

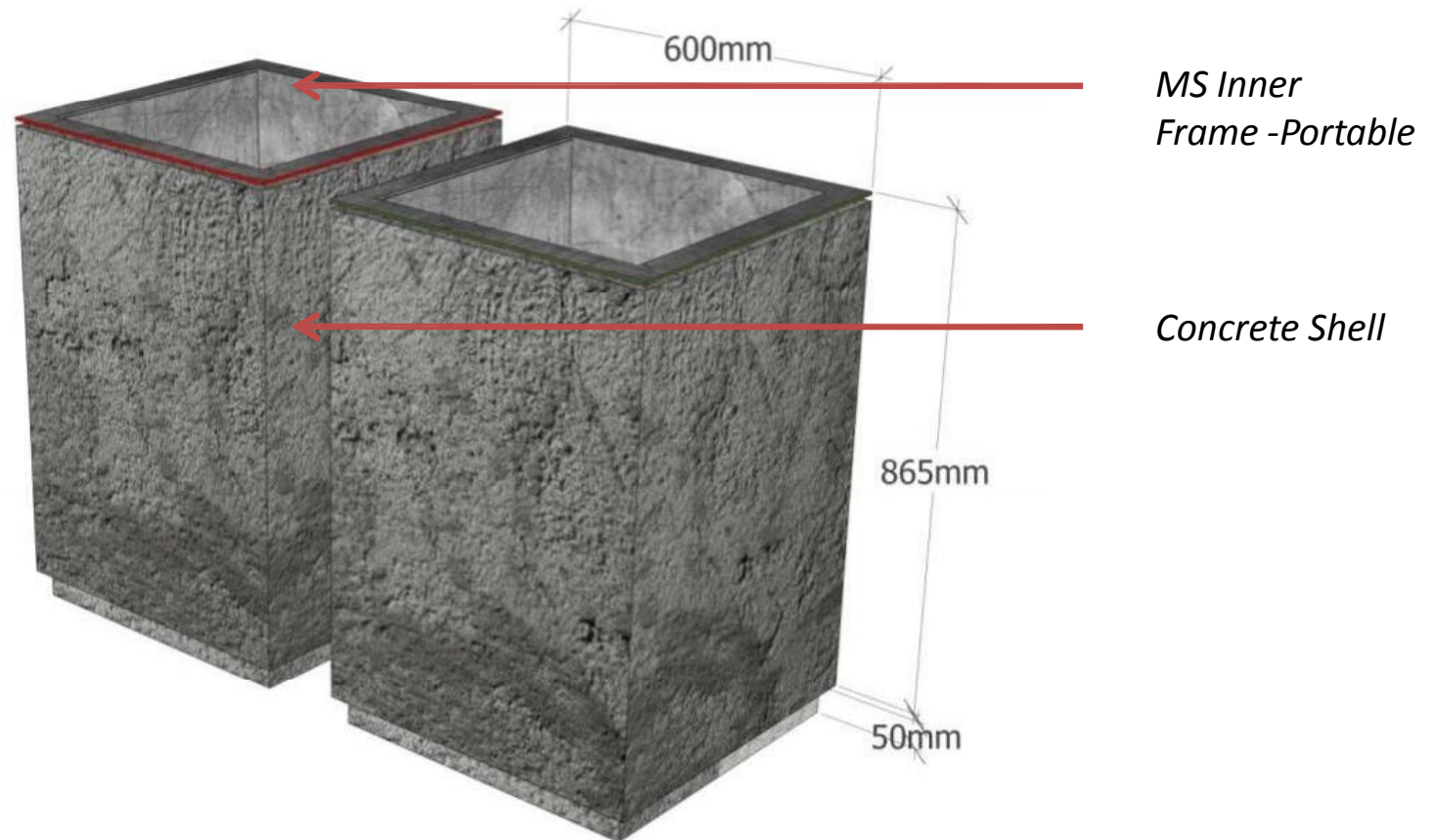
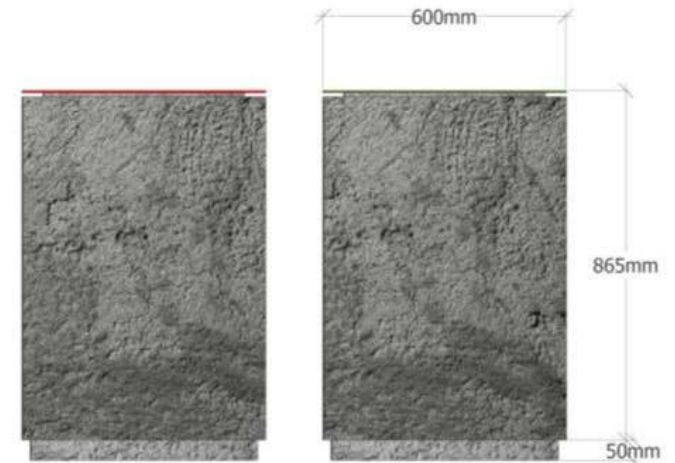


Capitol Complex & Buffer Zone

Proposed Works

•Dustbins

The Dustbins are kept as concrete masses so merge with the landscape and has a Sleek MS Plate on the top so as to give an edge and add agronomic advantages



Capitol Complex & Buffer Zone

Proposed Works

•*Service Screens*

Since the site has multiple exposed services and safety related systems installed, it becomes important to conceal them. Hence, screen would be installed around these services .



50mm ALUMINIUM SLATS

MS SUPPORTS



Capitol Complex & Buffer Zone

Proposed Works

Following is the list of works proposed for the zone.

- Implementation of the Signage System
- Replacement of Check posts with new designs.
- Redoing the Barb Wire Barricading and other movable barricades.
- Replacement of the canopies over pedestrian pathways with new designs.
- Clearing the garbage dump areas and include the scope in Site Management Plan.
- Covering the exposed services with screens.
- Managing exposed utilities and services and provide screening wherever possible
- Clearing and repairing site open drains and water passages.
- Providing new dustbins and waste management strategies.

Capitol Complex & Buffer Zone Estimate

BLOCK ESTIMATE FOR SITE WORKS, CAPITOL COMPLEX					
SR. NO	DESCRIPTION	QUANTITY	RATE	UNIT	AMOUNT
1	MAIN PLAZA WORKS				
a	Restoration of Hand Monument			Lumpsum	5,000,000.00
b	Softscape	7500	1250	Sqm	9,375,000.00
c	Hardscape (Including Restoring Concrete Surfaces in Main Plaza)	4400	2100	Sqm	9,240,000.00
d	Illumination of Plaza (Concrete Bollards, High-masts)			Lumpsum	2,500,000.00
	TOTAL				26,115,000.00
2	SITE & PARKING SPACES				
a	Site Clearance			Lumpsum	1,500,000.00
b	Re-Designing of Parking Spaces			Lumpsum	2,500,000.00
c	Paving of Bridge between Secretariat & Assembly	1500	1100	Sqm	1,650,000.00
	TOTAL				5,650,000.00
3	SITE PROTECTION & VISITOR FACILITIES				
a	Removal of existing Barricades, Barb wires etc			Lumpsum	1,250,000.00
b	New Barricade	3500	2500	R.M	8,750,000.00
c	Guard Posts / Bunkers	35	130000	Nos	4,550,000.00
d	Signages & Visitor Facilities			Lumpsum	7,000,000.00
e	Paving of Pathways	2150	1050	Sqm	2,257,500.00
f	Canopies over existing Pathways	2150	1600	Sqm	3,440,000.00
	TOTAL				27,247,500.00
4	SERVICES UPGRADATION WORKS				
a	Site Illumination (Pathways & Monuments)			Lumpsum	4,000,000.00
b	Relocation of Services			Lumpsum	2,500,000.00
c	Screening for existing Services			Lumpsum	4,000,000.00
d	Restoration & Cleaning of Surface Drains	750	1100	Rm	825,000.00
	TOTAL				11,325,000.00
	GRAND TOTAL REQUIRED FOR SANCTION				70,337,500.00

REPONSES BELGIQUE – VERSION FINALE
30 OCTOBRE 2017

g) CLARIFIER LA PROTECTION DE LA ZONE TAMPON POUR LA MAISON GUIETTE

Actuellement, il n’y a pas de protection spécifique touchant la zone tampon de la maison Guiette. La protection est dérivée des différents instruments qui sont aujourd'hui en place. Ceux-ci offrent une protection suffisante, aussi bien au niveau des affectations que sur le plan de l’aménagement du territoire (voir point I).

Même si des mesures additionnelles ne semblent pas nécessaires, il n’est pas exclu qu’un Plan d’Exécution Spatial (PES) avec surimpression patrimoine sera développé à long terme (voir point II).

I. Instruments actuellement en place

AU NIVEAU DE LA PLANIFICATION,

L’instrument de base est le [plan régional d’affectation du sol #14 ‘Antwerpen’](#) du 3/10/1979. Ce plan désigne les affectations suivantes pour la zone tampon (voir plan en annexe):

- rouge : zone résidentielle (« *woongebied* », code 0100)
- vert : zone verte (« *groengebied* », code 0700)

Dans chacune de ces zones, des règles générales et des règles spécifiques sont applicables :

- Zone résidentielle :
 Au niveau des règles générales, l’article 5 du plan régional d’affectation du sol #14 précise que les zones résidentielles (code 0100) sont affectées à une fonction résidentielle, ainsi qu’à des fonctions commerciales, de service, d’artisanat et de petite entreprise pour autant que celles-ci ne doivent pas être situées dans des zones spécifiques pour des raisons de bon aménagement de territoire, ainsi que pour des espaces verts, des institutions socio-culturelles, des équipements d’utilité publique, des services touristiques et des entreprises agricoles. Ces services, installations et institutions ne peuvent être permises que dans le cas où ils sont compatibles avec l’environnement immédiat.
 L’article 1, §1 des règles urbanistiques additionnelles du plan régional d’affectation du sol #14 proclame que, dans cette zone, la hauteur maximale de construction devra prendre en compte les critères suivants :
 - Les hauteurs de construction aux environnements immédiats ;
 - La nature de la zone concernée ;
 - La largeur de l’espace public en face du bâtiment.
- Zone verte :

L'article 13 du plan régional d'affectation du sol #14 indique que les zones vertes sont destinées au maintien, à la protection et au rétablissement de l'environnement naturel.

Aucune règle supplémentaire n'est proposée pour les zones vertes dans le plan régional d'affectation du sol #14.

→ Il est clair que les possibilités de développement aux alentours de la maison Guiette (zone tampon et même plus loin) sont limitées : il n'y a que dans les zones résidentielles que des projets sont possibles, mais ceux-ci doivent s'accorder au caractère de son environnement.

AU NIVEAU DE L'AMÉNAGEMENT DU TERRITOIRE,

Il faut tout d'abord faire référence au 'Codex flamand sur l'aménagement du territoire' (abrégé [VCRO](#)). Ce décret, approuvé par le Parlement Flamand le 15/5/2009, règle entre autres les procédures de demande de permis de construire, et définit les critères à prendre en compte au moment de l'évaluation de ces demandes.

L'article 4.3.4. du VCRO indique que, à partir du moment où il s'avère qu'une demande de permis de construire apparaît indésirable considérant les objectifs et/ou les obligations relevant d'autres réglementations, après avoir consulté les services concernés, les autorités compétentes peuvent décider de ne pas délivrer le permis. Toutefois, il ne s'agit pas d'une obligation, elles sont libres de délivrer le permis de construire, mais cette décision, comme tout acte administratif, doit être motivé. L'absence de motivation ou une motivation déficiente ouvrent la porte à une procédure d'appel.

*Art. 4.3.4 du VCRO : Un permis peut être refusé s'il apparaît d'un avis obligatoirement recueilli que la demande est jugée inopportune par rapport aux objectifs ou aux devoirs de sollicitude d'autres domaines politiques que celui de l'aménagement du territoire.
Pour l'application du premier alinéa, il convient d'entendre par " objectifs ou devoirs de sollicitude " : les dispositions de droit international, de droit européen, ayant force de loi, réglementaires ou décisionnelles qui obligent les autorités, lorsqu'elles exécutent ou interprètent la réglementation ou lorsqu'elles mènent leur politique, à respecter un certain objectif ou à prendre certaines précautions, sans que cela soit en soi suffisamment clair d'un point de vue juridique pour pouvoir les appliquer sans délai.*

Les services compétents susmentionnés sont détaillés dans l'article 1 de [la décision du gouvernement flamand du 5/6/2009 portant sur les institutions consultatives](#). L'article 1, section 1°, f) indique que les demandes de permis de construire relatives aux biens patrimoine mondial et à leurs zones tampon doivent être présentées à l'agence du Patrimoine de Flandre, en vue d'un avis obligatoire.

*Article 1er. Les instances invitées à remettre un avis conformément à l'article 4.7.16, § 1er, et 4.7.26, § 4, premier alinéa, 2°, du Codex flamand sur l'aménagement du territoire, sont les suivantes :
1° l'agence du domaine politique de l'Aménagement du Territoire, de la Politique du Logement et du Patrimoine immobilier chargé de l'exécution de la politique en matière de patrimoine immobilier, pour les demandes suivantes :*

...

f) aux demandes relatives aux biens agréés comme patrimoine mondial ou se situant dans la zone tampon du patrimoine mondial, conformément à l'article 11 de la Convention concernant la protection du patrimoine mondial, culturel et naturel, établie à Paris le 16 novembre 1972, dans les cas suivants :

- 1) si les biens figurent à la liste du patrimoine mondial;*
- 2) si les parcelles se situent dans la zone tampon telle qu'approuvée par le Comité du patrimoine mondial UNESCO à une distance de moins de cent mètres du patrimoine mondial;*
- 3) si les parcelles se situent dans la zone tampon telle qu'approuvée par le Comité du patrimoine mondial UNESCO à une distance de plus de cent mètres du patrimoine mondial, la construction ayant ou atteignant une hauteur de plus de quinze mètres;*

...

→ Toute demande de permis de construire relative à un terrain ou bâtiment situé dans la zone tampon devra donc être envoyée à l'agence du Patrimoine de Flandre, dans la mesure où elles touchent les critères susmentionnés. Les collaborateurs de l'agence évalueront l'impact du projet sur la VUE de la série « l'œuvre architecturale de Le Corbusier, une contribution exceptionnelle au Mouvement Moderne ». À partir du moment où ils constatent qu'il y a un impact, ils avertissent les autorités responsables, et leur signalent la procédure du §172 des Orientations.

En réalité, des problèmes potentiels sont détectés dans la majorité des cas bien avant que la demande de permis de construire est introduite (voir ci-dessous, les paragraphes sur la Commission de Convenance Esthétique).

Le [Code de l'Urbanisme](#) de la ville d'Anvers comprend toutes les règles qui déterminent comment on peut construire sur le territoire de la ville. Chaque projet de construction ou de transformation doit être conforme à ce document régulateur.

La seconde partie du Code de l'Urbanisme, intitulée 'qualité spatiale', comprend les articles les plus pertinents sur le plan du patrimoine et de la qualité de l'environnement :

- L'article 6, §2 introduit la règle de l'harmonie : dans un milieu comportant des bâtiments de caractère homogène, les nouvelles constructions ou les

transformations doivent être en harmonie avec la situation de référence. Cette situation de référence comprend les caractéristiques de la majorité des bâtiments des alentours. Chaque demande doit, par conséquent, être appréciée indépendamment.

Art. 6, §2 du Code de l'Urbanisme : In een omgeving waar de bestaande bebouwing homogene kenmerken vertoont, moeten de op te richten of de te verbouwen gebouwen zodanig worden ontworpen dat ze in harmonie zijn met de kenmerken van de omgeving. De kenmerken van de omgeving worden bepaald door het referentiebeeld. Het referentiebeeld wordt gevormd door de gebouwde omgeving die de begrenzing vormt met de buitenruimte en bestaat uit de gebouwen welke inzake harmonische samenhang het talrijkste zijn en dus kenmerkend voor de betreffende omgeving kunnen genoemd worden.

Le paragraphe 3 de cet article précise que la nature et l'ampleur de la fonction, la typologie et l'échelle du nouveau développement seront évaluées par rapport à la capacité spatiale de l'environnement.

Art. 6, §3 du Code de l'Urbanisme : De aard en grootte van de functie, de typologie en schaal van een project worden afgetoetst aan de draagkracht van de omgeving en dit voor alle delen van de constructie.

L'article 10, §1 précise que, conformément à la règle de l'harmonie, il ne peut être acceptable de faire référence à des bâtiments qui ne sont actuellement pas en harmonie avec ou qui polluent l'environnement.

Art. 10, §1 du Code de l'Urbanisme : Bij nieuwbouw, herbouw, functiewijziging of een volume-uitbreiding moeten de inplanting, bouwhoogte en bouwdiepte in harmonie zijn met het referentiebeeld, zoals nader bepaald in Artikel 6 "Harmonie en draagkracht". Er kan niet gerefereerd worden naar bestaande gebouwen die niet in harmonie of storend zijn met de omgeving.

L'article 11, finalement, contient les règles sur le maintien de la façade et de sa finition.

*Art. 11, §1. du Code de l'Urbanisme : Voorgevels die oorspronkelijk als bepleisterde gevels opgetrokken zijn, mogen alleen afgekap't worden met het oog op het aanbrengen van een nieuwe pleisterafwerking.
Art. 11, §2.: Bij het schilderen, pleisteren of kaleien van een voorgevel dienen elementen en decoraties die niet bedoeld waren om beschilderd, bepleisterd of gekaleid te worden, zoals natuursteen of arduinen plinten en dorpels, onbepleisterd, onbeschilderd en ongekaleid te blijven. Het veranderen van buitenschrijnwerk mag de historische beeldwaarde van de gevels niet verstoren door zijn materiaalgebruik, maatvoering en/of indeling*

Art. 11, §3: In de volgende gevallen is het niet toegelaten om bepleistering, schilderwerk, gevelbekleding of een andere afwerking, al dan niet in combinatie met buitenisolatie aan te brengen op voorgevels:

1° indien de voorgevel is opgetrokken in natuursteen of in polychroom metselwerk, indien de gevel is afgewerkt met simili (d.i. natuursteenimitatie in cement) of indien de gevel decoratieve tegeltableaus bevat;

2° bij gevels met decoratieve elementen zoals stuc-, baksteen-, metaaldecoraties, tenzij het enkel om schilderwerken gaat;

3° indien de gevel deel uitmaakt van een groter architectonisch geheel, bijvoorbeeld bij uniforme rij- of koppelbebouwing of meer-gezinsgebouwen, tenzij dit geheel als één aanvraag wordt ingediend.

Art. 11, §4: Het materiaalgebruik van alle onderdelen van een gebouw, constructie, afsluiting of aanleg moet duurzaam, kwalitatief, constructief en esthetisch verantwoord zijn. Omwille van de stedelijke opwarming, de beeldkwaliteit en de historische waarde moet de lichte kleurstelling van bepleisterde en geschilderde gevels bewaard of hersteld worden. Afwijkingen hierop, vanuit beeldkwaliteit, harmonie en/of historische argumenten moeten gemotiveerd worden conform de bepalingen uit Artikel 3 "Afwijkingsmogelijkheid".

- De plus, les articles 7 et 8 prescrivent que les grands projets et les projets emblématiques doivent être présentés à la Commission de Convenance Esthétique (*Welstandscmissie*). L'aspect emblématique peut ressortir de l'ampleur du projet, l'échelle, l'implantation, ... L'article 8 spécifie que toute demande de permis de construire pour un bâtiment de 50m de haut ou plus doit être présentée à la commission en charge de la convenance esthétique. L'opportunité de la fonction pour cette localisation et la qualité au niveau architectural et au niveau de l'ensemble urbain seront aussi formellement évaluées pour ces projets.

Art. 7, §1 du Code de l'Urbanisme : Binnen de algemene opdracht van het college van burgemeester en schepenen als vergunningverlenende of adviserende overheid worden bijzondere beeldbepalende stedenbouwkundige vergunningsaanvragen onderworpen aan een welstandsadvies, dat wordt opgemaakt en begeleid door de stadsbouwmeester en/of de welstandscmissie. Het verslag van de commissie kan ook de minderheidsstandpunten inhouden. Het welstandsadvies wordt opgenomen in de beslissing van het college omtrent de stedenbouwkundige vergunningsaanvraag.

Art. 8, §1 du Code de l'Urbanisme : Elke aanvraag tot het verkrijgen van een stedenbouwkundige vergunning voor de realisatie van een gebouw hoger dan 50 meter is vooraf voor advies voorgelegd aan de Gecoro en de welstandscmissie

Art. 8, §2: Specifiek voor de mogelijke impact die deze gebouwen hebben door hun hoogte, worden deze beoordeeld en afgewogen op basis van:

- 1° criteria voor de locatiegeschiktheid zoals: de impact op het stedelijk functioneren, het stadsbeeld, mobiliteit en milieueffecten (zoals wind, lucht en geluid, licht- en zonnetoetreding, energie, biodiversiteit)*
- 2° criteria voor de architecturale geschiktheid zoals: de beeldkwaliteit, de verblijfskwaliteit, keuze-architectuur en modal-split, duurzaamheid.*

➔ Le Code de l'Urbanisme propose un nombre de règles et principes qui aideront à maîtriser des développements. Il s'agit de la règle de l'harmonie, le principe de respect pour la capacité spatiale actuelle de l'environnement, et l'idée qu'une façade précieuse et sa finition doivent être maintenues. De plus, les grands projets et les projets emblématiques seront présentés à une Commission de Convenance Esthétique. L'opportunité de la fonction pour cet endroit et la qualité au niveau architectural et au niveau de l'ensemble urbain feront aussi formellement l'objet d'une évaluation par les autorités, avant de délivrer un permis.

II. Instruments additionnels à considérer ?

ZONE DE TRANSITION

Le nouveau décret sur le patrimoine immobilier, approuvé par le parlement flamand le 12 juillet 2013, a introduit la 'zone de transition' (« *overgangszone* »), un nouvel outil offrant une protection additionnelle aux biens, secteurs et sites protégés. La zone de transition est définie comme "une surface au sol limitée qui soutient la valeur patrimoniale d'un site archéologique, d'un monument, d'un paysage historico-culturel ou d'un site urbain et rural ;" (art. 2.1., °42).

Le gouvernement flamand a étudié la possibilité d'ajouter une zone de transition autour de la maison Guiette. Malheureusement, cette proposition s'est heurtée à plusieurs inconvénients :

- La zone tampon actuellement proposée ne correspond pas toujours à la définition de zone de transition. Il est difficile de justifier, par exemple, que les trois immeubles derrière la maison Guiette contribuent à la valeur patrimoniale de la maison.
- Dans un environnement très peuplé, il y a un risque réel de recours contre une décision de protection comme zone de transition ; beaucoup de gens ne comprendraient pas pourquoi.
- Du côté juridique, il n'est pas prévu d'ajouter une zone de transition autour d'un bien déjà protégé. Actuellement, la seule possibilité est de proposer une zone de transition dans le cadre d'une procédure de protection comme monument, paysage historico-culturel, etc. Il faudrait par conséquent protéger à nouveau la maison Guiette, ce qui n'est pas souhaitable.

PLAN D'EXÉCUTION SPATIAL (PES)/ PAYSAGE PATRIMONIAL

Pour nombre de biens patrimoine mondial situés en Flandre, les zones tampon actuelles sont déficientes (asymétriques, trop petites, ...). Pour résoudre cette situation, le gouvernement de Flandre vient de conduire une étude sur les instruments juridiques disponibles qui pourraient aider à résoudre la situation des zones tampon défectueuses et qui pourraient renforcer la protection là où elle est actuellement insuffisante.

Cette étude a démontré qu'un Plan d'Exécution Spatiale (PES) avec surimpression 'patrimoine' serait plus approprié qu'une zone de transition. Cet instrument se situe aux frontières de la planification, de l'aménagement du territoire et du patrimoine immobilier. Ces PES avec surimpression 'patrimoine' sont désignés comme paysages patrimoniaux (« *erfgoedlandschappen* »). Ils sont définis dans le [décret relatif au patrimoine immobilier](#) du 12 juillet 2013, notamment :

- *art 2.1., 24° du décret relatif au patrimoine immobilier : une zone qui, du fait de sa valeur patrimoniale conformément à la réglementation en vigueur, a été reprise dans un plan d'exécution spatiale sur la base d'un plan directeur de patrimoine immobilier ou d'un inventaire établi;*

- *art. 6.5.1. du décret relatif au patrimoine immobilier : Sur la base de plans directeurs de patrimoine immobilier, visés à l'article 7.1.1, ou d'un inventaire établi, visé à l'article 4.1.1, des paysages patrimoniaux peuvent être délimités dans des plans d'exécution spatiale.*

Art. 6.5.2. Quiconque effectue des travaux ou pose des actes ou octroie un marché à ce propos veillera le plus possible à respecter les valeurs patrimoniales d'un paysage patrimonial tel que déterminé dans le plan d'application.

Le Gouvernement flamand peut en arrêter les modalités.

Art. 6.5.3. L'autorité administrative ne peut pas entreprendre des travaux ni poser des actes, ni accorder l'autorisation ou un permis pour une activité susceptible de détruire un paysage patrimonial en tout ou en partie ou de provoquer des dommages significatifs à des valeurs patrimoniales.

L'autorité administrative doit, dans toutes ses décisions concernant ses propres travaux, concernant l'octroi d'un marché à ce propos ou un propre plan ou une ordonnance susceptibles d'avoir un impact préjudiciable sur le patrimoine rural :

1° éviter qu'il ne soit porté atteinte aux valeurs patrimoniales telles que déterminées dans le plan directeur de patrimoine immobilier d'application ;

2° limiter le plus possible les dommages significatifs aux valeurs patrimoniales en prenant des mesures visant à limiter les dommages.

L'autorité administrative indique, dans toutes ses décisions, la façon dont elle a tenu compte des obligations visées dans le présent article.

Le Gouvernement flamand en arrête les modalités.

Art. 6.5.4. Cette section n'entrave en rien l'application de prescrits plus stricts pour les biens protégés.

➔ Les zones de transition ne se prêtent pas très bien à la situation de la maison Guiette. Les Plans d'Exécution Spatiaux avec surimpression 'patrimoine' semblent plus opportuns, mais ceux-ci constituent surtout une solution pour les zones tampon déficientes des biens patrimoine flamands plus anciens (béguinages, beffrois, ...). Cependant, rien n'empêche qu'un Plan d'Exécution Spatial (PES) avec surimpression 'patrimoine' soit développé à long terme pour la zone tampon autour de la maison Guiette - même si des mesures additionnelles de protection ne semblent pas nécessaires (voir point I.). Mais actuellement, le gouvernement de Flandre préfère donner la priorité aux biens patrimoine mondial plus anciens.

g) clarify the protection of the buffer zone for the Maison Guiette ;

At this moment, there is no specific protection in place for the buffer zone of the maison Guiette. Its protection is derived from different instruments and regulations that are currently active. These offer a sufficient degree of protection, both at the level of zoning as at the level of spatial planning (see point I).

Even when additional measures don't seem necessary, it cannot be excluded that a Spatial Implementation Plan (SIP) with 'heritage'-overprint will be developed in the longer run (see point II).

III. Instruments currently in place

AT THE LEVEL OF SPATIAL PLANNING

The basic instrument is regional zoning plan #14 'Antwerpen' dd 3/10/1979. This plan clarifies that the following functions are allowed in the buffer zone (see attached plan):

- red: residential area (« *woongebied* », code 0100)
- green: green zone (« *groengebied* », code 0700)

in each of these zones, general and specific rules are applicable:

- Residential area:
Regarding general rules, article 5 in the regional zoning plan #14 states that residential areas (code 0100) can only be used for housing, commercial functions, services, crafts and small enterprises to the extent that these don't have to be located in specific zones, as well as for green zones, socio-cultural institutions, public utilities, tourist services and agricultural enterprises. These services, utilities and institutions can only be allowed to the extent that they are compatible with the immediate surroundings.

Article 1, §1 of the additional urban regulations of the regional zoning plan #14 dictates that the maximal height of constructions needs to accord to the following criteria:

- o The height of constructions in the immediate vicinity;

- The nature of the zone in question;
 - The scale and size of the public space in front of the building.
- Green zone:
Article 13 of the regional zoning plan #14 states that in these zones, the natural environment needs to be preserved, protected and reestablished.
No additional rule is proposed for green zones in the regional zoning plan #14.

→ It is clear that development possibilities in the surroundings of the maison Guiette (buffer zone and even beyond) are limited: projects are only possible in the 'red' residential area, but they need to conform to the character of their environment.

AT THE LEVEL OF TOWN PLANNING

First of all, reference needs to be made to the 'Flemish Codex for town and country planning' (abbreviated VCRO). This decree, approved by the Flemish Parliament on 15/5/2009, regulates among other things the procedures for applying for a building permit, and defines the criteria to be taken into account at the moment of the evaluation of an application.

Article 4.3.4. of the VCRO indicates that, at the moment it becomes clear that a building permit application is undesirable when taking into account the goals and obligations from other relevant policy domains, after consulting the pertinent services, the responsible authorities *can* decide not to issue a permit. It is not an obligation, so they may deliver the permit, but his decision, as any other administrative act, needs to be well-reasoned. The lack of proper foundations, or a motivation that is lacking offers a reason to lodge an appeal.

*Art. 4.3.4 du VCRO : Un permis peut être refusé s'il apparaît d'un avis obligatoirement recueilli que la demande est jugée inopportune par rapport aux objectifs ou aux devoirs de sollicitude d'autres domaines politiques que celui de l'aménagement du territoire.
Pour l'application du premier alinéa, il convient d'entendre par " objectifs ou devoirs de sollicitude " : les dispositions de droit international, de droit européen, ayant force de loi, réglementaires ou décisionnelles qui obligent les autorités, lorsqu'elles exécutent ou interprètent la réglementation ou lorsqu'elles mènent leur politique, à respecter un certain objectif ou à prendre certaines précautions, sans que cela soit en soi suffisamment clair d'un point de vue juridique pour pouvoir les appliquer sans délai.*

The aforementioned pertinent services are detailed in article 1 of the decision of the flemish gouvernement flamand dd 5/6/2009 relating to the advisory bodies. Article 1, section 1°, f) indicates that the applications for a building permit relating to world heritage properties and associated buffer zones need to be presented to Flanders Heritage, in view of obtaining their mandatory advice.

*Article 1er. Les instances invitées à remettre un avis conformément à l'article 4.7.16, § 1er, et 4.7.26, § 4, premier alinéa, 2°, du Codex flamand sur l'aménagement du territoire, sont les suivantes :
1° l'agence du domaine politique de l'Aménagement du Territoire, de la Politique du Logement et du Patrimoine immobilier chargé de l'exécution de la politique en matière de patrimoine immobilier, pour les demandes suivantes :*

...

- g) aux demandes relatives aux biens agréés comme patrimoine mondial ou se situant dans la zone tampon du patrimoine mondial, conformément à l'article 11 de la Convention concernant la protection du patrimoine mondial, culturel et naturel, établie à Paris le 16 novembre 1972, dans les cas suivants :*
- 4) si les biens figurent à la liste du patrimoine mondial;*
 - 5) si les parcelles se situent dans la zone tampon telle qu'approuvée par le Comité du patrimoine mondial UNESCO à une distance de moins de cent mètres du patrimoine mondial;*
 - 6) si les parcelles se situent dans la zone tampon telle qu'approuvée par le Comité du patrimoine mondial UNESCO à une distance de plus de cent mètres du patrimoine mondial, la construction ayant ou atteignant une hauteur de plus de quinze mètres;*

...

➔ Every building permit application related to a building or building plot located in the buffer zone needs to be submitted to Flanders Heritage, whenever they meet the criteria mentioned in article 1, 1°, f) They will assess the impact of the project on the OUV of the series « l'œuvre architecturale de Le Corbusier, une contribution exceptionnelle au Mouvement Moderne ». Whenever an impact is identified, Flanders Heritage will notify the responsible authorities, and recall the procedure of §172 of the Operational Guidelines.

In real life, potential problems will likely have been detected well before any building permit application will have been submitted (see below, the paragraphs relating to the Urban Aesthetics Commission).

The Antwerp Building Code includes all rules and regulations determining how one can build with the city's territory. Every construction or transformation project needs to correspond to this regulating document.

The second part of this Building Code, entitled 'spatial quality', includes the most pertinent articles at the level of heritage and environmental quality.

- Article 6, §2 introduces the rule of harmony: in an environment of buildings with homogeneous character, new constructions or transformations need to be in harmony with the reference situation. This point of reference includes the characteristics of the majority of buildings in the surroundings. Each application therefore needs to be assessed independently.

Art. 6, §2 du Code de l'Urbanisme : In een omgeving waar de bestaande bebouwing homogene kenmerken vertoont, moeten de op te richten of de te verbouwen gebouwen zodanig worden ontworpen dat ze in harmonie zijn met de kenmerken van de omgeving. De kenmerken van de omgeving worden bepaald door het referentiebeeld. Het referentiebeeld wordt gevormd door de gebouwde omgeving die de begrenzing vormt met de buitenruimte en bestaat uit de gebouwen welke inzake harmonische samenhang het talrijkste zijn en dus kenmerkend voor de betreffende omgeving kunnen genoemd worden.

Paragraph 3 of this article clarifies that the nature and scope of the function, the typology and the scale of the new development will be evaluated taking into account the spatial capacity of the environment.

Art. 6, §3 du Code de l'Urbanisme : De aard en grootte van de functie, de typologie en schaal van een project worden afgetoetst aan de draagkracht van de omgeving en dit voor alle delen van de constructie.

Article 10, §1 adds that, with reference to the rule of harmony, it is not allowed to refer to buildings that are currently not in harmony or that disrupt the environnement.

Art. 10, §1 du Code de l'Urbanisme : Bij nieuwbouw, herbouw, functiewijziging of een volume-uitbreiding moeten de inplanting, bouwhoogte en bouwdiepte in harmonie zijn met het referentiebeeld, zoals nader bepaald in Artikel 6 "Harmonie en draagkracht". Er kan niet gerefereerd worden naar bestaande gebouwen die niet in harmonie of storend zijn met de omgeving.

Article 11, finally, contains rules dealing with the preservation of the façades and its finishing.

Art. 11, §1. du Code de l'Urbanisme : Voorgevels die oorspronkelijk als bepleisterde gevels opgetrokken zijn, mogen alleen afgekappt worden met het oog op het aanbrengen van een nieuwe pleisterafwerking.
Art. 11, §2.: Bij het schilderen, pleisteren of kaleien van een voorgevel dienen elementen en decoraties die niet bedoeld waren om beschilderd, bepleisterd of gekaleid te worden, zoals natuursteen of arduinen plinten en dorpels, onbepleisterd, onbeschilderd en ongekaleid te blijven. Het veranderen van buitenschrijnwerk mag de historische beeldwaarde van de gevels niet verstoren door zijn materiaalgebruik, maatvoering en/of indeling
Art. 11, §3: In de volgende gevallen is het niet toegelaten om bepleistering, schilderwerk, gevelbekleding of een andere afwerking, al dan niet in combinatie met buitenisolatie aan te brengen op voorgevels:

1° indien de voorgevel is opgetrokken in natuursteen of in polychroom metselwerk, indien de gevel is afgewerkt met simili (d.i. natuursteenimitatie in cement) of indien de gevel decoratieve tegeltableaus bevat;

2° bij gevels met decoratieve elementen zoals stuc-, baksteen-, metaaldecoraties, tenzij het enkel om schilderwerken gaat;

3° indien de gevel deel uitmaakt van een groter architectonisch geheel, bijvoorbeeld bij uniforme rij- of koppelbebouwing of meer-gezinsgebouwen, tenzij dit geheel als één aanvraag wordt ingediend.

Art. 11, §4: Het materiaalgebruik van alle onderdelen van een gebouw, constructie, afsluiting of aanleg moet duurzaam, kwalitatief, constructief en esthetisch verantwoord zijn. Omwille van de stedelijke opwarming, de beeldkwaliteit en de historische waarde moet de lichte kleurstelling van bepleisterde en geschilderde gevels bewaard of hersteld worden. Afwijkingen hierop, vanuit beeldkwaliteit, harmonie en/of historische argumenten moeten gemotiveerd worden conform de bepalingen uit Artikel 3 “Afwijkingsmogelijkheid”.

- In addition, articles 7 and 8 prescribe that large projects and iconic projects need to be presented to the Urban Aesthetics Commission (*Welstandscommissie*). The iconic aspect may refer to the scope of the project, the scale, the location, ... Article 8 clarifies that every building permit application relating to a building of 50m or higher needs to be presented to this commission. The suitability of a function for this location and the quality, both at the architectural level as at the level of the urban ensemble, will be formally assessed for these projects.

Art. 7, §1 du Code de l’Urbanisme : Binnen de algemene opdracht van het college van burgemeester en schepenen als vergunningverlenende of adviserende overheid worden bijzondere beeldbepalende stedenbouwkundige vergunningsaanvragen onderworpen aan een welstandsadvies, dat wordt opgemaakt en begeleid door de stadsbouwmeester en/of de welstandscommissie. Het verslag van de commissie kan ook de minderheidsstandpunten inhouden. Het welstandsadvies wordt opgenomen in de beslissing van het college omtrent de stedenbouwkundige vergunningsaanvraag.

Art. 8, §1 du Code de l’Urbanisme : Elke aanvraag tot het verkrijgen van een stedenbouwkundige vergunning voor de realisatie van een gebouw hoger dan 50 meter is vooraf voor advies voorgelegd aan de Gecoro en de welstandscommissie

Art. 8, §2: Specifiek voor de mogelijke impact die deze gebouwen hebben door hun hoogte, worden deze beoordeeld en afgewogen op basis van:

- 3° criteria voor de locatiegeschiktheid zoals: de impact op het stedelijk functioneren, het stadsbeeld, mobiliteit en*

milieueffecten (zoals wind, lucht en geluid, licht- en zonnetoetreding, energie, biodiversiteit)

4° criteria voor de architecturale geschiktheid zoals: de beeldkwaliteit, de verblijfskwaliteit, keuze-architectuur en modal-split, duurzaamheid.

➔ The Building Code proposes a number of rules and principles that will help to control developments. They include the rule of harmony, the principle of respect for the current spatial capacity of an environment, and the idea that a valuable façade and its finishing need to be preserved. Moreover, large and iconic projects need to be presented to the Urban Aesthetics Commission. The suitability of a function for this location and the quality, both at the architectural level as at the level of the urban ensemble, will be formally assessed for these projects, before issuing a permit.

IV. Additional instruments to be considered?

TRANSITION ZONE

The new Immovable Heritage decree, approved by Flemish Parliament on July 12, 2013, introduced the 'transition zone' (« *overgangszone* »), a new tool offering an additional form of protection to listed properties and areas. This transition zone is defined as "a limited ground surface that supports the heritage value of an archaeological site, monument, cultural-historical landscape or conservation area;" (art. 2.1., °42).

The Flemish government has looked into the possibility to add a transition zone around the maison Guiette. Unfortunately, this search has revealed a number of disadvantages:

- The buffer zone that is currently proposed does not correspond to the definition of transition zone. It is hard to explain, for example, that the three apartment buildings behind the maison Guiette support the heritage value of the house.
- In a densely populated environment, there is a real risk that someone would lodge an appeal against the protection of a transition zone, since people may find it difficult to understand why.
- Legally, it was never foreseen to add a transition zone to already listed properties. The only way to provide a transition zone is in the frameworks of a protection procedure of a monument, cultural-historical landscape etc. This means the protection as a monument of the maison Guiette would have to be renewed entirely.

SPATIAL IMPLEMENTATION PLAN (SIP)/ HERITAGE LANDSCAPE

For a number of world heritage properties located in Flanders, the current buffer zones are clearly lacking (asymmetrical, too small, ...). In order to solve this situation, the government of Flanders has recently conducted a study into the available legal

instruments to solve this unfortunate situation, and that may offer the desired protection where it is currently insufficient.

This study has shown that a Spatial Implementation Plan (SIP) with 'heritage'-overprint would be more appropriate than a transition zone. This instrument is situated at the intersection of spatial planning and heritage. These SIP's with 'heritage'-overprint are designated heritage landscape (« erfgoedlandschappen »). They are defined in the Immovable Heritage decree of July 12, 2013, in particular:

- *art 2.1., 24° du décret relatif au patrimoine immobilier : une zone qui, du fait de sa valeur patrimoniale conformément à la réglementation en vigueur, a été reprise dans un plan d'exécution spatiale sur la base d'un plan directeur de patrimoine immobilier ou d'un inventaire établi;*
- *art. 6.5.1. du décret relatif au patrimoine immobilier : Sur la base de plans directeurs de patrimoine immobilier, visés à l'article 7.1.1, ou d'un inventaire établi, visé à l'article 4.1.1, des paysages patrimoniaux peuvent être délimités dans des plans d'exécution spatiale.*
Art. 6.5.2. Quiconque effectue des travaux ou pose des actes ou octroie un marché à ce propos veillera le plus possible à respecter les valeurs patrimoniales d'un paysage patrimonial tel que déterminé dans le plan d'application.
Le Gouvernement flamand peut en arrêter les modalités.
Art. 6.5.3. L'autorité administrative ne peut pas entreprendre des travaux ni poser des actes, ni accorder l'autorisation ou un permis pour une activité susceptible de détruire un paysage patrimonial en tout ou en partie ou de provoquer des dommages significatifs à des valeurs patrimoniales.
L'autorité administrative doit, dans toutes ses décisions concernant ses propres travaux, concernant l'octroi d'un marché à ce propos ou un propre plan ou une ordonnance susceptibles d'avoir un impact préjudiciable sur le patrimoine rural :
1° éviter qu'il ne soit porté atteinte aux valeurs patrimoniales telles que déterminées dans le plan directeur de patrimoine immobilier d'application ;
2° limiter le plus possible les dommages significatifs aux valeurs patrimoniales en prenant des mesures visant à limiter les dommages.
L'autorité administrative indique, dans toutes ses décisions, la façon dont elle a tenu compte des obligations visées dans le présent article.
Le Gouvernement flamand en arrête les modalités.
Art. 6.5.4. Cette section n'entrave en rien l'application de prescrits plus stricts pour les biens protégés.

➔ Transition zones are not particularly suited for the situation of the maison Guiette. SIP's with 'heritage'-overprint are more suitable, although these particularly make up a solution for the deficient buffer zones of older Flemish world heritage properties (béguinages, belfries, ...). Nevertheless, it should not be excluded that a heritage landscape will be developed in the long run for the buffer

zone around maison Guiette – even if additional protective measures don't seem necessary (see point I). But at this moment, the Flemish government prefers to give the older world heritage properties priority.

Summary table of the criteria of selection applied to all of Le Corbusier's buildings

Name of the work	Significant component in terms of the OUV of the Property	Satisfactory degree of authenticity	Satisfactory state of conservation	Protected under national law
1905-1907 Villa Fallet La Chaux-de-Fonds ; Suisse	NO	NO	YES	YES
1908-1909 Villa Stotzer La Chaux-de-Fonds ; Suisse	NO	NO	YES	YES uniquement les extérieurs
1908-1909 Villa Jacquemet La Chaux-de-Fonds ; Suisse	NO	NO	YES	YES uniquement les extérieurs
1912 Villa Favre-Jacot Le Locle ; Suisse	NO	YES	YES	YES uniquement les extérieurs
1912 Villa Jeanneret-Perret La Chaux-de-Fonds ; Suisse	NO	YES	YES	YES
1916 Maison Schwob La Chaux-de-Fonds ; Suisse	NO	YES	YES	YES
1916 Cinéma La Scala La Chaux-de-Fonds ; Suisse	NO	NO	NO	YES façade arrière uniquement
1917 Château d'eau de Podensac France	NO	NO	NO	YES
1917 Cité ouvrière de Saint-Nicolas d'Alger ; France	NO	NO	NO	YES
1922-1923 Villa Besnus Vaucresson ; France	NO	NO	NO	NO
1923 <i>Maisons La Roche et Jeanneret</i> Paris ; France	YES	YES	YES	YES
1923 <i>Petite villa au bord du lac Léman</i> Suisse	YES	YES	YES	YES
1923-1924 Résidence-atelier Ozenfant Paris ; France	NO	YES	YES	YES
1923-1925 Résidence-atelier Lipchitz Boulogne Billancourt ; France	NO	YES	YES	YES
1923-1925 Cité ouvrière de Lège France	NO	YES	NO	YES
1923-1926 Résidence-atelier Miestchaninoff Boulogne Billancourt ; France	NO	YES	YES	YES

Name of the work	Significant component in terms of the OUV of the Property	Satisfactory degree of authenticity	Satisfactory state of conservation	Protected under national law
1924 <i>Cité Frugès</i> Pessac ; France	YES	YES	YES	YES
1924-1928 Villa Planeix Paris ; France	NO	YES	YES	YES
1926 <i>Maison Guiette</i> Anvers ; Belgique	YES	YES	YES	YES
1926 Maison Cook Boulogne Billancourt ; France	NO	NO	YES	YES
1926-1928 Villa Stein et de Monzie Garches ; France	YES	NO	NO	YES
1927 <i>Maisons de la Weissenhof-Siedlung</i> de Stuttgart ; Allemagne	YES	YES	YES	YES
1928-1931 <i>Villa Savoye et loge du jardinier</i> Poissy ; France	YES	YES	YES	YES
1928-1931 Villa Baizeau Carthage ; Tunisie	NO	YES	NO	NO
1929 Cité de Refuge de l'Armée du Salut Paris ; France	NO	NO	NO	YES
1929 Asile flottant de l'Armée du Salut Paris ; France	NO	NO	NO	YES
* 1929-1935 Centrosouz Moscou ; Russie	YES	YES	NO	NO
1930 <i>Immeuble Clarté</i> Genève ; Suisse	YES	YES	YES	YES
1930 ** Pavillon suisse à la Cité universitaire de Paris ; France	YES	YES	YES	YES
1931 <i>Immeuble locatif à la Porte Molitor</i> Paris ; France	YES	YES	YES	YES
1929-1931 Villa de Mme de Mandrot Le Pradet ; France	NO	YES	YES	YES
1934-1935 Villa Henfel La Celle Saint-Cloud ; France	NO	NO	NO	NO

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** Élément signifiant au regard de la VUE mais dont les qualités sont déjà présentes dans d'autres éléments retenus.

Name of the work	Significant component in terms of the OUV of the Property	Satisfactory degree of authenticity	Satisfactory state of conservation	Protected under national law
1935 Villa Le Sextant La Palmyre ; France	NO	YES	YES	NO
1945 <i>Unité d'habitation</i> Marseille ; France	YES	YES	YES	YES
1946 <i>Manufacture à Saint-Dié</i> Saint-Dié-des-Vosges ; France	YES	YES	YES	YES
1948-1953 Unité d'habitation Rezé-les-Nantes ; France	NO	YES	YES	YES
1949 <i>Maison du Docteur Curutchet</i> La Plata ; Argentine	YES	YES	YES	YES
1950 <i>Chapelle Notre-Dame-du-Haut</i> Ronchamp ; France	YES	YES	YES	YES
1951 ** Maisons Jaoul Neuilly ; France	YES	YES	YES	YES
1951 <i>Cabanon de Le Corbusier</i> Roquebrune-Cap-Martin ; France	YES	YES	YES	YES
1952 <i>Complexe du Capitole</i> Chandigarh ; Inde	YES	YES	YES	YES
1950-1965 Autres œuvres de Le Corbusier Chandigarh ; Inde	YES	NO	YES	NO
1953 <i>Couvent Ste-Marie-de-la-Tourette</i> Éveux ; France	YES	YES	YES	YES
1953-1959 Pavillon du Brésil Paris ; France	NO	NO	YES	YES
1953-1973 Gymnase Bagdad ; Irak	NO	NO	YES	NO
* 1954 Palais des filateurs Ahmedabad ; Inde	YES	YES	YES	NO
1955 <i>Musée National des Beaux-Arts de l'Occident</i> Tokyo ; Japon	YES	YES	YES	YES

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Name of the work	Significant component in terms of the OUV of the Property	Satisfactory degree of authenticity	Satisfactory state of conservation	Protected under national law
1955 <i>Maison de la Culture de Firminy</i> Firminy ; France	YES	YES	YES	YES
1953-1969 Centre de récréation du corps et de l'esprit de Firminy – France	YES	NO	YES	YES
1955-1965 Barrage Bhakra ; Inde	NO	NO	YES	NO
* 1956 Villa Sarabhai Ahmedabad ; Inde	YES	YES	YES	NO
* 1956 Villa Shodan Ahmedabad ; Inde	YES	YES	YES	NO
1956-1958 Unité d'habitation Berlin ; Allemagne	NO	YES	YES	YES
1956-1963 Unité d'habitation Briey-en-Forêt ; France	NO	YES	YES	YES
* 1958 Musée Sanskar Kendra Ahmedabad ; Inde	YES	YES	YES	NO
1959-1969 Unité d'habitation Firminy ; France	YES	NO	NO	YES
1960-1962 Écluse Kembs Nifer ; France	NO	YES	YES	YES
* 1960-1963 Carpenter center for visual Arts Cambridge, États-Unis	YES	YES	YES	NO
1964-1967 Centre Le Corbusier « Pavillon de l'Homme » Zürich ; Suisse	NO	NO	YES	YES

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Tableau récapitulatif des critères de sélection appliqués à l'ensemble des réalisations de Le Corbusier

Nom de l'œuvre	Élément signifiant au regard de la VUE du Bien	Degré d'authenticité suffisant	État de conservation suffisant	Protégé au titre de la législation nationale
1905-1907 Villa Fallet La Chaux-de-Fonds ; Suisse	NON	NON	OUI	OUI
1908-1909 Villa Stotzer La Chaux-de-Fonds ; Suisse	NON	NON	OUI	OUI uniquement les extérieurs
1908-1909 Villa Jacquemet La Chaux-de-Fonds ; Suisse	NON	NON	OUI	OUI uniquement les extérieurs
1912 Villa Favre-Jacot Le Locle ; Suisse	NON	OUI	OUI	OUI uniquement les extérieurs
1912 Villa Jeanneret-Perret La Chaux-de-Fonds ; Suisse	NON	OUI	OUI	OUI
1916 Maison Schwob La Chaux-de-Fonds ; Suisse	NON	OUI	OUI	OUI
1916 Cinéma La Scala La Chaux-de-Fonds ; Suisse	NON	NON	NON	OUI façade arrière uniquement
1917 Château d'eau de Podensac France	NON	NON	NON	OUI
1917 Cité ouvrière de Saint-Nicolas d'Algermont ; France	NON	NON	NON	OUI
1922-1923 Villa Besnus Vaucresson ; France	NON	NON	NON	NON
1923 <i>Maisons La Roche et Jeanneret</i> Paris ; France	OUI	OUI	OUI	OUI
1923 <i>Petite villa au bord du lac Léman</i> Suisse	OUI	OUI	OUI	OUI
1923-1924 Résidence-atelier Ozenfant Paris ; France	NON	OUI	OUI	OUI
1923-1925 Résidence-atelier Lipchitz Boulogne Billancourt ; France	NON	OUI	OUI	OUI
1923-1925 Cité ouvrière de Lège France	NON	OUI	NON	OUI
1923-1926 Résidence-atelier Miestchaninoff Boulogne Billancourt ; France	NON	OUI	OUI	OUI

Nom de l'œuvre	Élément signifiant au regard de la VUE du Bien	Degré d'authenticité suffisant	État de conservation suffisant	Protégé au titre de la législation nationale
1924 <i>Cité Frugès</i> Pessac ; France	OUI	OUI	OUI	OUI
1924-1928 Villa Planeix Paris ; France	NON	OUI	OUI	OUI
1926 <i>Maison Guiette</i> Anvers ; Belgique	OUI	OUI	OUI	OUI
1926 Maison Cook Boulogne Billancourt ; France	NON	NON	OUI	OUI
1926-1928 Villa Stein et de Monzie Garches ; France	OUI	NON	NON	OUI
1927 <i>Maisons de la Weissenhof-Siedlung</i> de Stuttgart ; Allemagne	OUI	OUI	OUI	OUI
1928-1931 <i>Villa Savoye et loge du jardinier</i> Poissy ; France	OUI	OUI	OUI	OUI
1928-1931 Villa Baizeau Carthage ; Tunisie	NON	OUI	NON	NON
1929 Cité de Refuge de l'Armée du Salut Paris ; France	NON	NON	NON	OUI
1929 Asile flottant de l'Armée du Salut Paris ; France	NON	NON	NON	OUI
* 1929-1935 Centrosyuz Moscou ; Russie	OUI	OUI	NON	NON
1930 <i>Immeuble Clarté</i> Genève ; Suisse	OUI	OUI	OUI	OUI
1930 ** Pavillon suisse à la Cité universitaire de Paris ; France	OUI	OUI	OUI	OUI
1931 <i>Immeuble locatif à la Porte Molitor</i> Paris ; France	OUI	OUI	OUI	OUI
1929-1931 Villa de Mme de Mandrot Le Pradet ; France	NON	OUI	OUI	OUI
1934-1935 Villa Henfel La Celle Saint-Cloud ; France	NON	NON	NON	NON

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Nom de l'œuvre	Élément signifiant au regard de la VUE du Bien	Degré d'authenticité suffisant	État de conservation suffisant	Protégé au titre de la législation nationale
1935 Villa Le Sextant La Palmyre ; France	NON	OUI	OUI	NON
1945 <i>Unité d'habitation</i> Marseille ; France	OUI	OUI	OUI	OUI
1946 <i>Manufacture à Saint-Dié</i> Saint-Dié-des-Vosges ; France	OUI	OUI	OUI	OUI
1948-1953 Unité d'habitation Rezé-les-Nantes ; France	NON	OUI	OUI	OUI
1949 <i>Maison du Docteur Curutchet</i> La Plata ; Argentine	OUI	OUI	OUI	OUI
1950 <i>Chapelle Notre-Dame-du-Haut</i> Ronchamp ; France	OUI	OUI	OUI	OUI
1951 ** Maisons Jaoul Neuilly ; France	OUI	OUI	OUI	OUI
1951 <i>Cabanon de Le Corbusier</i> Roquebrune-Cap-Martin ; France	OUI	OUI	OUI	OUI
1952 <i>Complexe du Capitole</i> Chandigarh ; Inde	OUI	OUI	OUI	OUI
1950-1965 Autres œuvres de Le Corbusier Chandigarh ; Inde	OUI	NON	OUI	NON
1953 <i>Couvent Ste-Marie-de-la-Tourette</i> Éveux ; France	OUI	OUI	OUI	OUI
1953-1959 Pavillon du Brésil Paris ; France	NON	NON	OUI	OUI
1953-1973 Gymnase Bagdad ; Irak	NON	NON	OUI	NON
* 1954 Palais des filateurs Ahmedabad ; Inde	OUI	OUI	OUI	NON
1955 <i>Musée National des Beaux-Arts de l'Occident</i> Tokyo ; Japon	OUI	OUI	OUI	OUI

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Nom de l'œuvre	Élément signifiant au regard de la VUE du Bien	Degré d'authenticité suffisant	État de conservation suffisant	Protégé au titre de la législation nationale
1955 <i>Maison de la Culture de Firminy</i> Firminy ; France	OUI	OUI	OUI	OUI
1953-1969 Centre de récréation du corps et de l'esprit de Firminy – France	OUI	NON	OUI	OUI
1955-1965 Barrage Bhakra ; Inde	NON	NON	OUI	NON
* 1956 Villa Sarabhai Ahmedabad ; Inde	OUI	OUI	OUI	NON
* 1956 Villa Shodan Ahmedabad ; Inde	OUI	OUI	OUI	NON
1956-1958 Unité d'habitation Berlin ; Allemagne	NON	OUI	OUI	OUI
1956-1963 Unité d'habitation Briey-en-Forêt ; France	NON	OUI	OUI	OUI
* 1958 Musée Sanskar Kendra Ahmedabad ; Inde	OUI	OUI	OUI	NON
1959-1969 Unité d'habitation Firminy ; France	OUI	NON	NON	OUI
1960-1962 Écluse Kembs Nifer ; France	NON	OUI	OUI	OUI
* 1960-1963 Carpenter center for visual Arts Cambridge, États-Unis	OUI	OUI	OUI	NON
1964-1967 Centre Le Corbusier « Pavillon de l'Homme » Zürich ; Suisse	NON	NON	OUI	OUI

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