

TREEHOUSE

RODGERS CREEK - AREA 6 Lot 1

DEVELOPMENT PERMIT APPLICATION: REPORT TO COUNCIL

ADDRESS: Rodgers Creek Area 6 - Lot 1

May 14 2018

Area 6 Lot 1 - Rodgers Creek

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Contents

1 Site (Rodgers Creek Development)

Location, Zoning & Connectivity
Concentration of Development

2 Pre-Design

Existing Conditions
Site Opportunities

3 Landscape Response

The Parti
Connectivity

4 Architectural Response

Concept Sketch
Architectural Framework
Engagement with Hillside

5 Sustainability

Strategy
Climate
Analysis

6 Program

Amenities/Circulation
Housing Modules

7 Materiality

Appendices

APPENDIX A: Built Green Project Checklist/Energy Model Data

APPENDIX B: Preliminary Energy Modeling Analysis

APPENDIX C: Site Survey

APPENDIX D: Landscape Documents

APPENDIX E: Architectural Documents

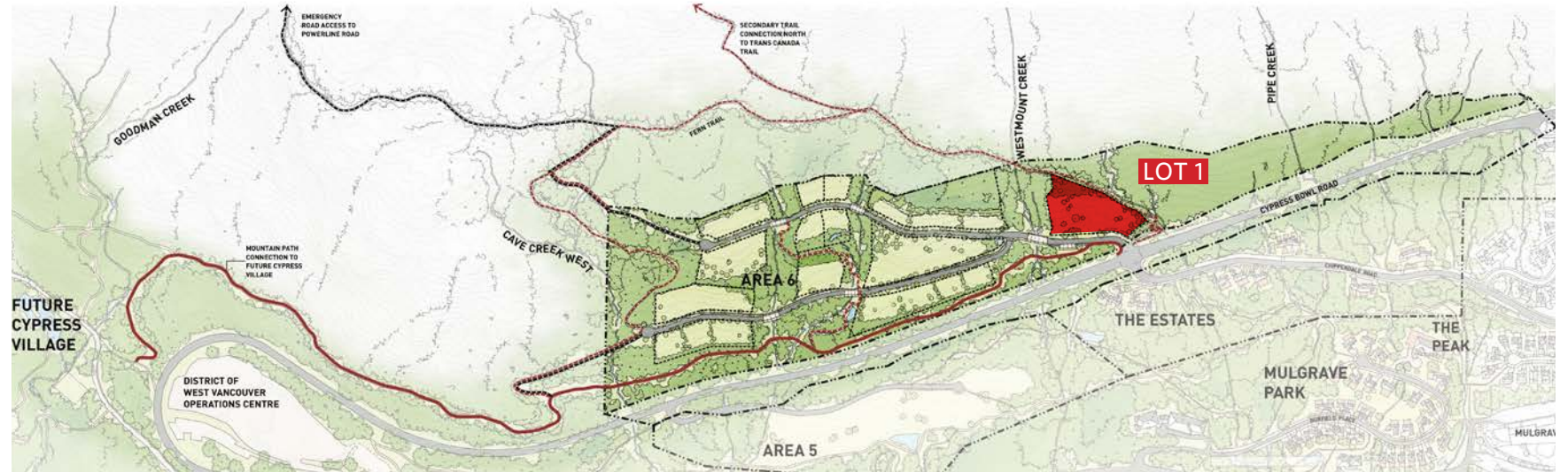
APPENDIX F: Fire Access Narrative

1 Rodgers Creek Development

Location & Zoning

The Rodgers Creek Neighbourhood is located on the slopes of Cypress Mountain on the North Shore of the Burrard Inlet, overlooking the City of Vancouver. Accessed by the Cypress Bowl interchange off Highway 1 the neighbourhood is located roughly 15 minutes from Downtown Vancouver and an hour from Whistler.

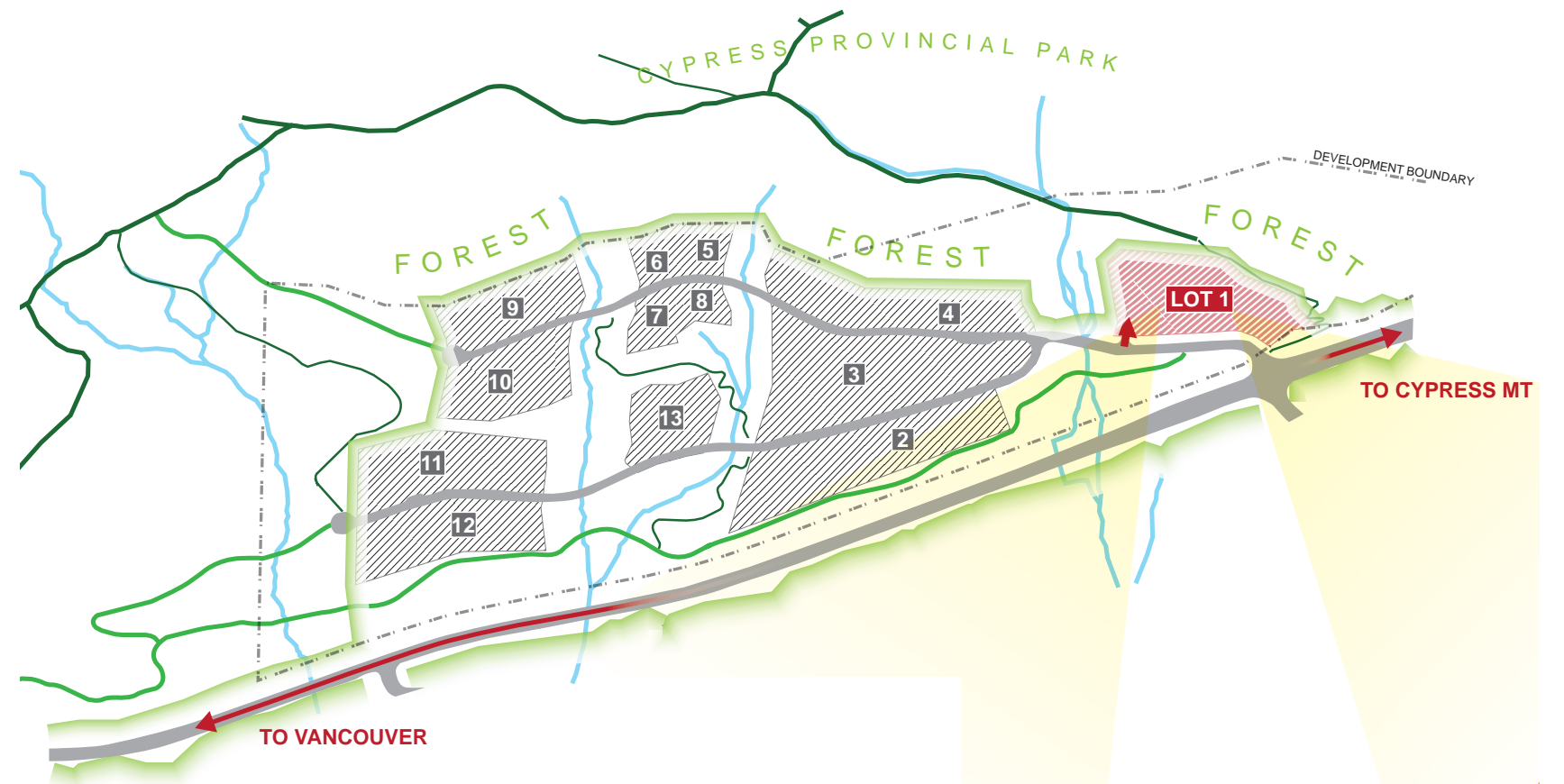
Rodgers Creek is divided into six distinct areas of development. Area 6 is the second last development area in the Rodgers Creek Area Plan and is located 900 meters from the future Cypress Village Area Plan. Throughout Rodgers Creek, British Pacific Properties is developing several mountain trails that connect the site into a larger pedestrian network. This makes Area 6 of Rodgers Creek walkable to the amenities, shops, restaurants, and offices that serve the upper levels of West Vancouver. living for the residents of Rodgers Creek and West Vancouver alike.



Connectivity

Just to the South of the site, the Mountain Path is a 3km pedestrian spine that connects all of the areas of Rodgers Creek east to west and to the future Cypress Village. The wide path with gentle gradients is intended to provide access for pedestrians and cyclists and is based on the Whistler Valley Trail. Just above the site to the North, the Fern forest fire access road provides mountain bikers access to several mountain bike paths throughout the area.

These trails are integrated into the overall trails system and provides linkages to several secondary trails, parks, viewpoints and natural site features. The trail network provides access for pedestrians, hikers, cyclists and mountain bikers exploring the forest trails; encouraging an active outdoor lifestyle and healthy living for the residents of Rodgers Creek and West Vancouver alike.



Concentration of Development

In response to the unique existing natural setting of the area, a deliberate move has been made to concentrate development in specific zones within the natural landscape to minimize disturbance. Key natural features such as the creek system, the existing forest, and topography have been identified as significant attributes within the setting. As such, a concerted effort has been made to minimize the size of the development parcels and carefully integrate them within the landscape setting to reduce sprawl. The undisturbed swaths of landscape that remain in tact act as the connective tissue that ties the various parcels of development into one cohesive development strategy. In doing so, the landscape is not only preserved and enhanced but presented as a unique feature and distinguishing characteristic of this development.



2 Pre-Design

Existing Conditions

Lot 1 is the first, and most visible lot in Area 6, a neighbourhood composed of ground-oriented and apartment units spread over 13 lots, totaling 269 units. The site is characterized by mature second growth forest with rock outcrops and views to the water, islands, and city. The site is bordered by a natural tree preserve with Cypress Bowl Ski Area at the summit.

With an elevation of 1,000 ft+ above sea level and situated on a steep mountain slope, the site offers exceptional long-range views to the south. Panoramic water views extend from the East to the West and include highlights of Port Mann Bridge, Mount Baker, Point Grey and Vancouver Island. The forest view to the North is equally impressive and gives glimpses of the forest floor and tree canopy on a more intimate scale. The contrast between mountain and water is a unique opportunity offered by the site itself.

The shape of the lot orients its primary axis East-West, this orientation sets up great opportunities for not only views, but both solar and prevailing wind orientation. The large trees to the East, North, and West are impressive, topping out at 125-150 feet tall. Minimizing impact to the surrounding forest is a key goal for the project.

Additionally, the geology of the site is unique. With a small layer of topsoil and solid bedrock below, the site brings opportunities to sculpt and form this bedrock in interesting ways. Areas where the bedrock can be used as landscape features and retaining walls will integrate into the building.

Zone: CD-3.

Site Area: 96,229 sf site

Allowable Coverage: 35%

Height Limit: 37.9m



Site Opportunities

Views

The views out to the surrounding areas of the Salish Sea, Mt Baker and the Coast Mountains, are abundant. Localized views highlight, Port Mann Bridge, Mount Baker, Point Grey and Vancouver Island

Bringing in Nature

While the long range views are an opportunity not to be missed, there is equal opportunity in connecting to the forest, both visually and physically. The building will open to the site, blurring distinction between inside and outside, building and nature.

Cross Ventilation

The shape and topography of the lot inform the orientation of the building with its length running East/West. This allows an opportunity to maximize cross ventilation against the North/South prevailing winds. Catching these seasonal breezes for cross ventilation increases the sustainability of the building and enhances the quality of life of its inhabitants.

Micro Level Landscape Features

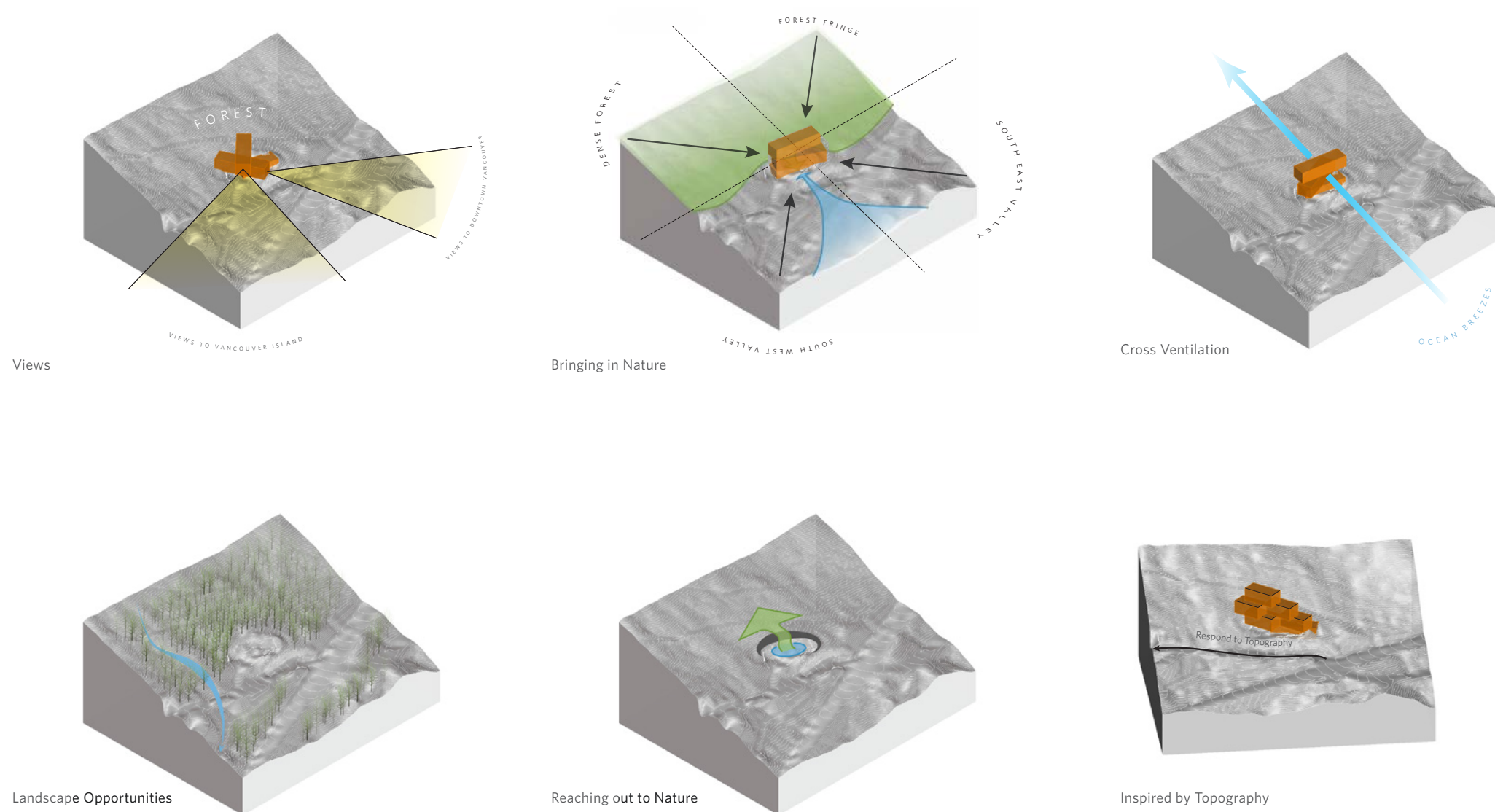
The site presents unique experiential moments for which our design interventions are to respond. Westmount Creek, Rock Outcroppings, Fern Trail, sounds of the tree canopy and flora at the ground are some of the site's defining characteristics.

Reaching out to Nature

Opportunities for outdoor rooms, courtyards, and moments of refuge are to extend into the natural setting.

Inspired by Topography

The topography of the site is an asset. The steepness of the site affords greater and greater views as you rise up the hillside. It also provides many floors with an opportunity to have at grade courtyards. The massing of building should engage and nestle into the landscape as much as possible while maximizing opportunities to step out onto the landscape.



3 Landscape Response

The Parti

The extraordinary contextual landscapes, both immediate and distant which embrace the site have been inspirational in our approach to the landscape. The monumental mountainside with its sculpted rocky terrain and sweeping forest create a sense of enclosure and refuge while the expansive views to the water offer an incredible sense of prospect. The juxtaposition and interplay between these two landscapes is the basis for our landscape response.

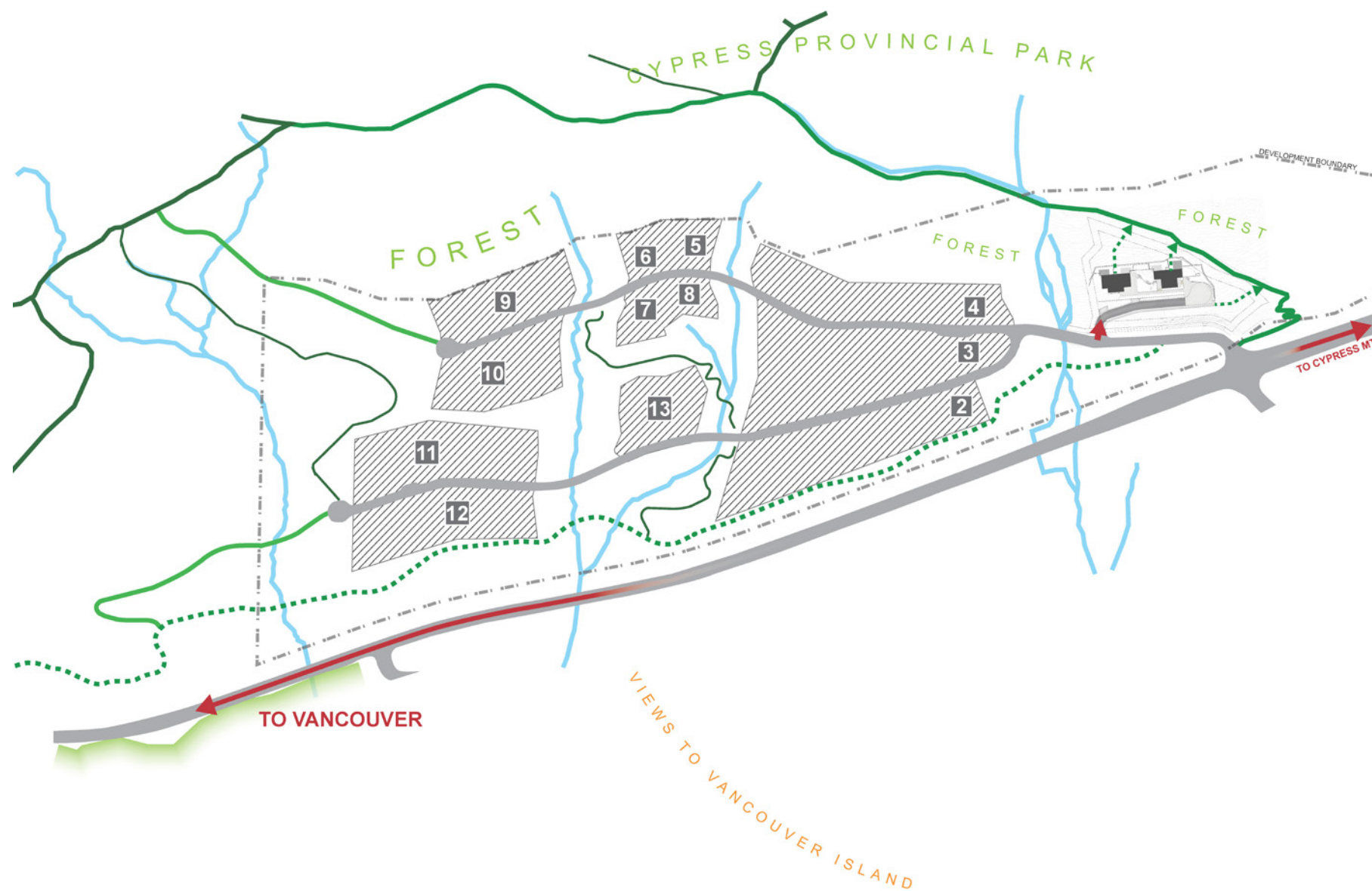
The landscape design for the site is a composition comprised of two layers. The first is the external layer which embraces and actively engages with the existing forested, rocky terrain. In distinct locations the rocky terrain is selectively carved to accept the building while in other areas the rocky terrain prominently positions itself to allow the building to recede. Extensive bands of vegetation and landform wrap around the building and act as the connective tissue which bring the site and building together in a seamless composition.

The second is the internal layer which attempts to draw the surrounding contextual landscape into the site. Centrally located between the two towers is an intimately scaled courtyard. The courtyard design is based on the abstraction of the surrounding landscape which is manifested in a simple composition comprised of: water, a peninsula, and rock outcroppings.

A shallow pool of water which extends beyond the courtyard around the building allows the building entrance to appear as a floating island. As one moves across the threshold of water a glimpse of the sculptural peninsula within the courtyard can be seen. Once in the courtyard, the full extent of the peninsula is revealed against the dramatic backdrop of the chiseled rock-face. Rock outcroppings and stepping stones are positioned across the courtyard to provide informal access throughout the space. The courtyard is conceived as a serene and poetically composed visual landscape which can be experienced from a number of different vantage points but it also acts as an extension of the internal amenity space and offers a contemplative and serene place to occupy and gather.



rendered site plan



Connectivity

Central to the landscape concept is to reinforce one of the key overriding design principles for the development which is to ensure connectivity throughout the Roger's Creek development area and to the contextual landscape.

The design of the landscape as well as the building has been influenced by the existing framework of trails surrounding the site. Specific design responses such as bridges extending from the building and a new path at the arrival court both lead to the existing trails and create opportunities for the site to connect into the extensive existing trail network which further extends into the overall Roger's Creek development.

connectivity diagram

- water course
- existing trail
- - - new trail

4 Architectural Response

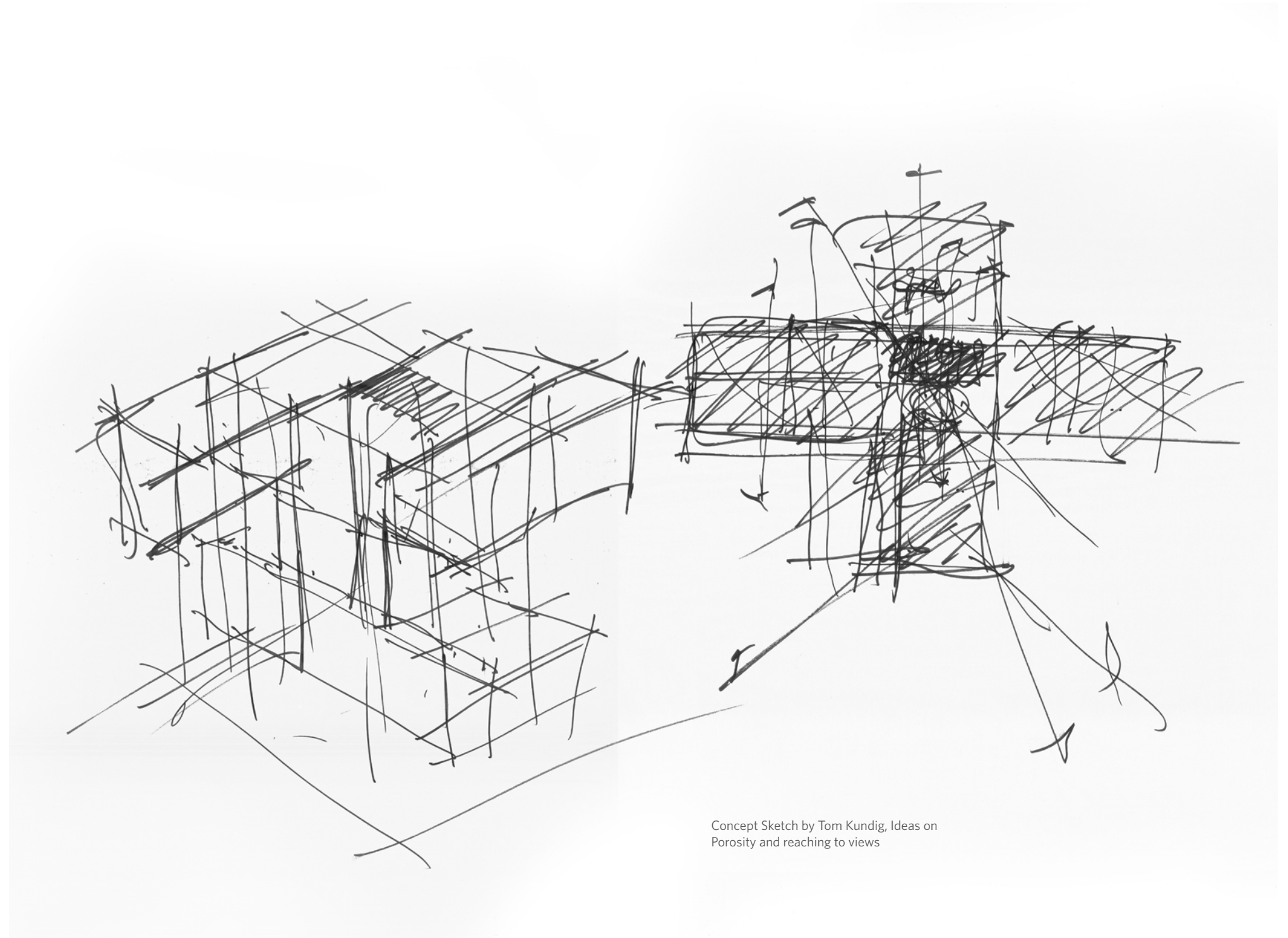
Designed as a new flagship architecture for the Rodgers Creek Area Plan, this project is a new 37 Unit 92,000sf 12 story multi-family development. Key drivers are maximizing dramatic views from every unit, developing an architecture that both engages and blends into the natural environment of the mountainside, and a strong focus on sustainable building.

The design approach is founded on a collection of experiences, all of which spawn from reactions to the site. The form organically configures itself as a responsive housing community from which its articulation expresses a scale of the individual and provides visual cues to the scale of each residence. Units will cantilever off a central core; wherever a unit cantilevers out, opportunities for larger deck spaces become available above. The cantilevers will also provide broader access to views and natural ventilation.



Pierre Koenig, Stahl House, 1960 - Los Angeles

"What does Vancouver's version of the case study home look like?"



Concept Sketch by Tom Kundig, Ideas on Porosity and reaching to views

Architectural Framework

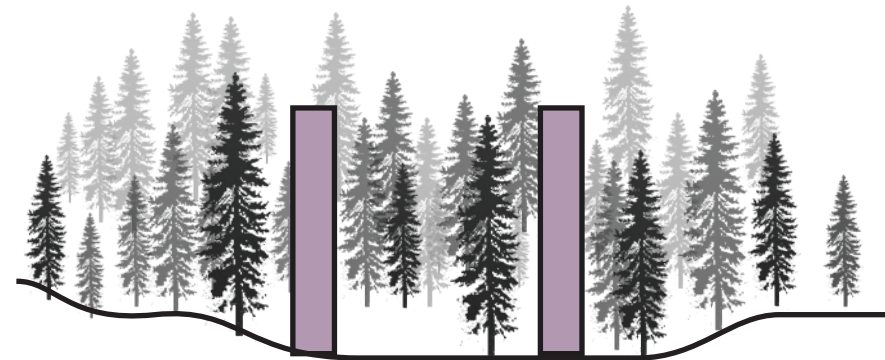
Rather than beginning with a single impervious mass, the architecture is an assemblage of vertical masses, scaled to the height to the surround trees. The process is inspired by the Ecology of a tree, from which two Service Trunks reach out to capture daylight and fresh air. Spaces grow and extend organically, reaching southward to the view and northward engaging with the site. These shoots form physical connections to nature, creating outdoor living spaces and at grade connections. On the top three floors, the units branch out to form a canopy in the sky. These units will be caught between the forest and the water, offering amazing views and experiences throughout the units.

Attention is being paid to minimize the footprint on the ground plane which allows the natural landscape to return around the towers. The parkade becomes the defining limits of the excavation, which will be fully below grade. On top of the parking deck, natural landscape will be restored as it reengages onto the courtyard between the two trunks.

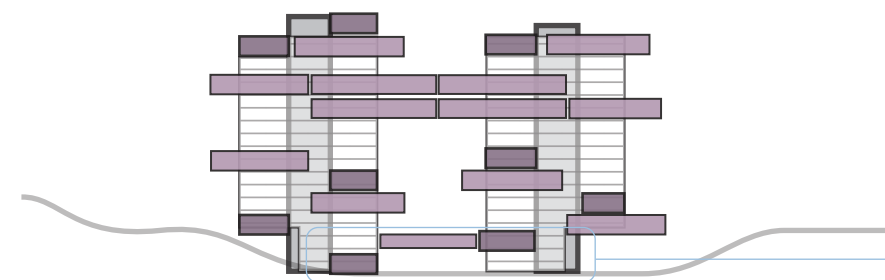
Programmatically, the core form of the trunk is established by a stacking of the standard Two Bedroom Unit typologies. The Three Bedroom Units become the additional projections that cantilever out their living spaces to accommodate the extra bedroom. This manifests as a bridge in the larger canopy bridge form. All of these projections offer the unit above a benefit of enlarging the outdoor room of the deck. This extension out into the site breaks down the edge of the form that connects back to the natural surroundings in a meaningful way.



Design in an additive rather than subtractive process



Establish trunks as an armature for the architecture in proportion of surrounding trees



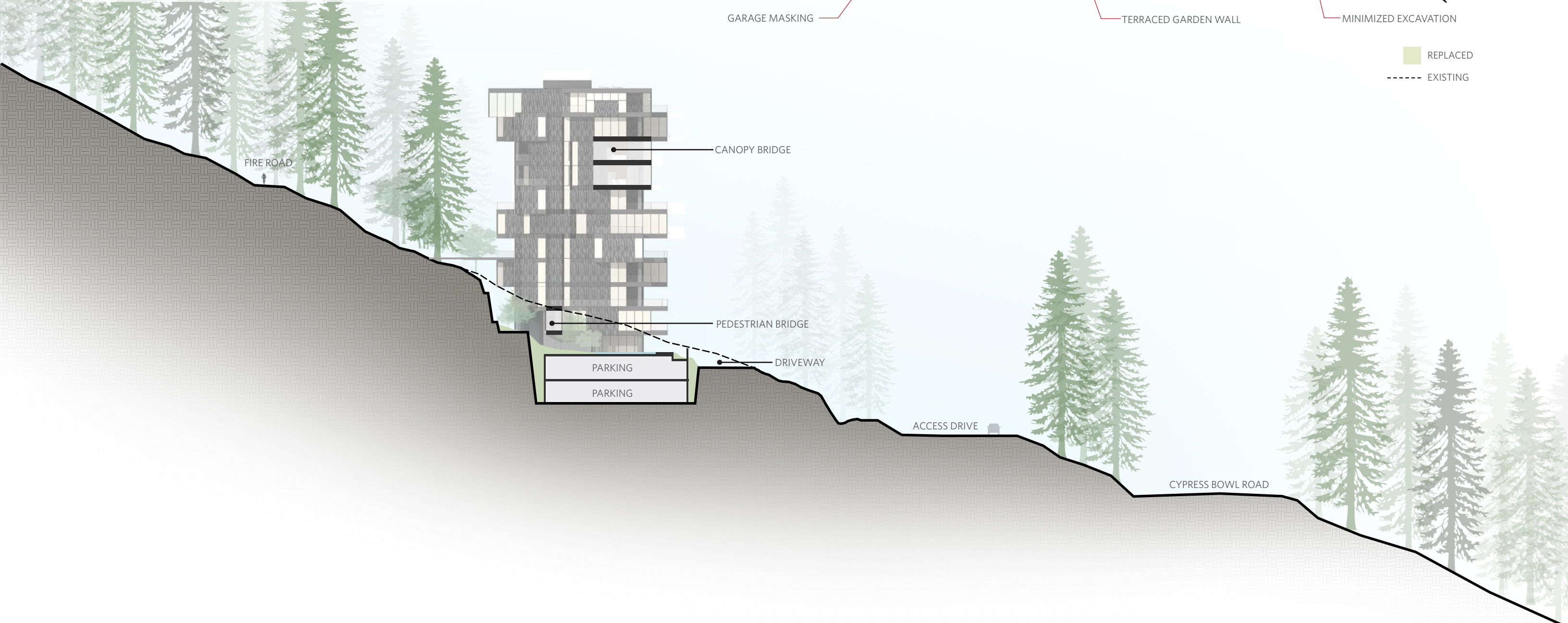
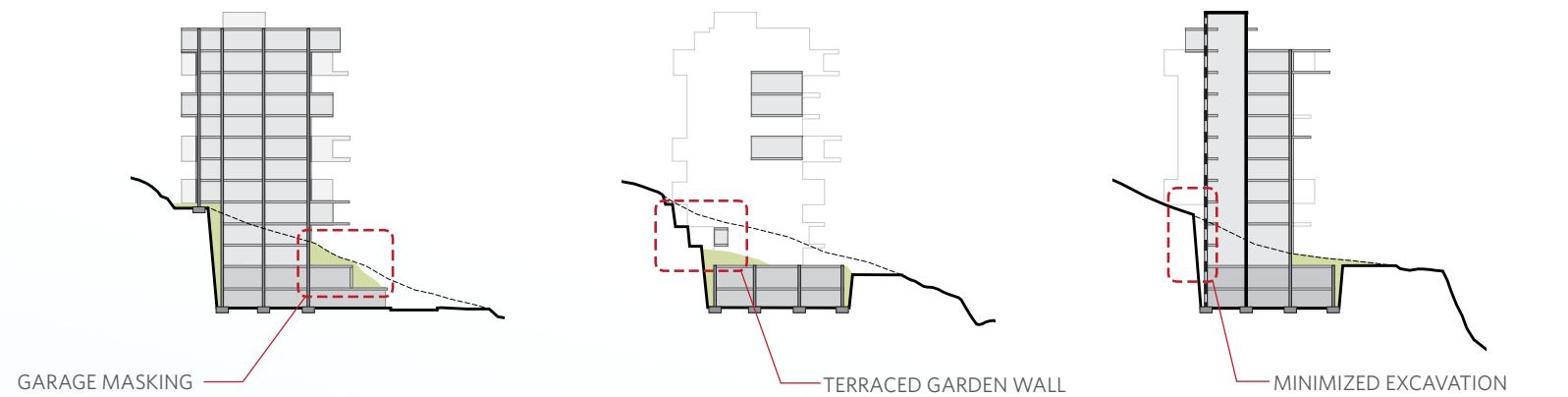
Establish diversity with minimum footprint



Landscape as podium; allow landscape to flow through building & site

Engagement with Hillside

How the building sits into the hillside and how the ground floor interacts with the natural excavated hillside has been given careful attention. To accommodate vehicular parking, the site will need to be excavated. Portions of the building will bear structurally on benches in the bedrock, minimizing the required excavation and maximizing the preservation of the natural landscape. As the natural cut rock face of the excavation reveals itself, it will be highlighted as a feature of the design; landscape and architectural elements will engage the face of these cliffs throughout the site.





At the East, North, and West faces, the existing slope of the site raises almost three stories from the central courtyard, allowing levels 1 through 4 to have at-grade access to the site. Where possible, residences will have at-grade garden patios. This allows units that would have been typically buried in a retaining wall to have the same cross ventilation, access to light, and indoor/outdoor access that the upper units are afforded.

To minimize the environmental impact of the excavation, the rock materials generated from excavation will be processed and re-used for road fill with our site servicing program further up road H. This minimizes extensive trucking of materials on and off the site while making use of locally generated materials in the construction program.



View from West Cypress Bowl Road



View from East Cypress Bowl Road



View from East Cypress Bowl Road



View from West Cypress Bowl Road