The House as a Screen: A Transition Between Two Landscapes

by
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Abstract

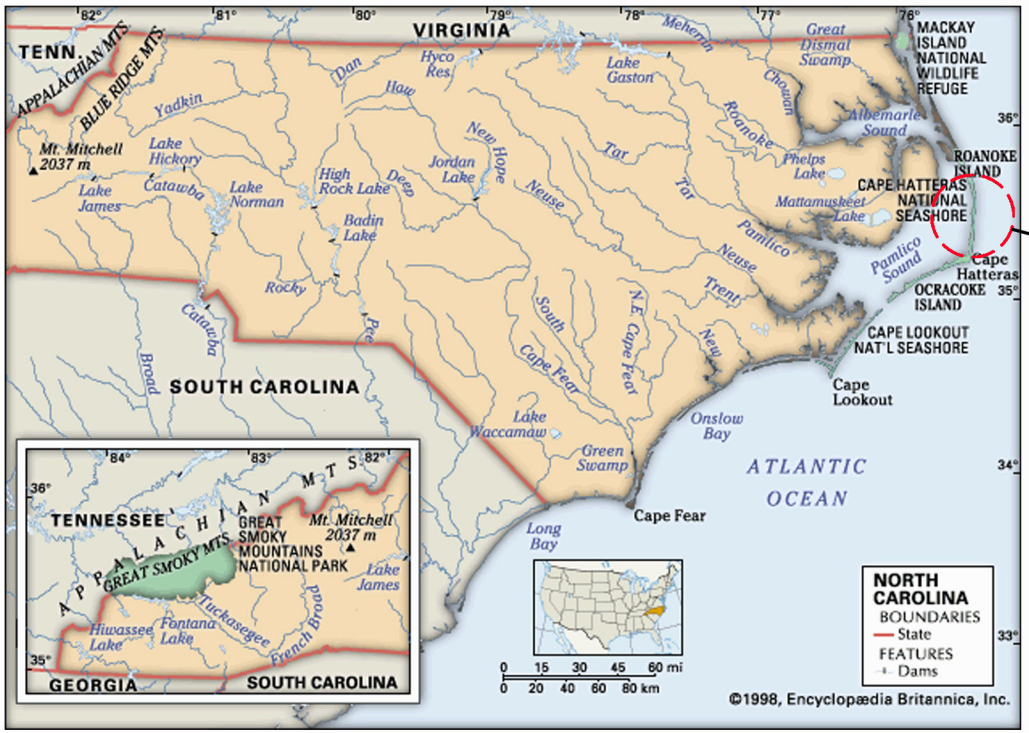
When I walk over Hatteras Island, I experience three things: the sand beneath my feet, the Ocean toward the East, and the Sound toward the West. Each has different qualities yet all three can be experienced simultaneously. It is my intention not to obstruct this connection, but rather to accentuate it. I will design a dwelling that will tie the sand, the Ocean, and the Sound together. It will be a reflection of the qualities of each of these natural elements. The dwelling will take on the characteristics of a screen, with many different levels of permeability, while providing the necessary amount of livable space.

Afternoon shadows over the dunes on Hatteras Island

photo by: Nicholas Simpson

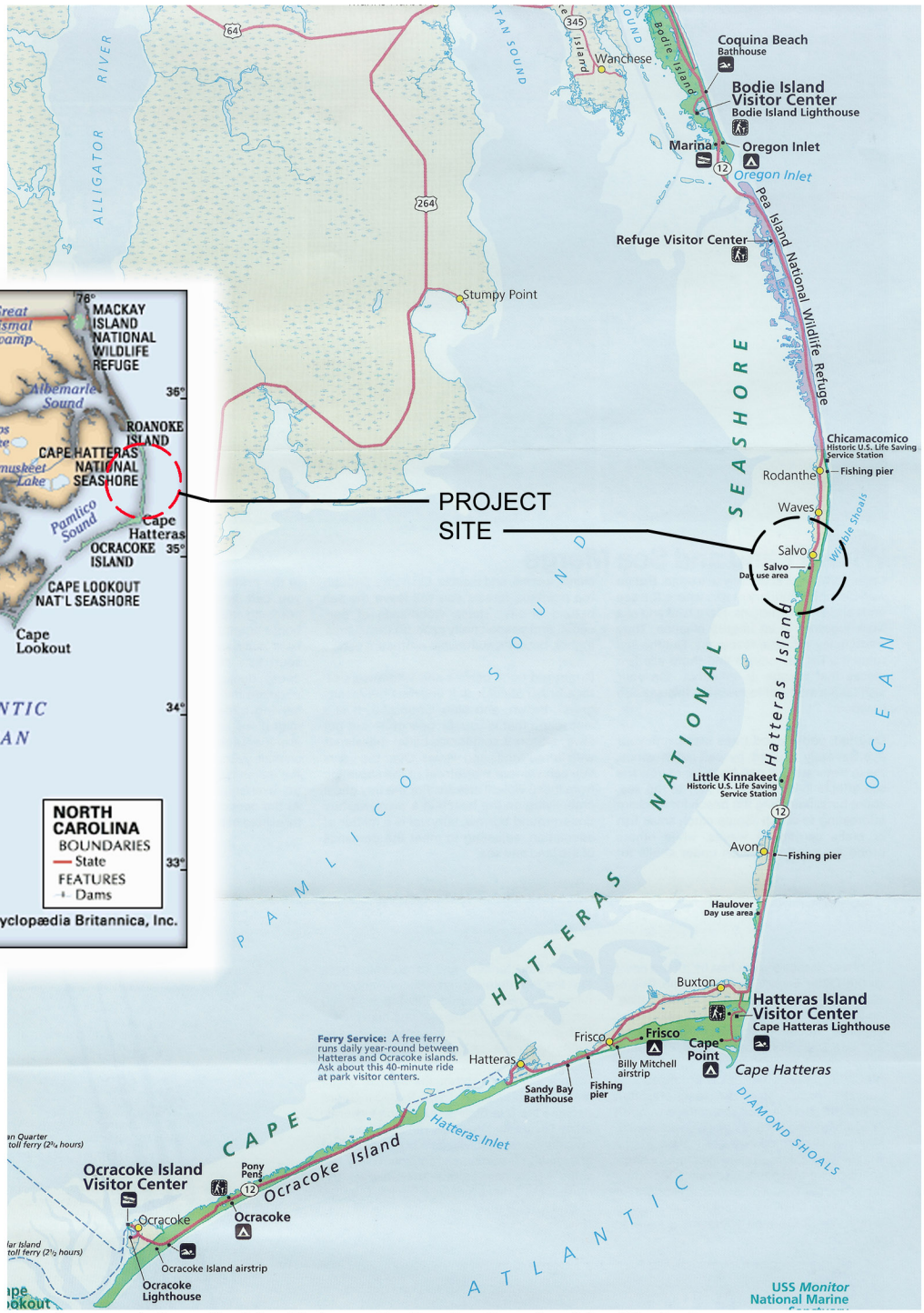
Table of Contents

THE INTRODUCTION



A map of the easternmost part of North Carolina shows the location of Hatteras Island.

Source: Encyclopedia Brittanica. (1998). Retreived October, 2003 from the World Wide Web: http://www.britannica.com/ebi/art-59795/North-Carolina?&articleTypeId=31.



An enlargement shows the Island between the Pamlico Sound and the Atlantic Ocean.
Source: National Park Service U.S. Department of the Interior. (2003). Cape Hatteras: National Seashore, NC.

An aerial image of Hatteras Island.
Source: National Oceanic and Atmospheric Administration. (2003). Retreived October, 2003 from the World Wide Web: http://ngs.woc.noaa.gov/storms/isabel/26261145.jpg.

Hatteras Island

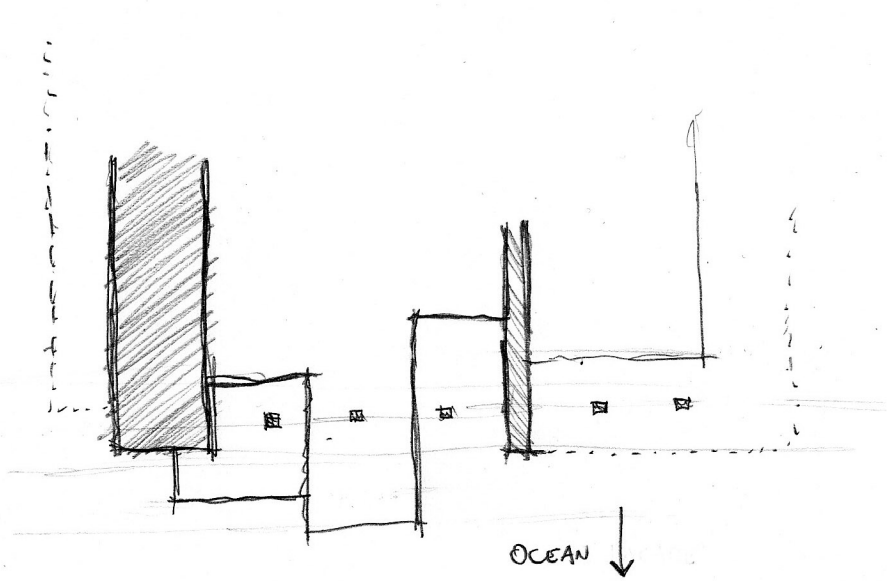
The Island acts as a boundary between the Atlantic Ocean and the Pamlico Sound. It is only a few hundred feet across in some places, one being the site for this project. By placing a structure on this site, a connection to both the Ocean and the Sound can be made. The Island is divided by a highway that runs continuously the entire length of the island. The immediate site is located on the East side of the highway, closest to the Ocean. The house will act as a screen between these vast bodies of water.

A photo of the ocean showing the dunes.

photo by: Nicholas Simpson

The ocean is erratic, always moving and changing its characteristics. The waves demonstrate its power, but also establish a certain rhythm. All waves do not follow the same rhythm, however, and the fluctuation is due to the ocean floor, the current and the wind. The wind and current can alter the motion of the waves creating an irregular pattern, crashing into one another before hitting the shore. They demonstrate how the environmental changes can influence the ocean, making it rough at times and calm at times. The ocean floor is a surface that also changes because of the movement of water. The relationship between the ocean floor and the waves is important and is the basis for the connection to the ocean.

A sketch to the right shows how a facade can shift past a column line similar to the way the waves come into the shore. The column line acts as a surface with the building envelope shifting in and out of the columns. The spaces created can shift around these columns as well. This gives this diagram a dynamic character, like the movement of the ocean. It also varies the way we would experience the spaces, all differently, with different framed views out to the water, and consequently similar effects when looking at the facade from the outside. Some surfaces will be brighter as the sun hits them, but the movement of the facade will create deep shadows and unusual lighting effects.



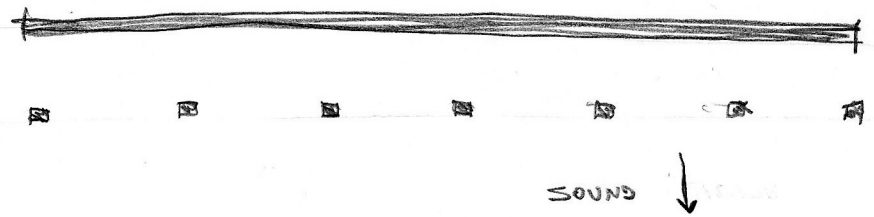
A diagram showing the movement of a facade

A photo of the sound showing the placid water.

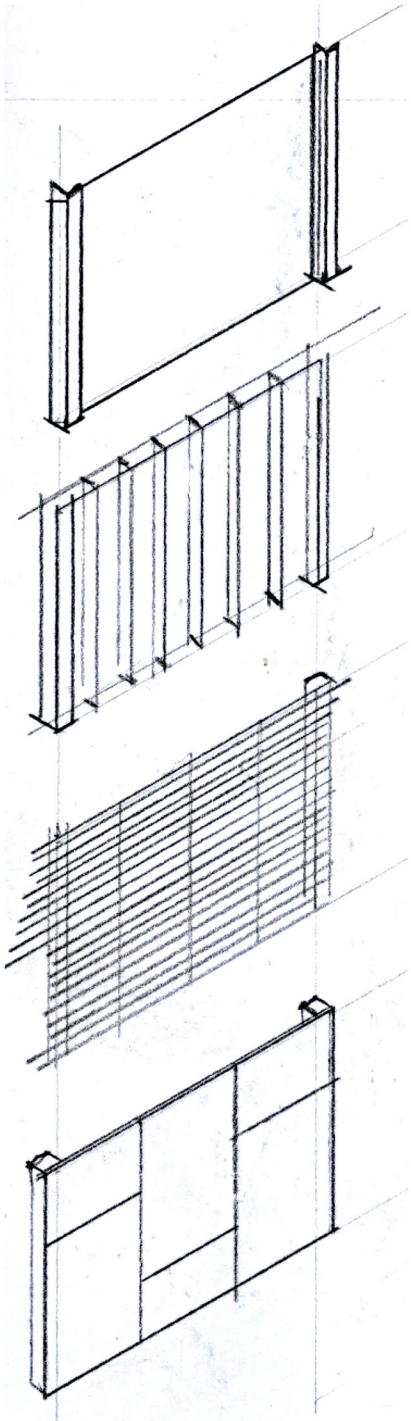
photo by: Nicholas Simpson

The Sound is serene, having a homogeneous nature. The surface of the water is composed of a vast collection of small ripples spanning the entire area. These ripples give is a certain texture. This texture conceals the surface below. It is a relationship very different from that of the Ocean; a relationship of separate surfaces floating past one another, as opposed to movement around order. This special surface condition is the basis for the connection of the Sound.

A sketch to the right shows how a surface can float over another surface or structure without interaction. The column line creates a rhythm and order to the structure. The floating plane screens the structure much like the surface of the water masks the contours of the solid land beneath. This floating surface acts as the outer envelope for the entire composition. Each ripple of the sound reflects light in a different way; this can be imitated in this diagram. Whereas the structure has to remain solid and opaque, the screen can take on many different characteristics like transparency and reflectivity.



A plan diagram showing a surface floating over a structure.



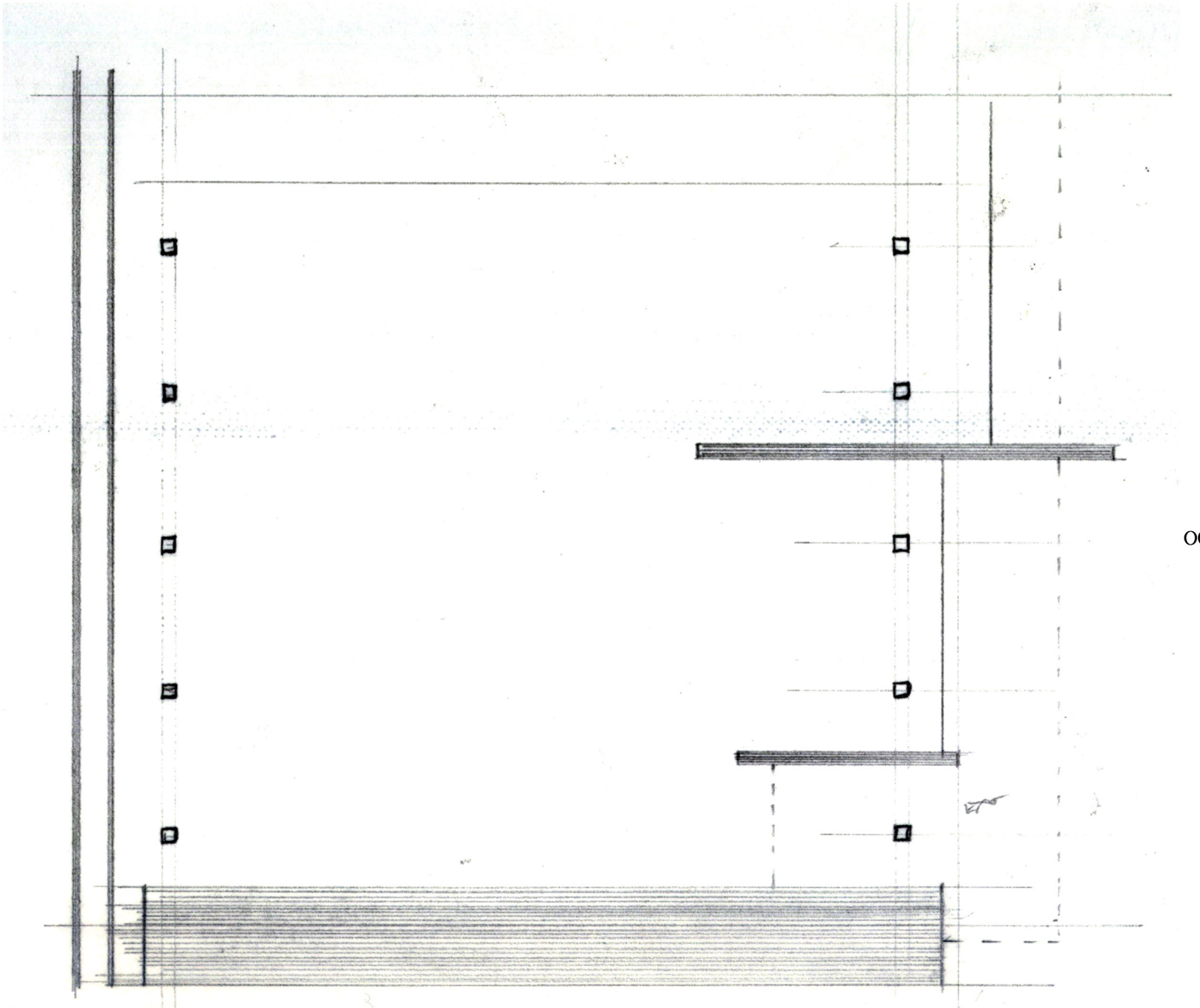
This diagram shows the beginnings of the screen element and the different characteristics that can start to affect the aesthetics and function. The structure starts to define the frame and the veneer defines the partition.

The project is a residence for a carpenter and his family. It will have all the necessary functions of a house while addressing details and maintenance relating to carpentry. The house will have a workshop large enough for the essential tools to repair and maintain the house. Because of the extreme weather conditions, it is almost certain that pieces of the house will need to be restored. This is why the house is designed with a carpenter in mind. This project will act as a marker for carpentry, requiring precision woodworking and craftsmanship.

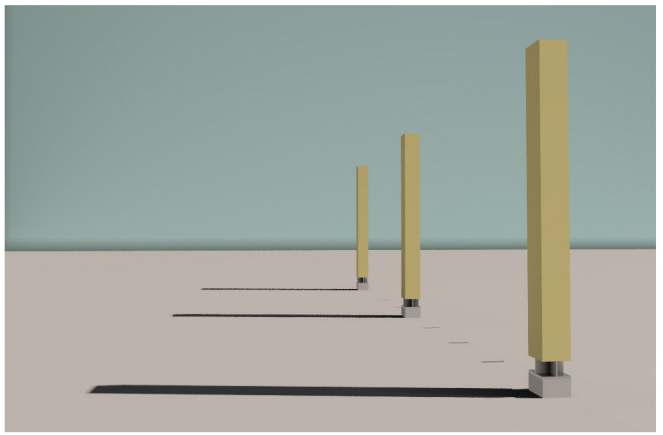
"*The three great elemental sounds in nature are the sound of rain, the sound of wind in a primeval wood, and the sound of outer ocean on the beach.*" [1]

This quote as well as the extreme environment provided the inspiration for the project being constructed mainly of wood. But the quote also gave rise to the idea of a screen through which wind, sand, and light will pass. This screen element will have levels of permeability as the environment changes. It will demonstrate alternative methods of construction with wood, metal, and special fasteners. The screens will come together to form a house that can adapt to its changing environment.

[1] Henry Beston, The Outermost House (New York: Henry Holt and Company, 1949) 43.

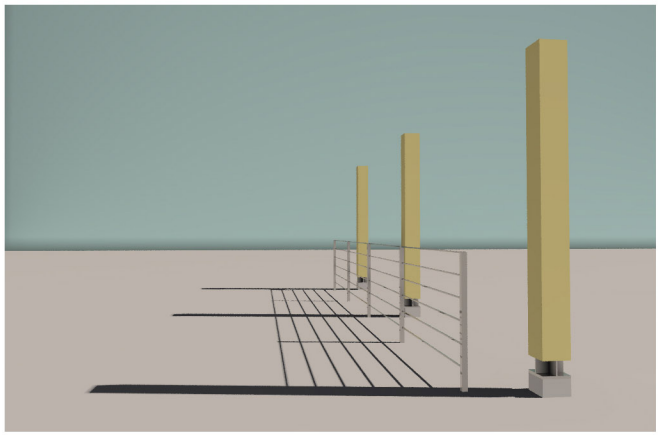


The beginnings of a plan show a homogeneous façade with linear stratification to the west vs. an undulating façade to the east. A heavy barrier is defined as the south wall to shield the direct sunlight. This simple diagram became the basis for the project.



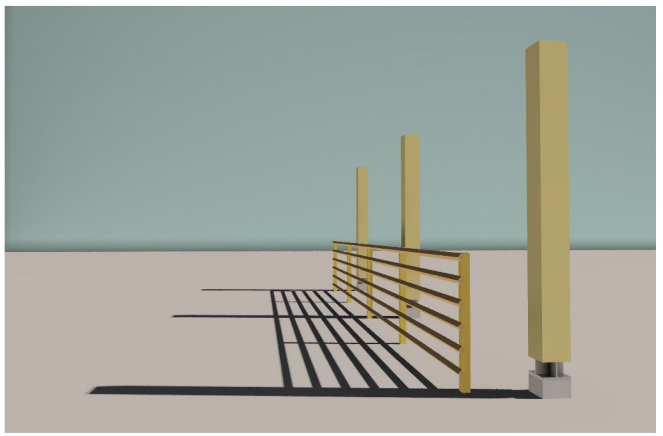
Primary column structure

The primary structure is represented by the three columns. The concrete base links the structure to the foundation. The steel offers a transition from the foundation to the wood columns. The footprints of the studs, that may or may not exist, are representative of footprints in the sand. They will occasionally fill with sand that blows over the landscape, enhancing the connection to the natural environment.



Steel railing

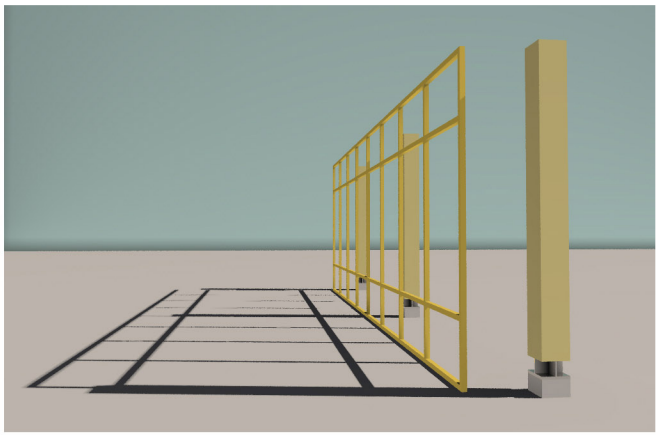
A stainless steel railing is added to the primary structure as the first screen element. Because it is a steel post and cable assembly, the members do not obstruct views. The thin lines of the shadow are representative of the permeability. The railing can also weave in and out of the columns because it is a self-supporting element. The finish of the stainless steel compliments the textured finished of the wood structure.



Wood railing

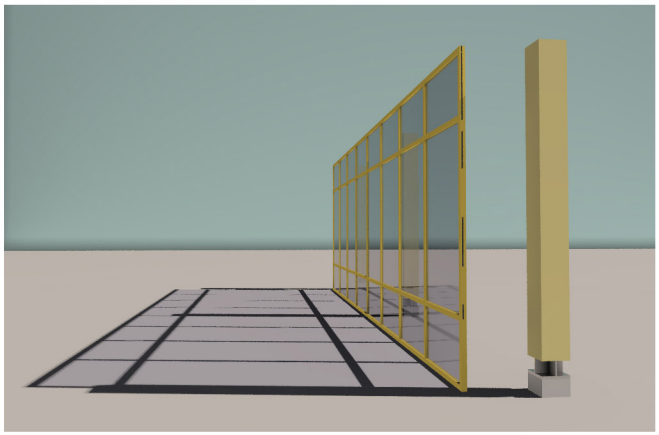
A heavier railing, made of wood members, creates a more defined screen. The wood railing has the same self-supporting qualities that the steel had, but it simply creates a heavier element and a screen with more presence. The downside is less visibility thru the members, as is displayed in the rendering.

The light frame gives a definition to the envelope of the space while still being open to the air. The division of the mullions gives maximum visibility with the necessary amount of rigidity to the frame. The divisions also have the flexibility of being infilled with a number of different features, including shading devices, glazing, louvers, or privacy screens. The system possesses a certain customization capability that will enhance this beach landscape.



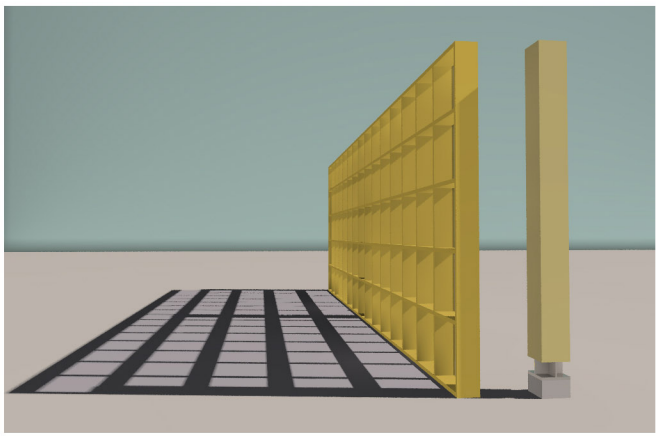
Light open frame

The frame infilled with Low-E glazing encloses the space while still allowing all the visibility. The divisions of the frame give the flexibility of allowing different windows to open allow proper airflow into a space. The Low-E glazing allows the greatest amount of light into a space while keeping the heat out. Because it is a slightly translucent system, the shadow still forms a heavy frame with a lighter shadow infill, thus the system appears to be more solid than only the frame.

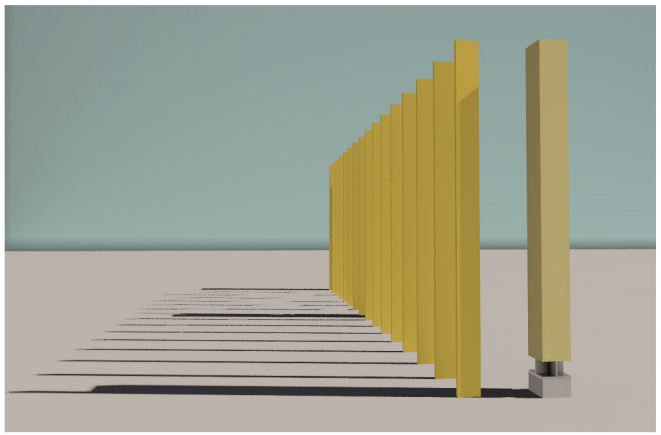


Light frame with glazing

The heavy frame with glazing is designed for applications in heavy sunlight, like a southern facing facade. The deep mullions, which occur more frequently than the light frame, act to shade the sun before it actually hits the glazing. The dense frame is also a heavy screening element. The rendering shows the heavy shadows on the ground as well as the small shadows cast within the frame. Because of the heavy frame, this system can filter the greatest amount of light so far.

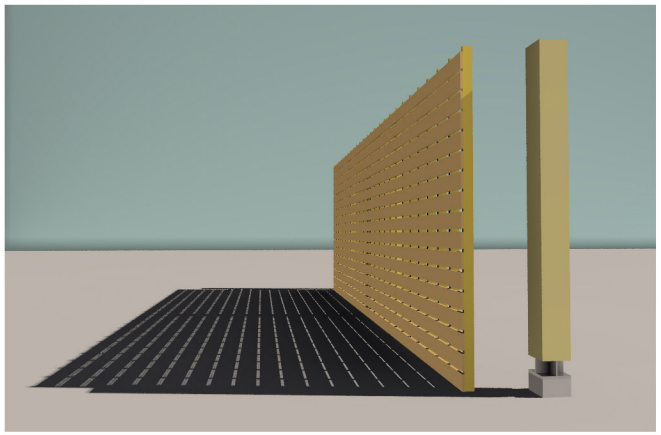


Heavy frame with glazing



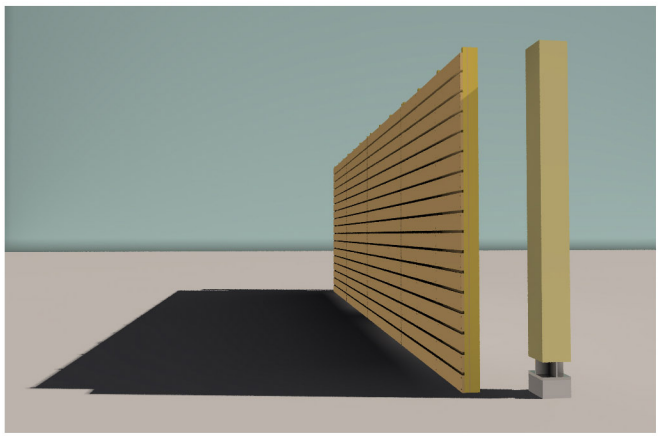
Standard studs

The standard stud partition is the basis for this vignette. The studs can define a space complete and give the appearance of an enclosed wall from the sides. It can be used as a colonnade feature for shade, as well as structure for a secondary system. It offers great versatility because the stud placement can vary crating different plays of light and shadow. The depth of each stud also changes the shadow as the sun moves across the sky. It can create a series of thin shadow lines or a strong solid shadow.



Spaced horizontal members on studs

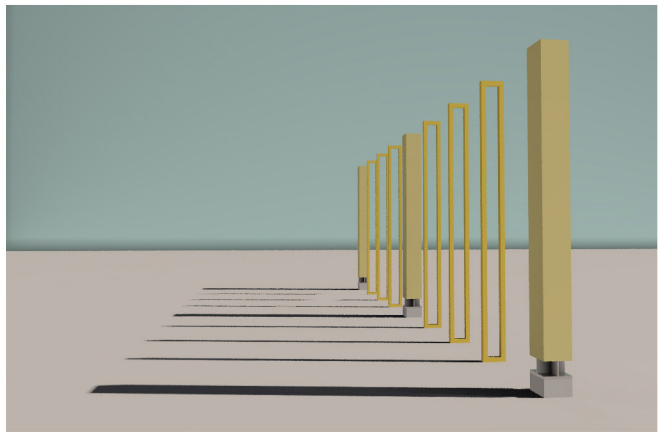
The addition of horizontal wood members to the studs create almost a solid wall, filtering out most of the light and air, but still allowing both to enter the space it defines. As far as permeability is concerned, it has very little. The vertical elements act as the structure and the horizontal elements applied on the flat side create a dominating shadow. The shadow now becomes a juxtaposition of the actual system, the structure, which is the stronger and essential in the construction, becomes the background element in the shadow and the secondary elements, which rely on the studs, become the dominant feature.



Solid partition

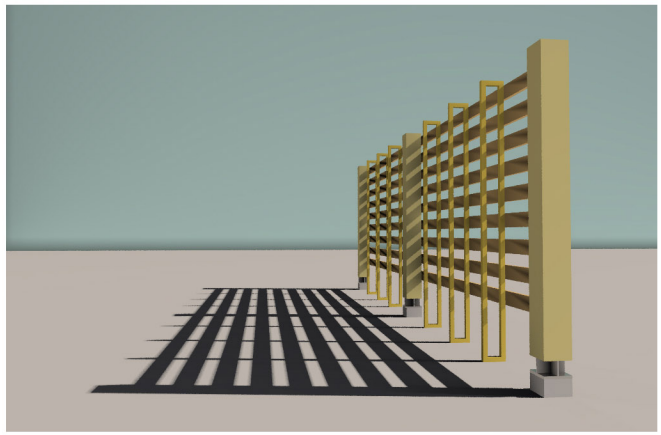
The solid wall is the least permeable of all the systems, allowing no light thru. It is a stud-framed system with insulation, sheathing, and veneer. The exterior can be configured in many different ways but the horizontal orientation compliments the other studies. The horizontal lines are present and the way in which it is fastened is also accentuated, allowing the method of construction to be visible and giving a clear understanding as to how the system works.

A hollow stud made from less material but possessing the same strength offers a different way to look at the structural vertical member. By eliminating the solid member, the stud seems lighter, and obviously has a more permeable appearance. This stems from an idea of making the entire structure lighter and feel more open. It is a hybrid design that is developed from studying each of the assemblies, showing how they can be modified to be more permeable adapt with the design of this project.



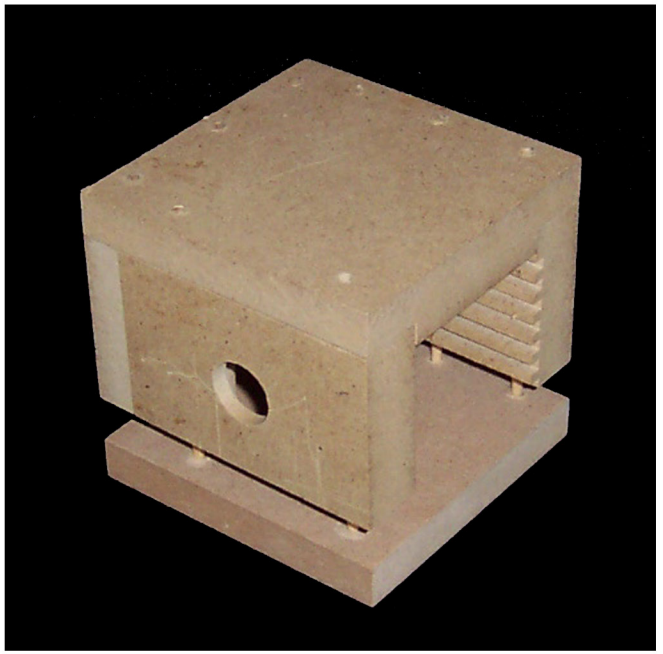
Hollow studs

By spacing the horizontal members father apart, this assembly accomplishes the same thing the previous does, more permeability. This screen wall has a different presence than the members attached to the studs; it defines the space while still opening up to the wind and air. It is a perfect assembly where ventilation is needed. As it is shown, the wall is attached to the primary structure, but it can be freestanding. The depth of the hollow studs can be the same depth as the primary structure and thus can make a continuous line of structural members.



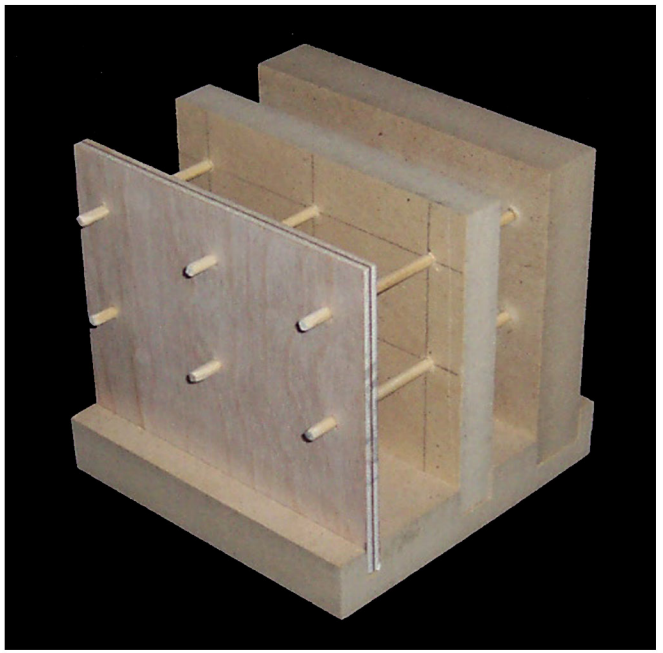
Spaced horizontal members on hollow studs

The permeability study was an important aspect of this project. By exploring the many possibilities of wall construction, the design of each wall defining a space can be built with the function of that space in mind. If the space requires more ventilation, a more permeable system can be implemented. If privacy is needed, the wall will be solid to filter everything out of the space. The wall construction also acts to portray the function of the space from the exterior, allowing the spaces to be identified as public or private. With a simple rectilinear footprint, this is a critical feature that reacts to both the surrounding landscape and the function of each room in the house.



Massive enclosure

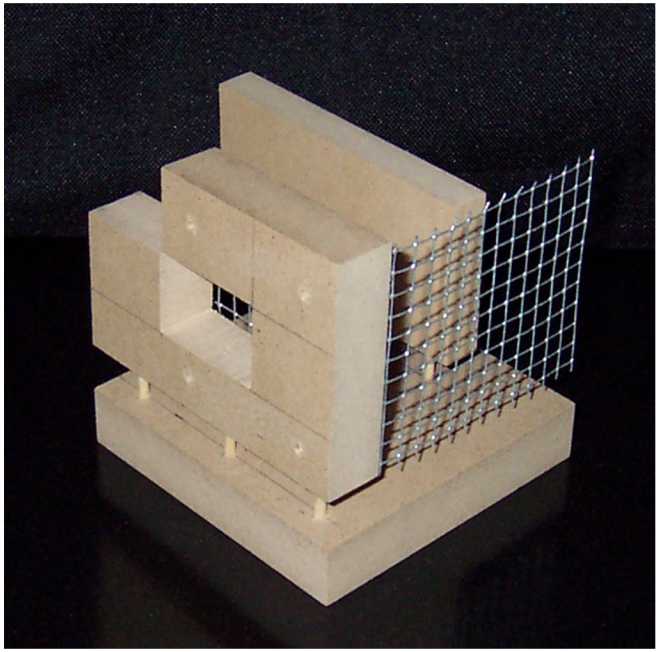
The top model demonstrates how a material with heavy properties can be used to define a space. The MDF (Medium-density fiberboard) can be carved out, as the circular opening and linear cuts show. The walls are lifted off the base by the dowels allowing light to enter the enclosed space. By boring all the way through the MDF, the dowels are seen from the top view, giving the impression that they are have another function within the model. The primary material in this model is the MDf so it has the most massive feel of all the models.



Vertical walls

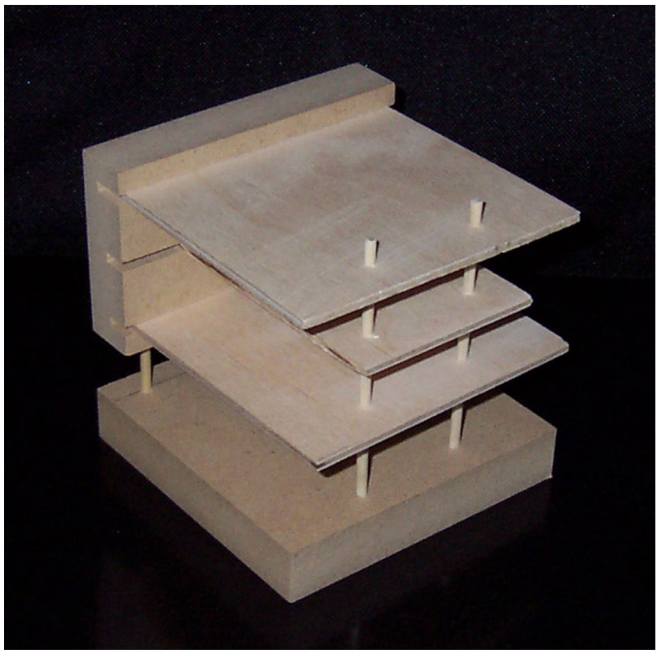
The lower model has the same MDF base, but used in a different way. In this model, the base is carved out to support three wall elements, each of a different material, plywood, ½" MDF and ¾" MDF. The space created by heavy MDF is confined, where the thinner plywood allows for a more spacious room. The dowels act to space the walls apart while providing a secondary structure. This model explores the design thru a section.

The introduction of the screen element offers a different way of defining a space. The mesh creates an envelope but still gives a certain transparency to the space within. The MDF frames the other sides of the space. Holes are carved out of the wall elements to allow a visual connection back to the screen. The dowels lift the walls out to allow light while making the heavy elements seem lighter. This model also establishes the planes shifting behind the screen element, allowing certain features to act as a primary facade and a secondary facade.

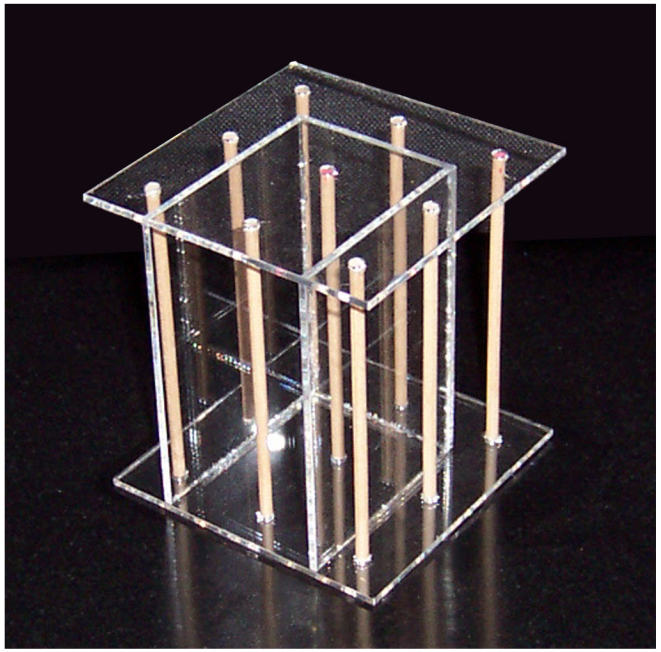


Screen element

This model demonstrates a heavy wall element supporting lighter floors. The dowels provide the necessary support of the opposite end. The horizontal floors define spaces between themselves, and as they shift, the spaces become larger volumes. Carving out the heavy element demonstrates the interaction between the horizontal and vertical members, while, at the opposite end, the plywood can float past the dowels.



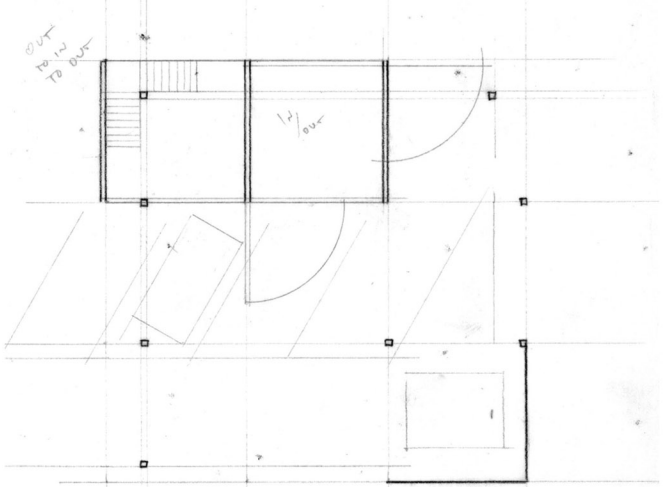
Vertical walls



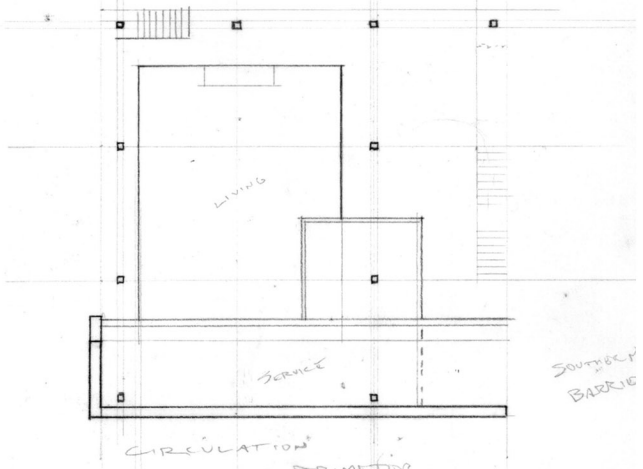
Plexiglas with column grid

The Plexiglas gives a complete transparency to the model. It demonstrates the relationship of the interior space with the exterior environment. The dowels separate the planes, and give the flexibility to place the vertical planes anywhere within the volume, exploring the free plan concept. These walls can meander around the dowels that provide the primary structure. As the image shows, the Plexiglas also offers a quality none of the other materials posses, reflectivity.

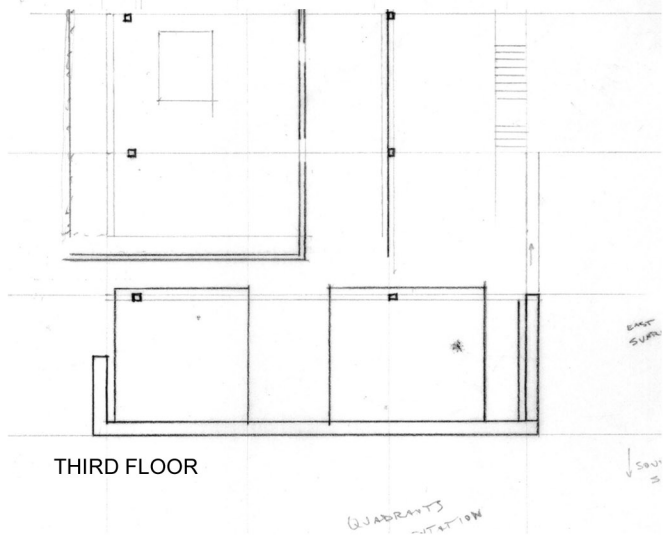
These models lead to an idea about how pieces that take on certain qualities will come together in the project. While the permeability study explored different screen elements, this series of models demonstrates the massing of objects and the spaces created within. This series of models starts to resemble the beginnings of a building. The dowels take on the characteristics of columns, while the MDF acts as a massive wall element. It also begins to explain how the horizontal and vertical elements are going to interact with one another.



FIRST FLOOR



SECOND FLOOR

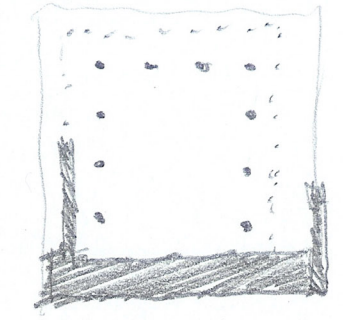


THIRD FLOOR

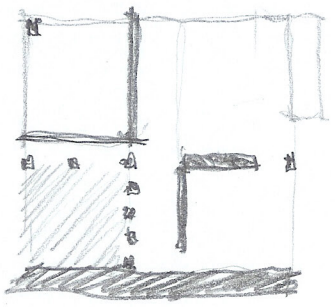
The plans began as a grid of columns. The floors were designated as three different functional elements. The first floor was devoted to service. The second floor was devoted to public/living space. The third floor was devoted to private/sleeping space.

The initial set of plans developed around the structural grid. A garage for an automobile and accompanying spaces for storage were created. The walls are supported off the columns, and the space outside the grid was designated for stairs and circulation through the house. In the second set of plans the service core took the shape of a massive southern wall.

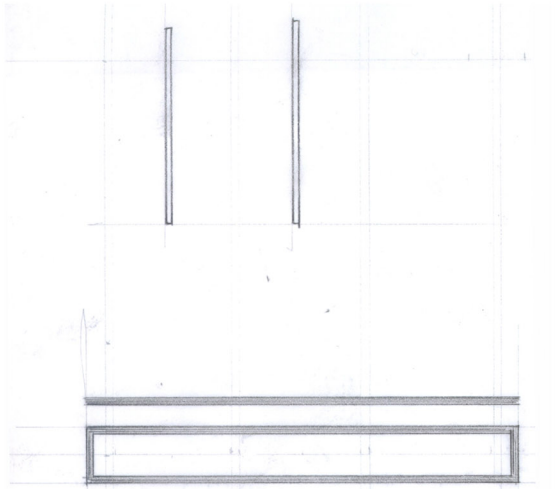
The initial first floor scheme is developed around a structural grid. The spaces are created by framing between the columns. A large workshop space occupies the North side, and a service space is framed out on the South side. The space outside the grid is designated for stairs and circulation though the house.



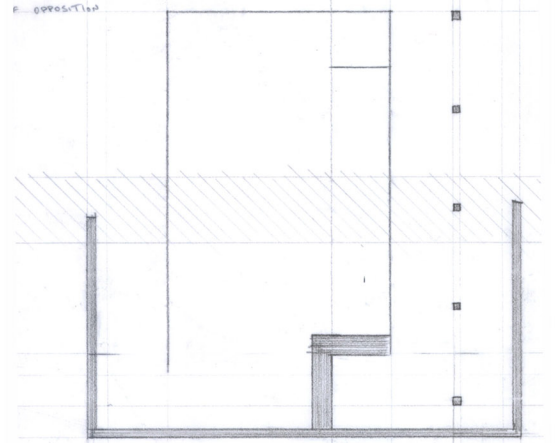
The second floor has a service element on the South side of the structural grid and the accompanying spaces directly adjacent to it. The North side of the structural grid is left open for exterior spaces on the North side of the plan.



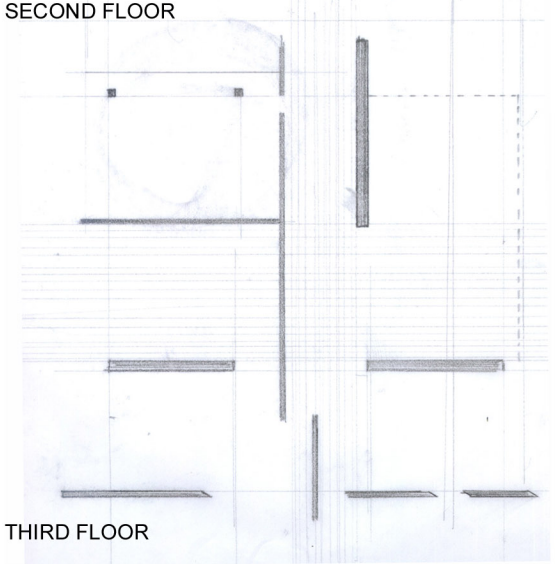
The Southern side of the third floor has a pocket for two bedrooms. A large master suite occupies the North side to maximize views and natural light. An exterior corridor separates all the bedrooms and give each one its own privacy. An exterior corridor separates all bedrooms and gives each one its own privacy.



FIRST FLOOR



SECOND FLOOR



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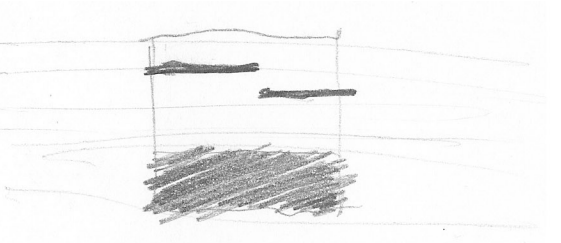
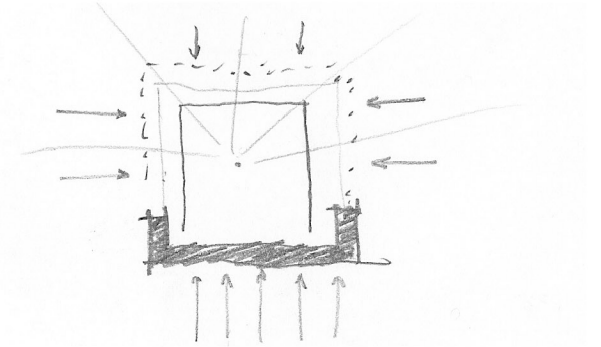
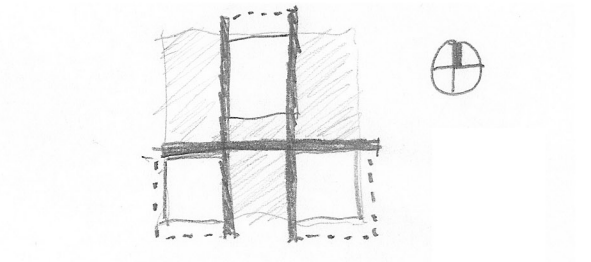


The first floor diagram shows a massive volume that houses a service core. The Southern side offers the best place for this heavy element, because it will screen the direct sunlight in the summer, and also open the North side of the plan for the occupied spaces.



The second floor diagram shows the public living space as a permeable volume intersecting the frame of the service space for the second floor. The idea behind the public space is to create views across the surroundings.



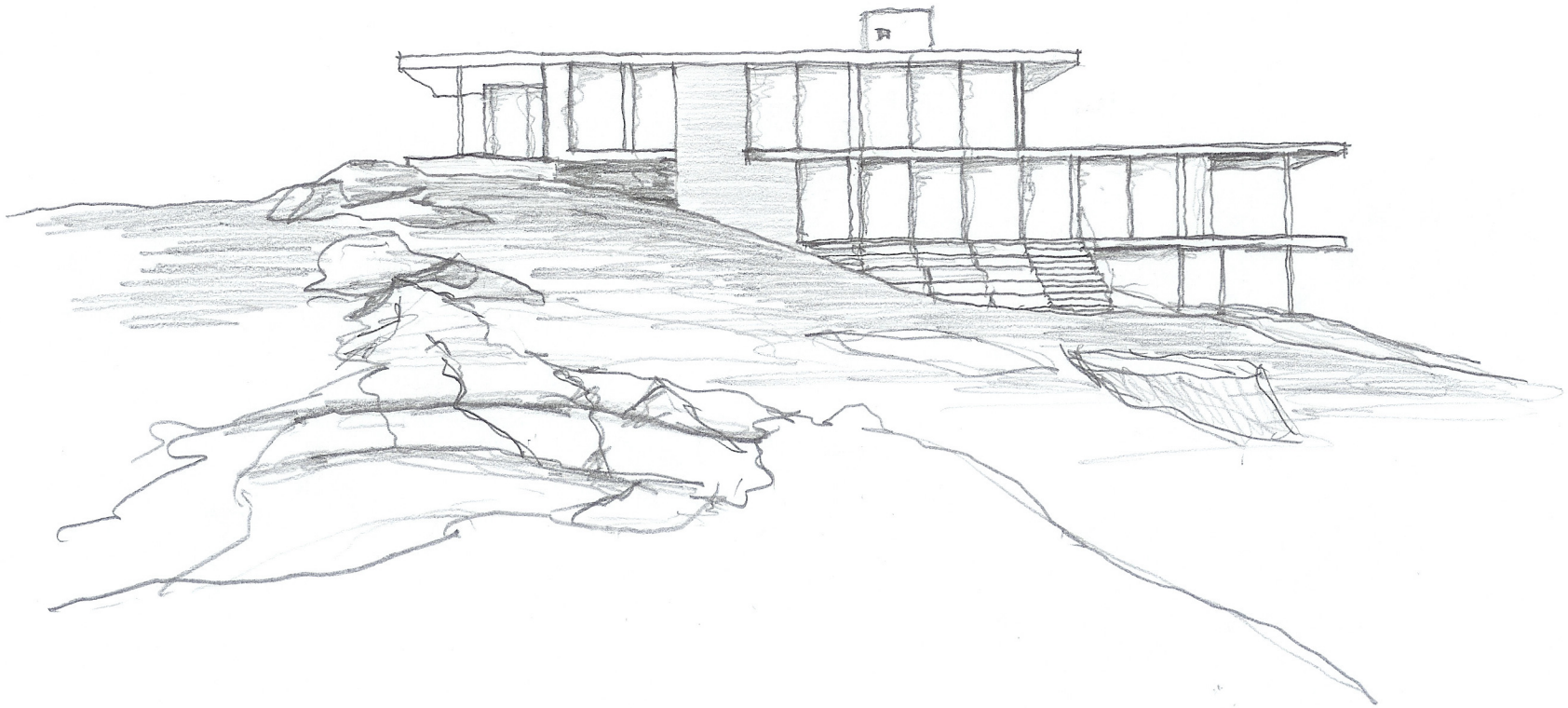
A series of walls creates the private spaces for the bedrooms. The walls shift to generate interior bedrooms and exterior corridors and gathering spaces. The walls also act to connect to the Ocean and the Sound.

THE KOEHLER HOUSE

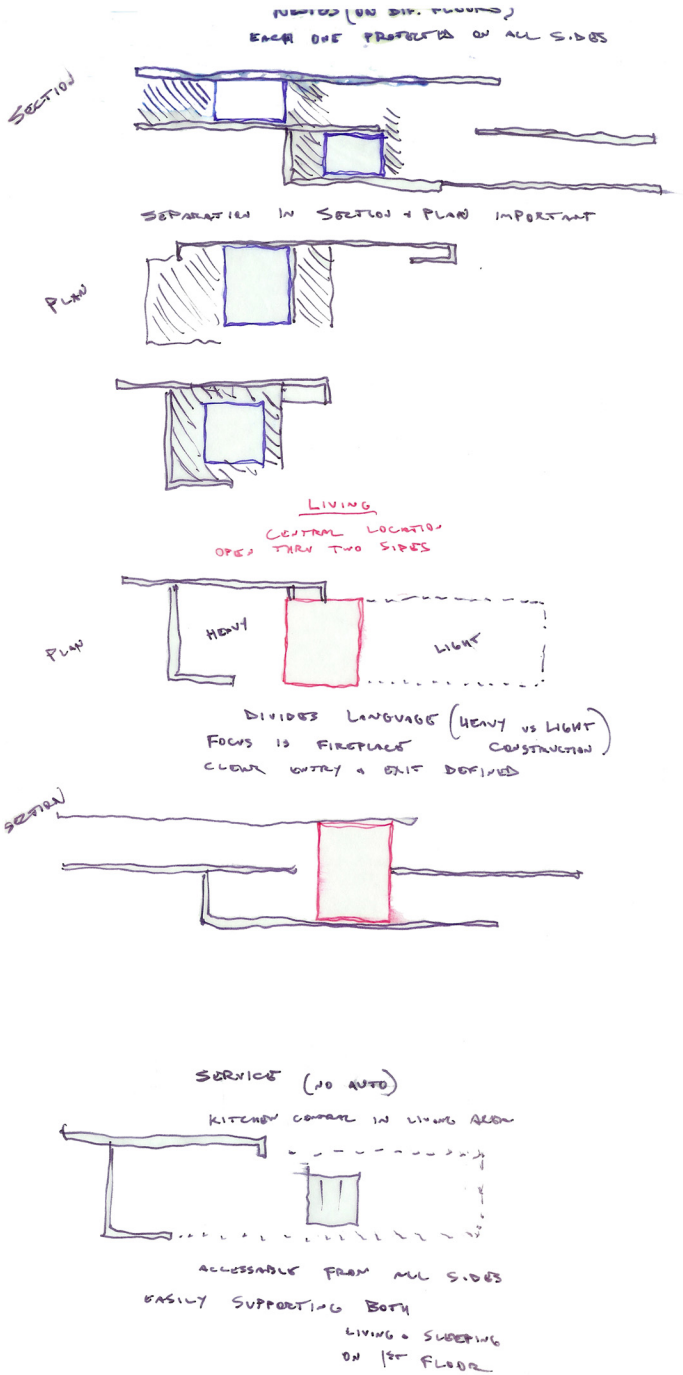
JULIE SNOW

CANADA

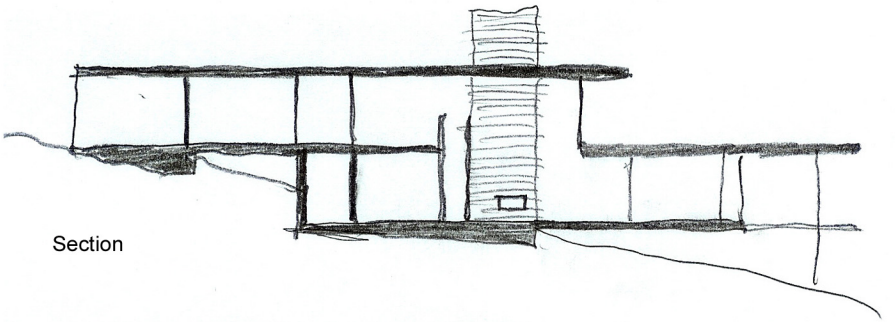
The Koehler house can be defined as two stacked rectangular volumes. The volumes shift so only a central core lines up on both floors, as can be seen in the section on the opposite page. The floors act to separate the functions of the house, the second floor only containing the private master bedroom and the necessary support functions. The location on the sloping landscape offers appropriate site for the shifting volumes, each with views out to the water. The simplicity of the plan places emphasis on the adjacencies of the rooms. Because it is a linear volume, the circulation is through the rooms themselves, and not through corridors. This maximizes the floor plan and allow it to open up to its surroundings.



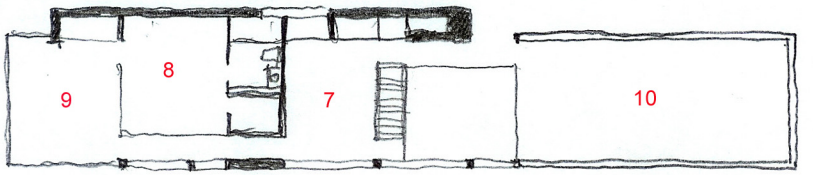
A sketch of the Koehler House.



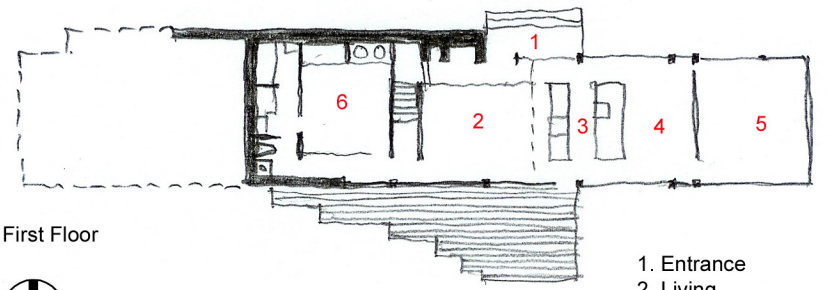
The diagrams to the left show spaces that are separated both in plan and in section. A bedroom is located on each floor which follows the trend of being a nested condition. They are pulled toward one side of their respective floors, away from the other functions of the floors. On the first floor, the stairs separate the bedroom from the public living spaces. The living room, kitchen and dining room occupy the outermost portion of the house, allowing them to open on three sides to the exterior. The heavy walls act to frame the bedrooms, keeping them private, but the site offers the most privacy. This project uses a simple plan to show how adjacencies and volumes of space distinguish between separate functions of a house.



Section



Second Floor



First Floor

1. Entrance
2. Living
3. Kitchen
4. Dining
5. Deck
6. Guest Room
7. Sitting
8. Master Bedroom
9. Porch
10. Deck

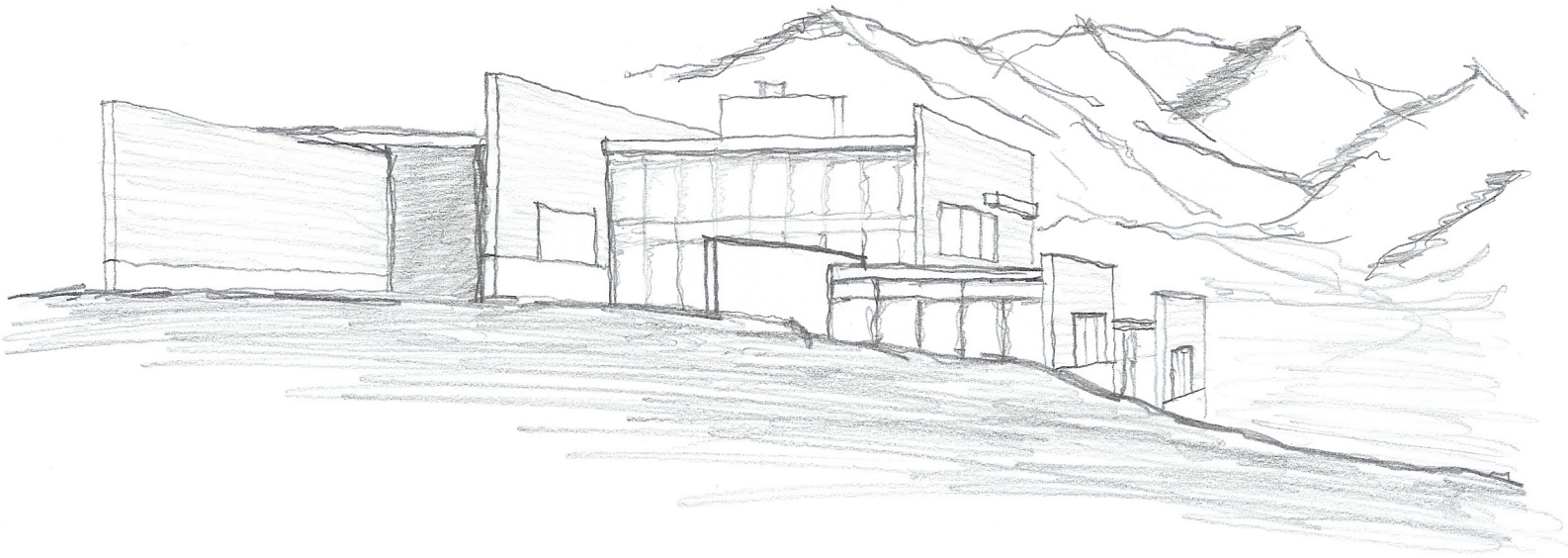
Plan Diagrams & Section

THE COLORADO HOUSE

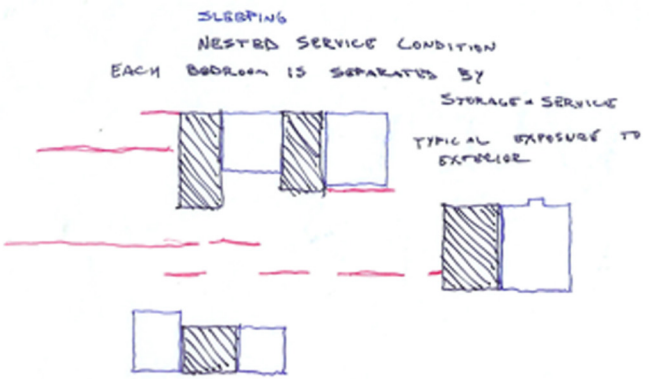
Architecture Research Office

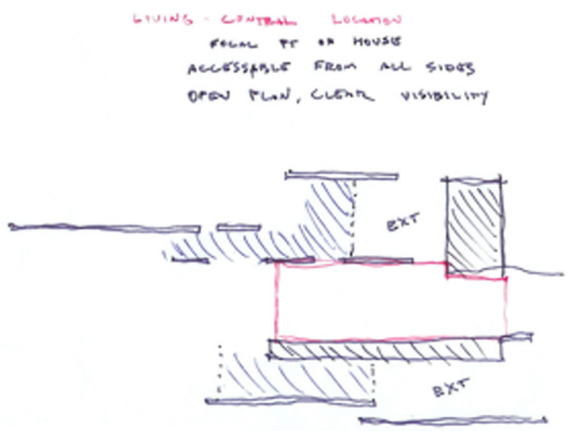
Southwestern Colorado

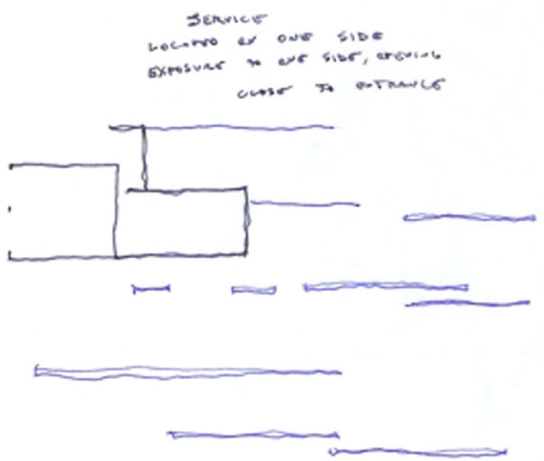
The linear orientation of the project strives to capture the views down the mountain landscape. The massive walls define the spaces while shielding the direct sunlight, extending past the building envelope. The interaction of volumes created by these walls creates necessary circulation and support spaces. The shifting planes offer a creative way to form private entrances to spaces and exterior rooms sheltered from the wind and elements. An important concept maintained throughout this project is the separation of public spaces and private spaces.



A sketch of the Colorado House

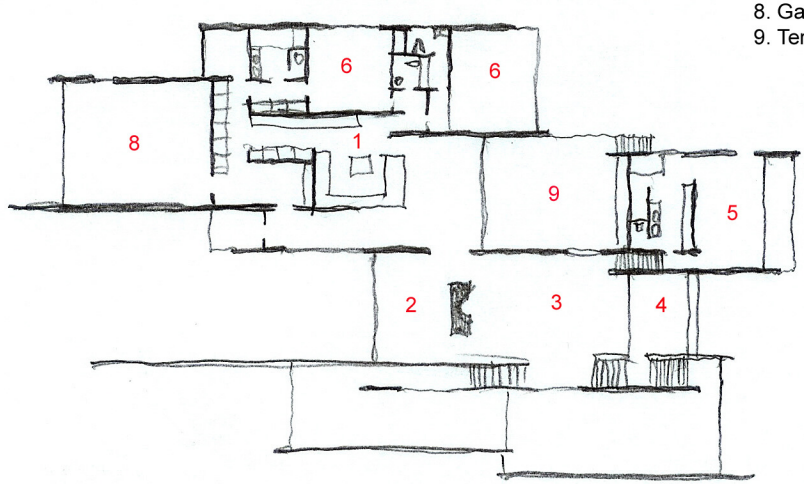




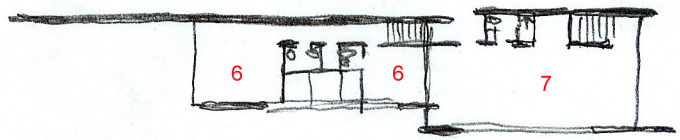


The diagrams of the plan below reveal the way the spaces make up the Colorado house. The spaces are broken up the same way the spaces in this project are identified, service, living and sleeping. The exterior spaces act as buffers to the interior rooms. The circulation elements (stairs and hallways) also separate the volumes of space. Because the plan is defined by the massive walls, each space opens to the East or West views over the mountain landscape. The most important characteristic of this house is the way the walls separate the functions of the house, and allow for the volumes of space to shift to create circulation.

1. Kitchen
2. Dining
3. Living
4. Sitting
5. Master Bedroom
6. Bedroom
7. Library
8. Garage
9. Terrace



Main Floor



Lower Level

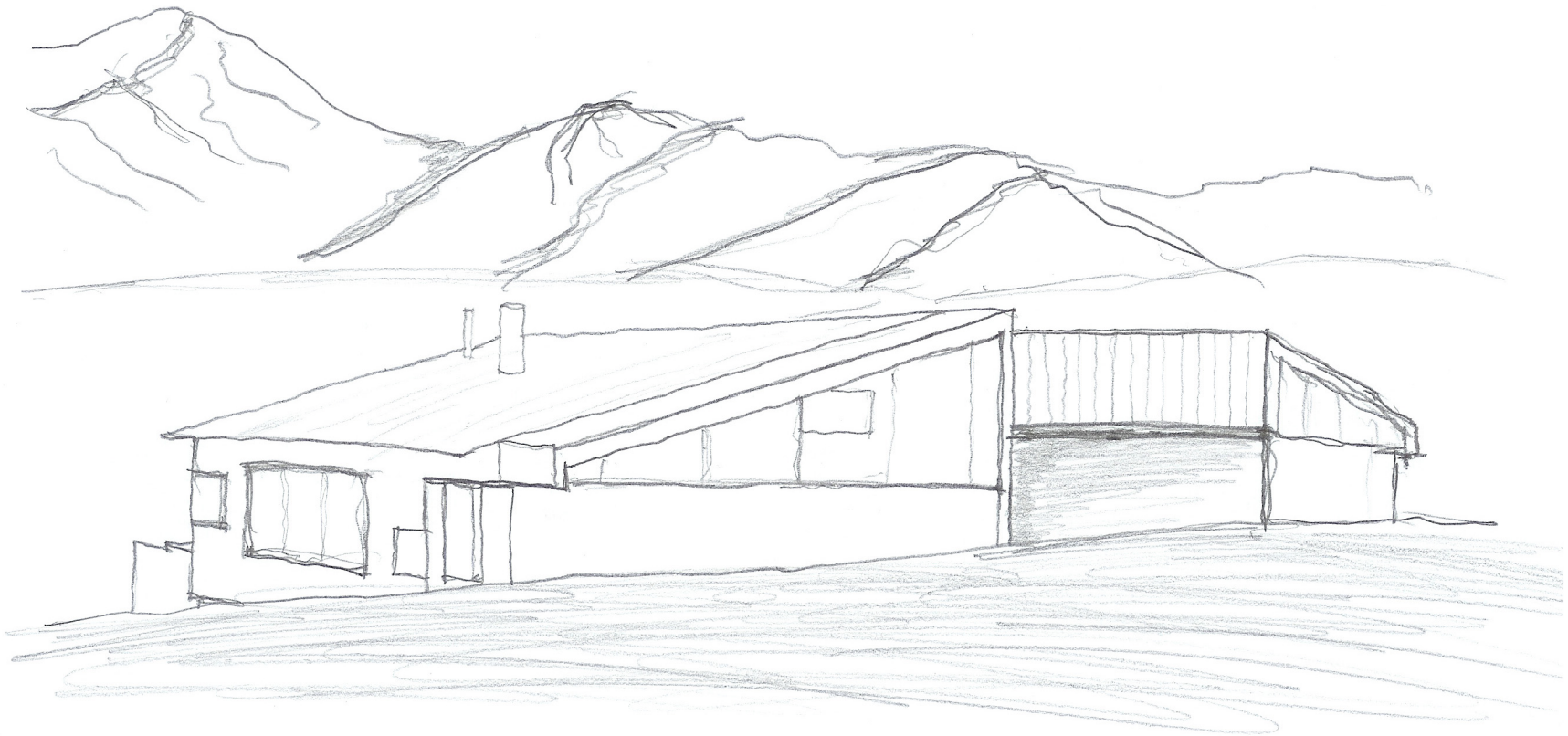
Plan Diagrams

THE TYLER RESIDENCE

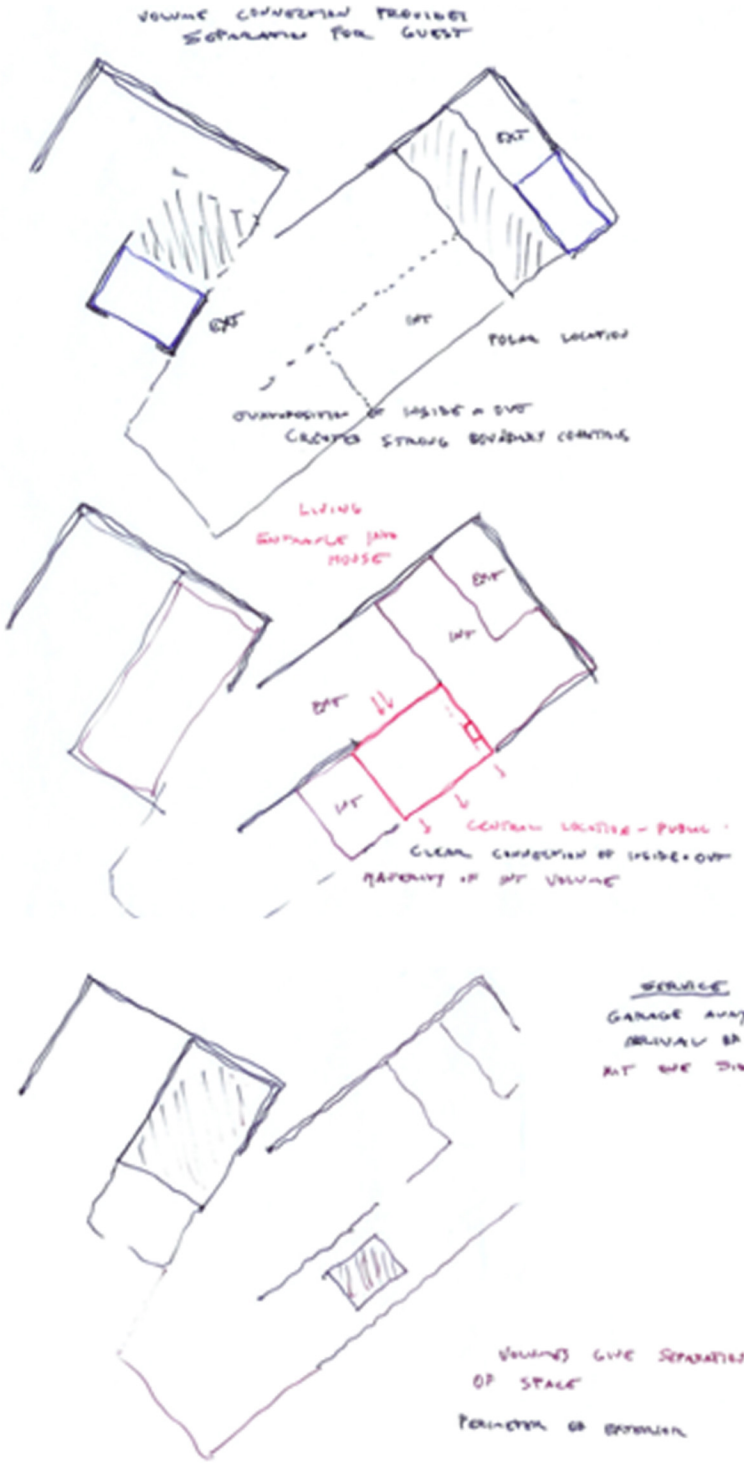
RICK JOY

SONORAN DESERT, ARIZONA

In this project, each volume of the house is broken into separate functions; the service function being separate from the living and sleeping. An exterior courtyard occupies the space where the two volumes intersect. This creates a large buffer between the primary living space and the garage. A heavy wall on the South side protects the house from the heat, while the northern side of the living space opens up to the terrace. This allows indirect light from the North to enter the living spaces. An important aspect of this plan is the separation between the public and private spaces. The master bedroom occupies its own corner of the volume while the private bathroom separates it from the public living space.



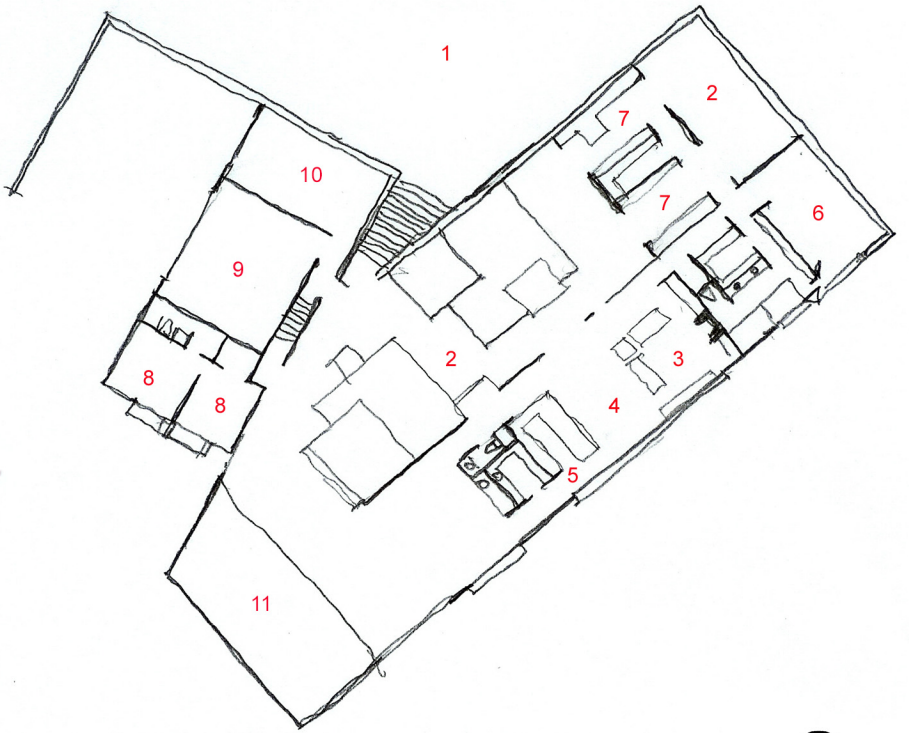
A sketch of the Tyler Residence



The interior spaces frame the exterior courtyard in this desert house, and the exterior spaces frame views out over the landscape. This relationship ties in with the idea of the separation between public and private and the different functions of the house. The plan is a harmonious interaction of two volumes coming together to enclose an exterior courtyard and separate functions of the house.

The diagrams to the left demonstrate how the living, sleeping and service spaces are defined by the rest of the house.

1. Driveway
2. Courtyard
3. Living
4. Dining
5. Kitchen
6. Master Bedroom
7. Study
8. Guest Room
9. Garage
10. Workshop
11. Pool



Plan Diagram

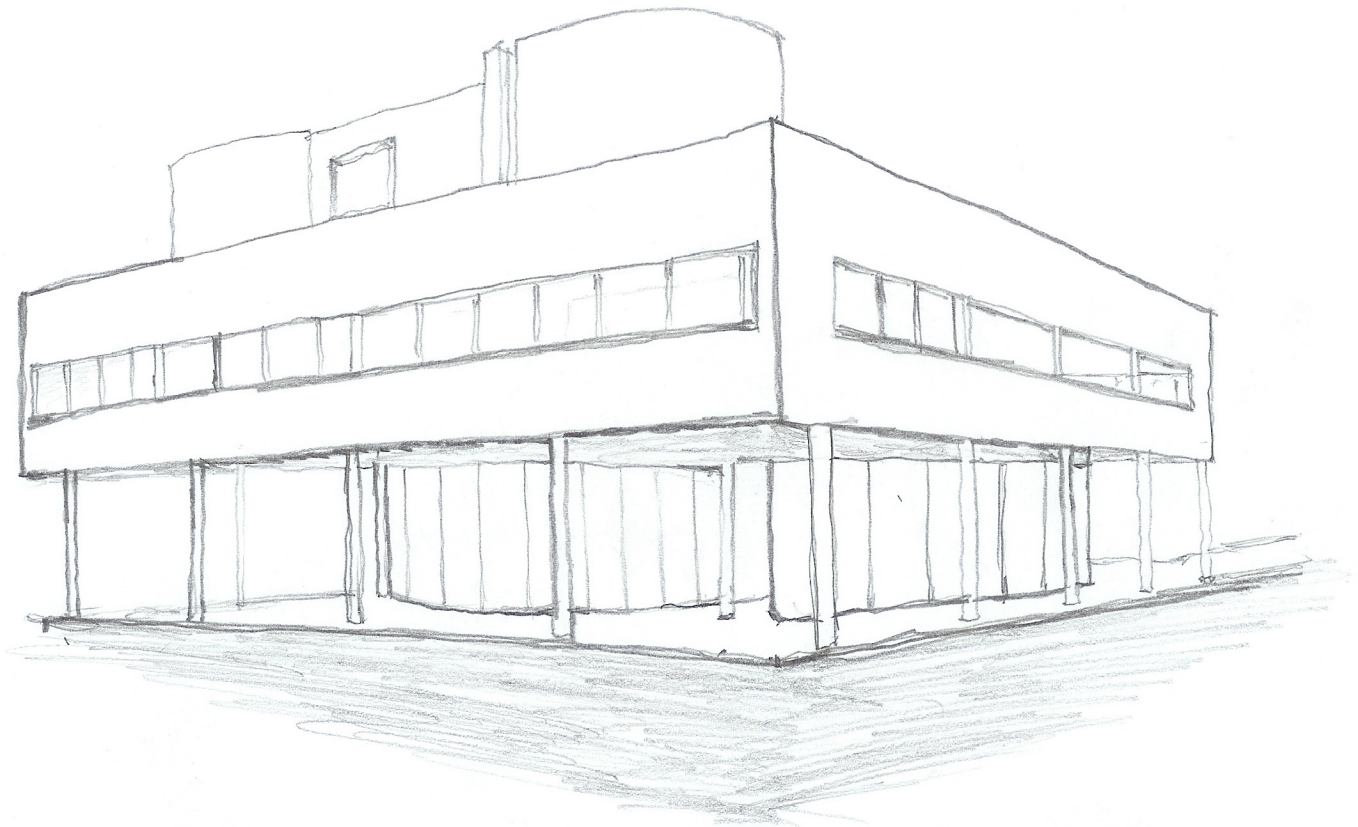
VILLA SAVOYE

Le Corbusier

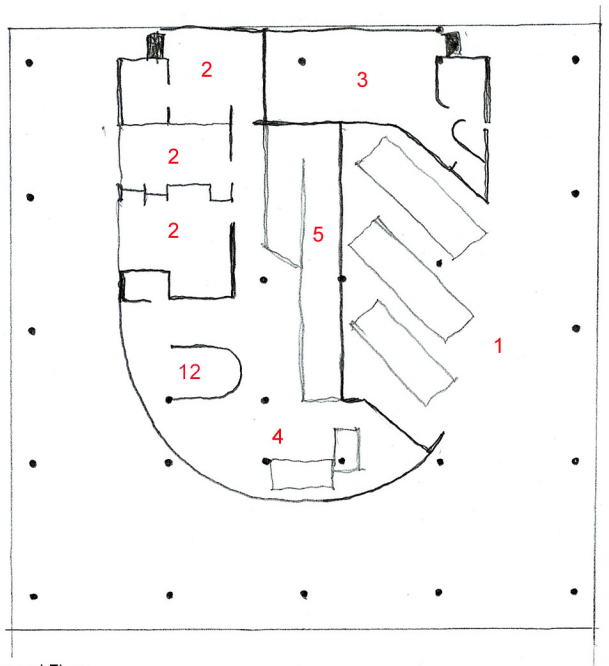
Poissy, France

This house is one of the best examples of the free plan, a floor plan where the columns provide structural support and the walls can be placed anywhere within supported area. Corbusier also separated the functional elements of the house. The ground floor is primarily devoted to service, containing space for vehicle storage. He creates an important relationship between interior and exterior space in the Villa Savoye. On the ground floor, the interior building envelope is only one third of the overall plan. This exterior space is necessary to accommodate the function of the automobile. This interior/exterior relationship happens on all floors.

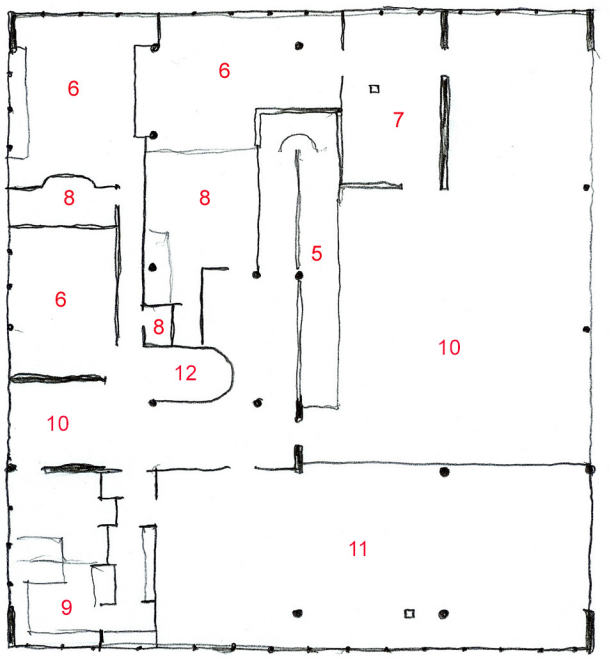
The second floor contains the living and sleeping spaces. The interior space only occupies about three quarters of the plan, as the public living space opens to the exterior terrace. On this floor, the sleeping area is nested between the bathrooms and the exterior walls, separating it from the rest of the house. The exterior terrace leads to the roof terrace on the third floor. A central ramp divides the interior and exterior space while creating an opposing symmetry.



A sketch of Villa Savoye



Ground Floor

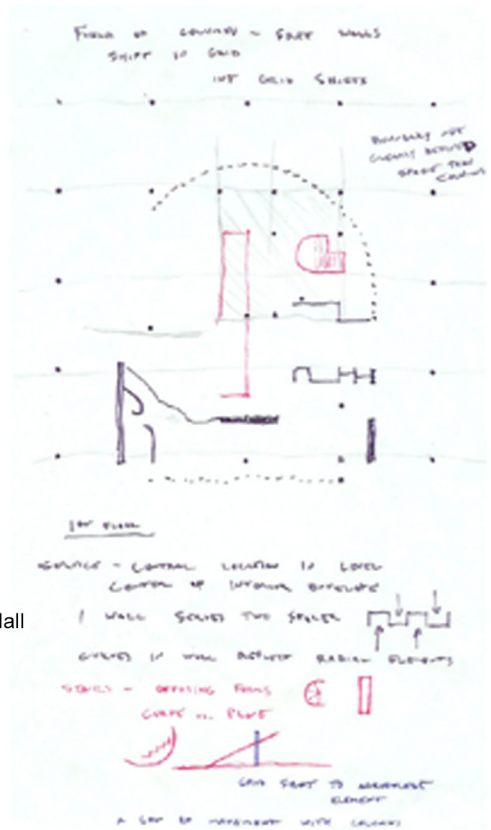


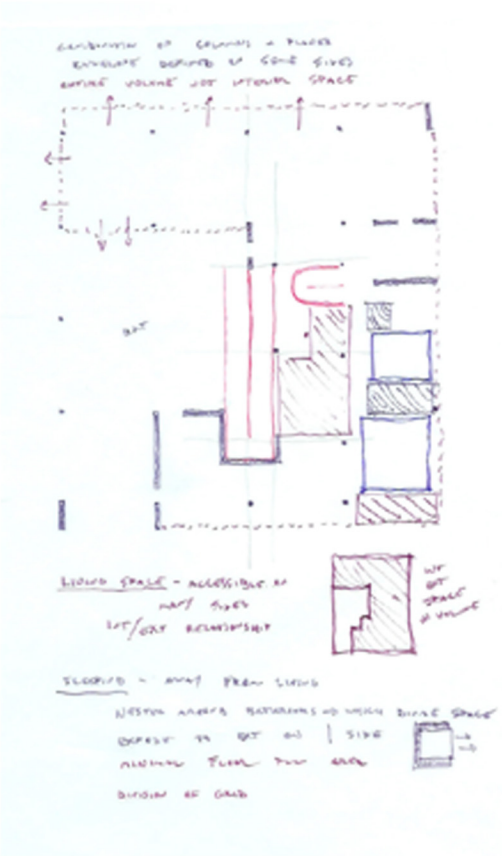
Second Floor

1. Garage
2. Utility
3. Chauffeur
4. Entrance Hall
5. Ramp
6. Bedroom
7. Boudior
8. Bath
9. Kitchen
10. Terrace
11. Salon
12. Stair

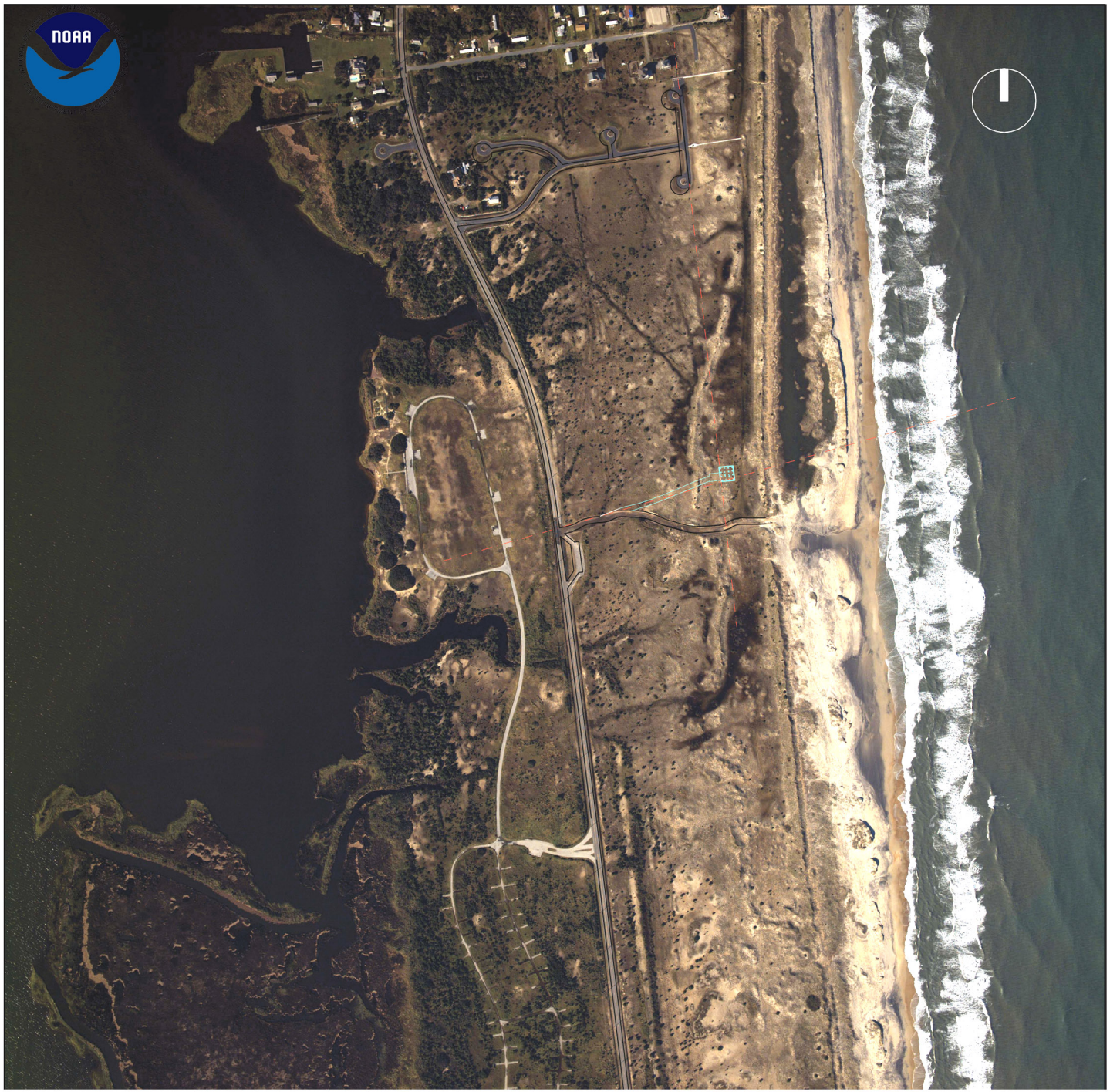
The diagrams below reflect the plans for the Villa Savoye to the left. The curve on the ground floor plan is reflective of the function of the space (turning radius for vehicles), which is a garage for automobiles. Two methods of circulation up to the next floor are distinctive volumes, one being a curved stair and the other a large central ramp. These objects translate through all the plans and offer a sense of orientation on all levels.

Similar to the other case studies, the Villa Savoye separates the functional elements of the house. The service elements are primarily on the ground floor. The public living areas are centrally located and feed into exterior spaces for a sense of openness. The private sleeping areas are nested from other rooms by private bathrooms and their location on the exterior walls.





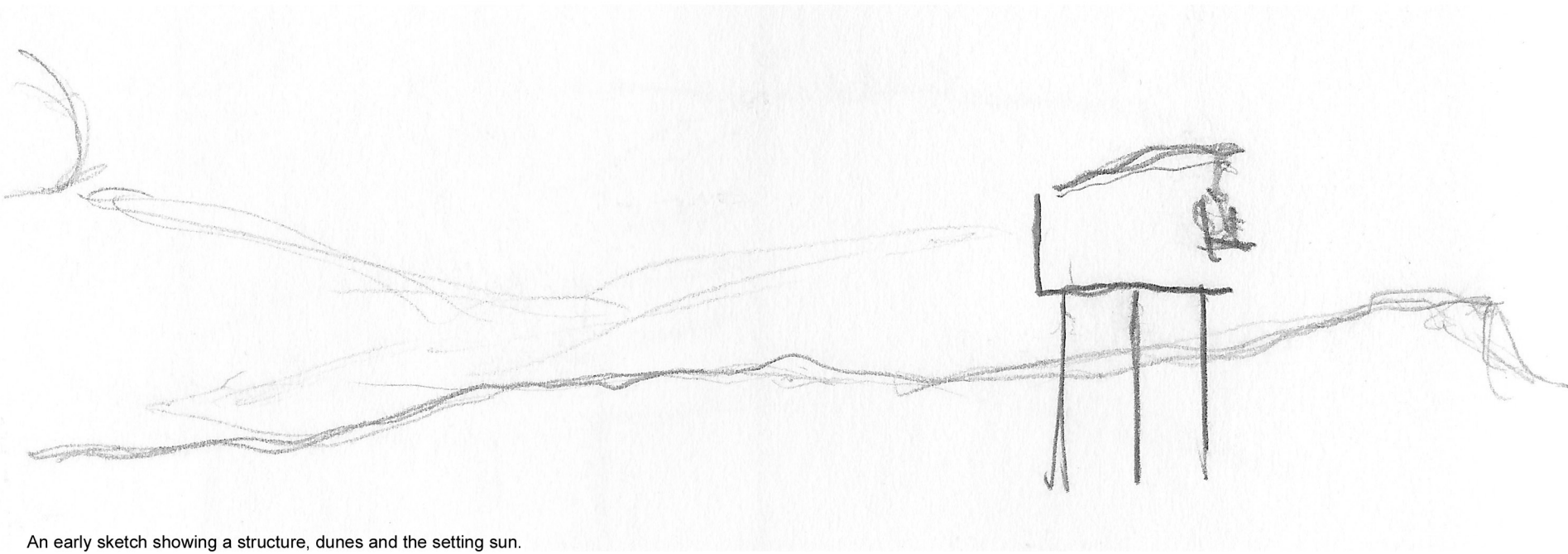
Plan Diagrams



The aerial gives a distinct example of how the characteristics of the Ocean and the Sound are quite different.

Source: National Oceanic and Atmospheric Administration. (2003). Retreived October, 2003 from the World Wide Web: http://ngs.woc.noaa.gov/storms/isabel/26262670.jpg.

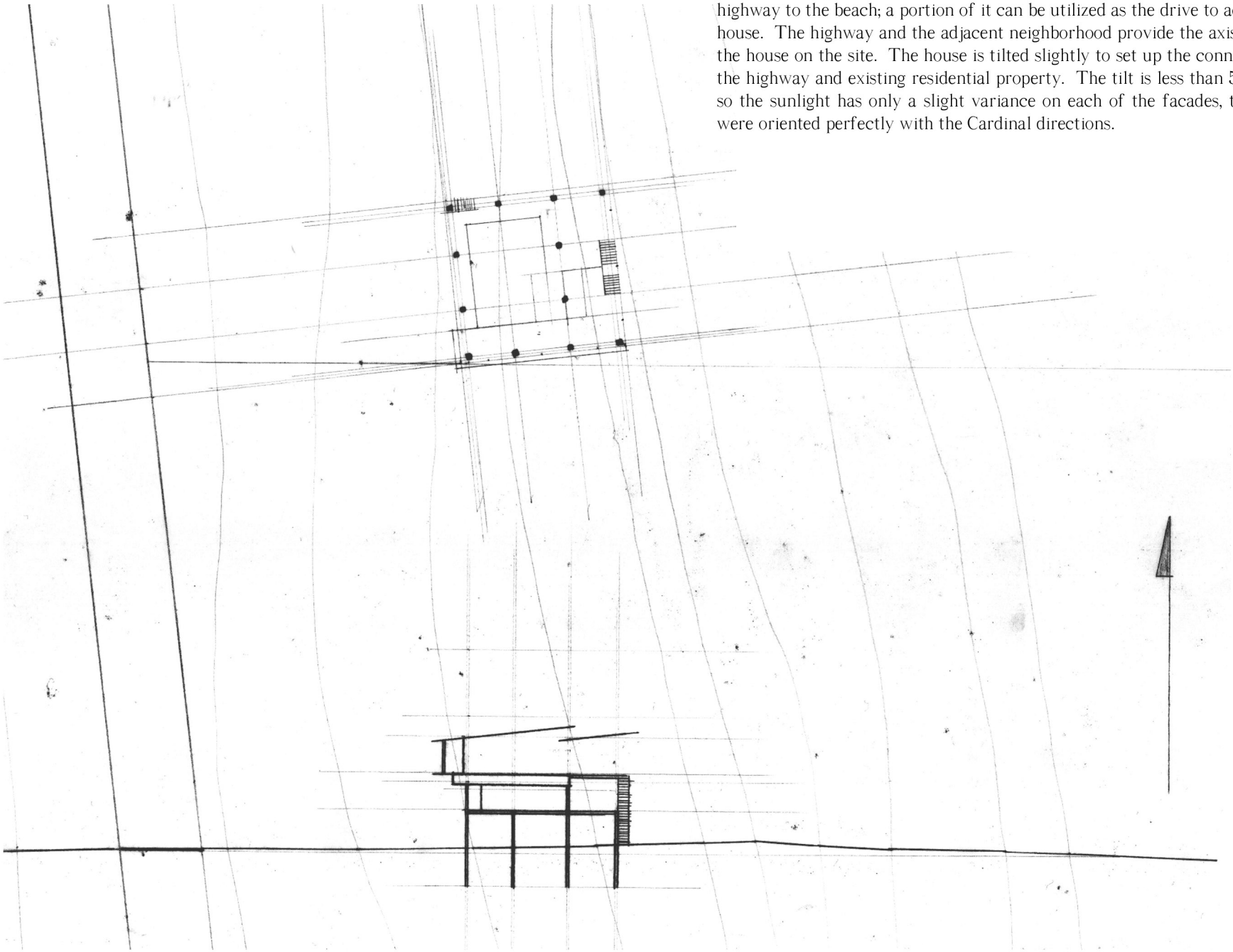
The site for this house is just south of the city of Salvo, North Carolina. It is relatively flat except for two dunes that run parallel to the Ocean. The vegetation consists of low trees, shrubs, and grass, typical of a beach environment. A highway divides the island into an Ocean side and a Sound side. This project is located on the Ocean side. The dunes offer protection from the Ocean, and the beach access road allows for a connection to the highway. Although the house sits close to the Ocean, it still represents a strong connection to the Sound, both visually and conceptually.



An early sketch showing a structure, dunes and the setting sun.

A line site plan shows the placement of the house in relation to adjacent residential developments and the highway.

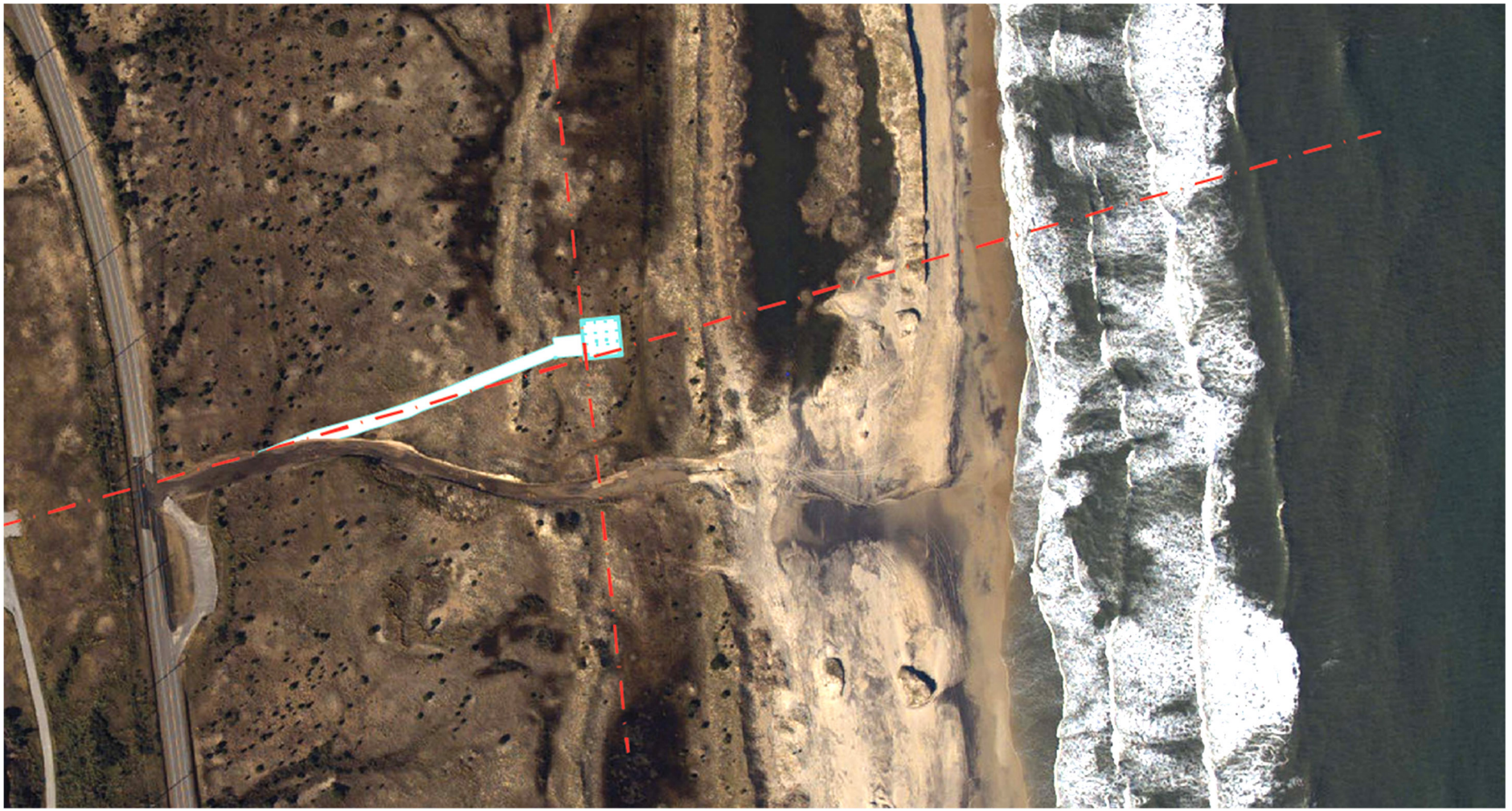
The placement of the house on the immediate site has to do with several factors, the beach access road, the highway, the neighborhood as well as the Island landscape and solar conditions. The beach access road runs from the highway to the beach; a portion of it can be utilized as the drive to access the house. The highway and the adjacent neighborhood provide the axis to align the house on the site. The house is tilted slightly to set up the connection to the highway and existing residential property. The tilt is less than 5 degrees so the sunlight has only a slight variance on each of the facades, than if it were oriented perfectly with the Cardinal directions.



An early drawing showing the plan/section relationship

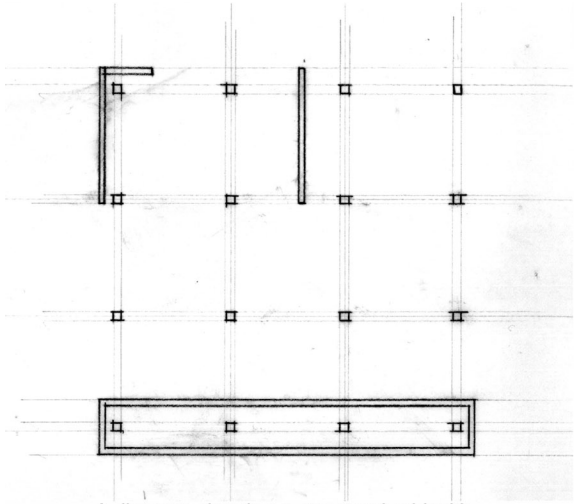
An aerial of the site showing the Sound side of the Island.

Source: National Oceanic and Atmospheric Administration. (2003). Retreived October, 2003 from the World Wide Web: http://ngs.woc.noaa.gov/storms/isabel/26262670.jpg.



An aerial showing the placement on the site, between the Ocean and the highway, and the access off of the beach access road. This aerial, paired with the adjacent page, demonstrates the opposition of the Ocean and the Sound. The Ocean is always moving and unpredictable, whereas the Sound is calm and homogeneous.

Source: National Oceanic and Atmospheric Administration. (2003). Retreived October, 2003 from the World Wide Web: http://ngs.woc.noaa.gov/storms/isabel/26262670.jpg.



A diagram showing a structural grid with a framed wall element.

THE SERVICE ELEMENT

The service element is developed around the support spaces of the house. These spaces can be defined as automobile storage, mechanical room, workshop, kitchen and bathrooms. These are secondary elements of the house but serve important functions and require a certain language. Since these elements are not limited to one floor, they must interact and merge with the other two elements, living and sleeping. Thus, the service element takes the form of an occupiable wall. In this way it resembles electrical conduit in a volumetric form. This wall will contain all the necessary spaces for serving the house. It will have the appearance of being a massive wall, but it is actually a hollow service core.

diagram 1: a heavy wall with a structural column grid.

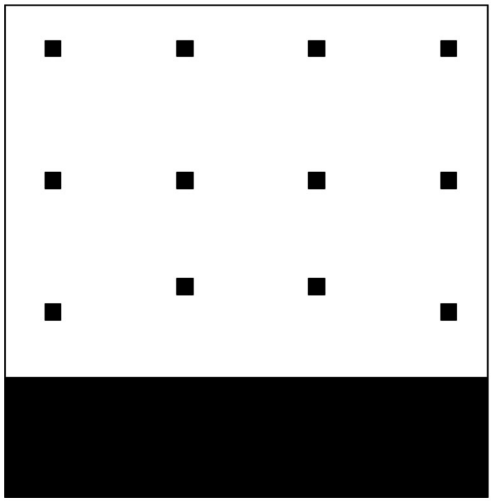


diagram 2: scale of the wall improves, circulation introduced to structure.

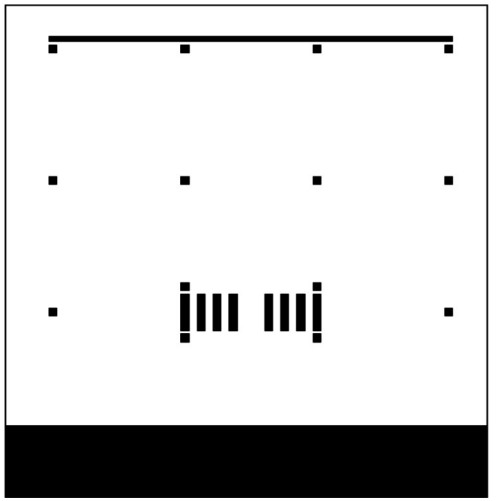
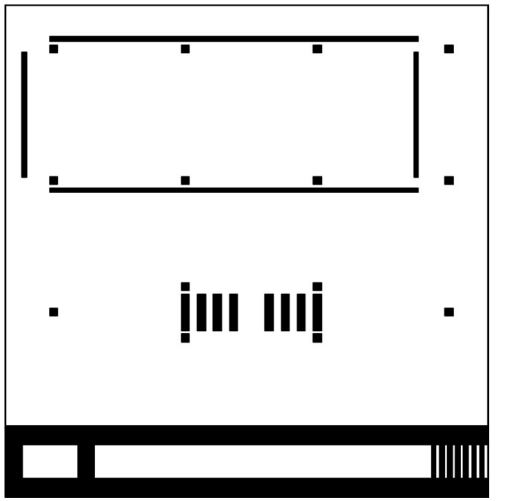
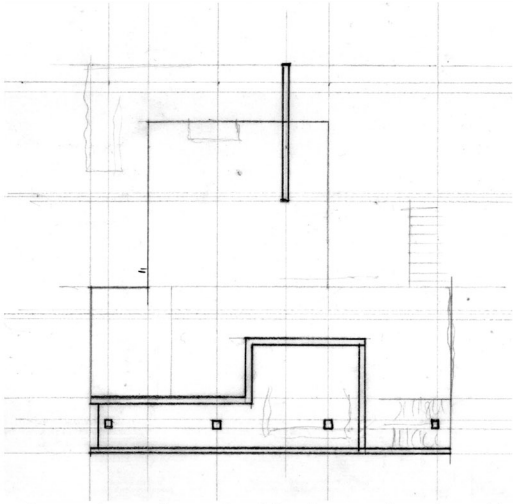


diagram 3: spaces carved out of wall, framed walls form envelope.



THE LIVING ELEMENT

The living area is a public space. It has an important relationship between the interior and exterior spaces. When inside the house, one can experience the outside because of a transparent envelope. The same goes for exterior interaction. The diagram for the living area began as a square with one side being a massive volume. The three other walls have a relationship to the exterior because of their transparent nature, and the heavy wall allows for an internal focal point for the living space. This living element is mostly glass, having the most permeability of the interior spaces and the highest level of transparency. It only occupies the second floor and has a full separation from the column structure. The living space gives an uninterrupted connection to the Ocean and the Sound while providing the necessary interior space for a public function.



The figure above shows the thin glass wall anchored by the southern service wall containing the kitchen and bathroom spaces. The southern wall provides a great deal of shade from the direct sunlight. The glass walls are set in from the outer perimeter of the house giving ample room for exterior spaces on all sides. Because it is a public room, the living space has the most visibility both into and out of the room.

diagram 1: a three-sided envelope with a heavy wall.

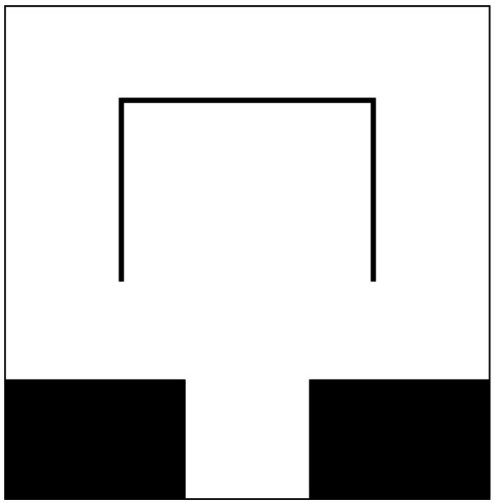


diagram 2: separation of volumes, circulation introduced to structure.

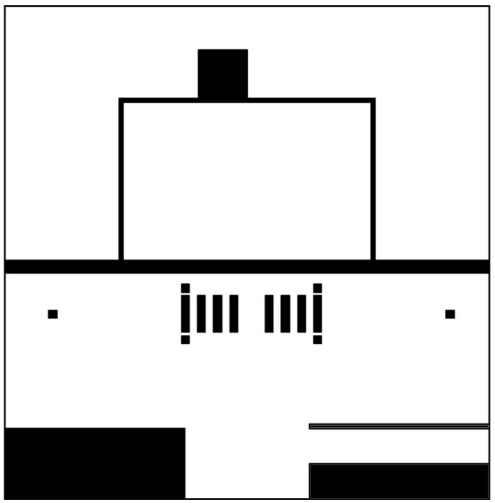
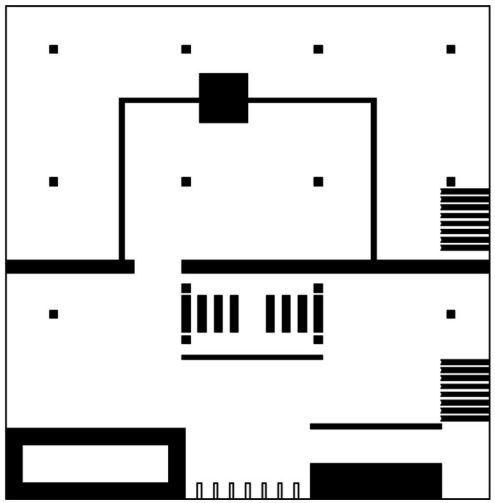
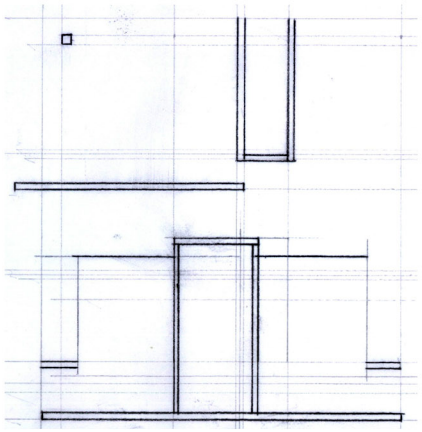


diagram 3: definition of spaces, building envelopes creating relationships.





The figure above shows a diagram of the third floor plan. The bedrooms begin to form around pockets left by the configuration of the walls. The south wall remains constant in all the floor plans, as it is an integral part of bringing utilities to all levels. Another important aspect of the placement of the bedrooms is the relationship to the sun. Each room receives sunlight from a different time of day. The South side bedrooms receive continuous southern light, while the master bedroom receives mostly indirect Northern light as well as western light marking the end of the day.

THE SLEEPING ELEMENT

The sleeping space is a nested condition. Each bedroom has a series of functional spaces around it, bathrooms, circulation and storage spaces. Because they are private spaces, they are pulled away from each other and have their own connection to the exterior. The sleeping spaces are designed with a screen in mind, therefore, they are composed of a series of walls oriented East/West to allow for the best connection to the Ocean and the Sound. These walls are thicker because they also act a boundary between each of the bedrooms.

diagram 1: a heavy wall with a structural column grid.

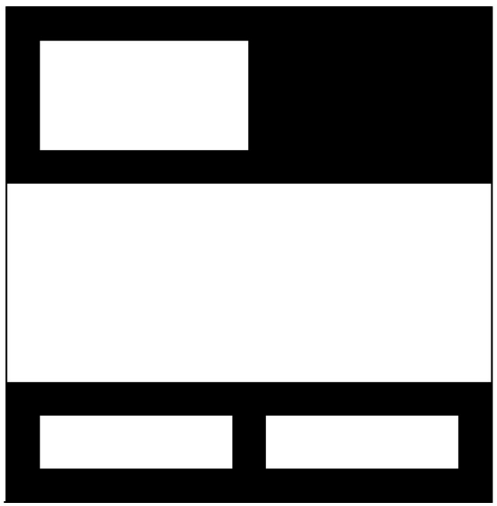


diagram 2: scale of the wall improves, circulation introduced to structure.

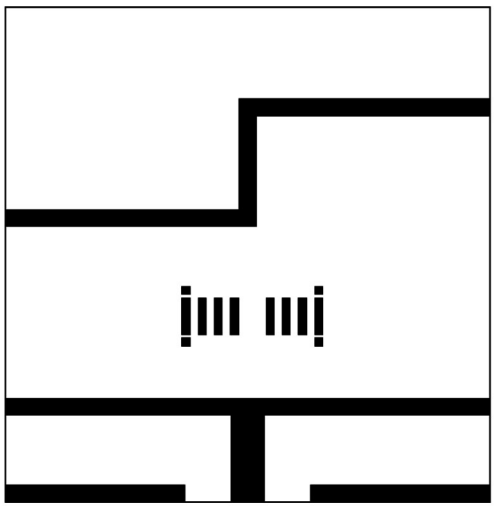
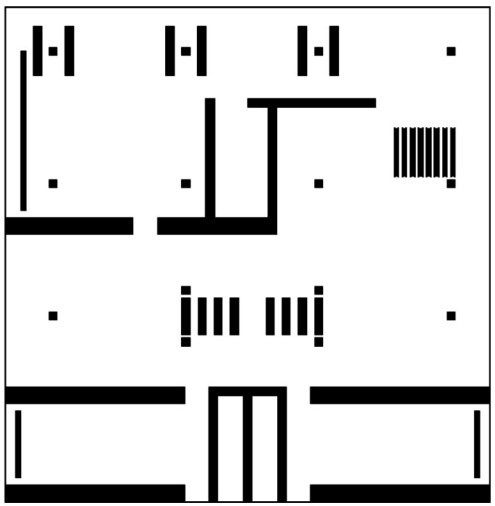


diagram 3: spaces carved out of wall, framed walls form envelope.



The case studies led to the breakdown of the elements making up the house. Each plan was created with the Ocean and the Sound in mind. The plans also reflect a clear idea of how stucture plays into each element as well as the building envelope.

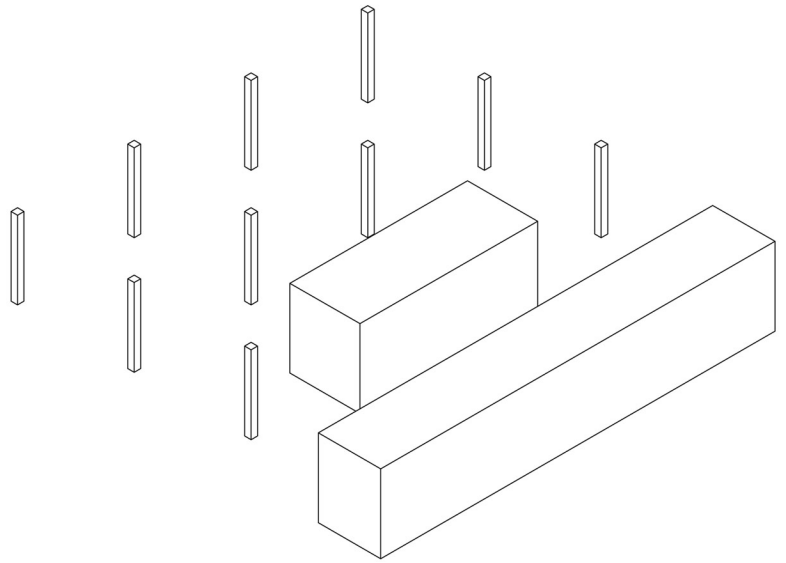
"Late one September night, as I sat reading, the very father of all waves must have flung himself down before the house, for the quiet of the night was suddenly overturned by a gigantic tumbling crash and an earthquake rumbling: the beach trembled beneath the avalanche, the dune shook, and my house so shook in its dune that the flame of the lamp quivered and pictures jarred on the wall."[2]

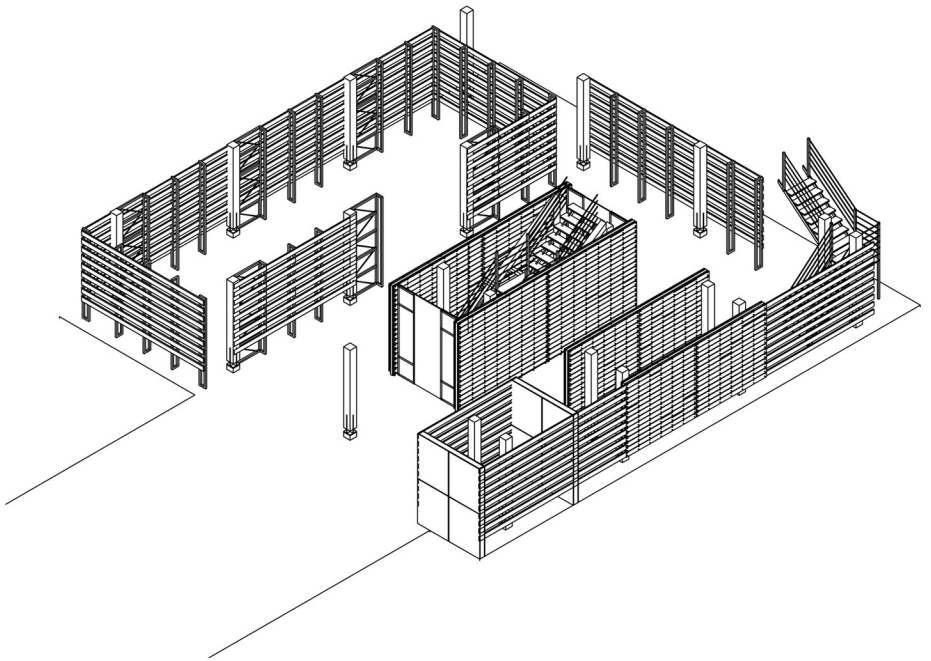
[2] Henry Beston, The Outermost House (New York: Henry Holt and Company, 1949) 43.

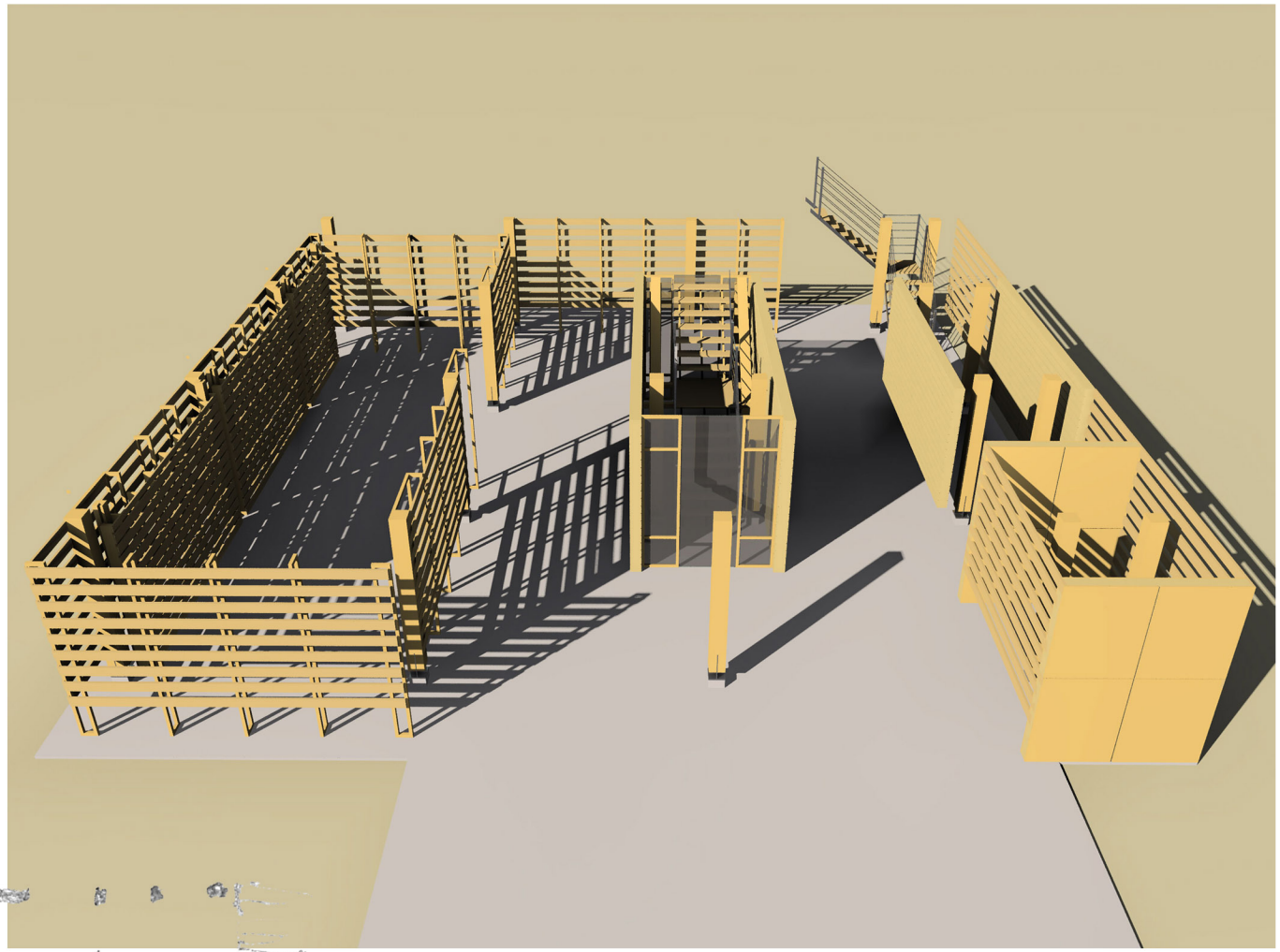
THE GROUND FLOOR

The ground floor is devoted mainly to the service element of the house. A large portion on the North side is the workshop space for regular maintenance and carpentry that a beach house will require. A central stair plays an important role in marking an entry by shifting the regular column grid. This shift in the column grid also allows for the lateral structural support necessary for construction.

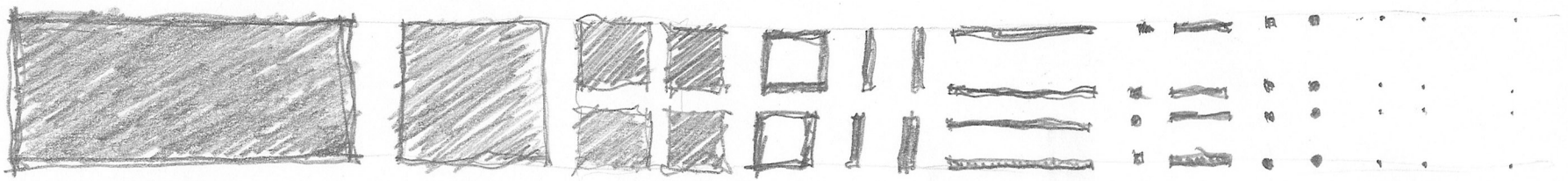
The ground floor also houses the foundation of the southern service wall. On this level, the wall contains the mechanical room, exterior shower, and storage space. The volume of the wall 'dissolves' toward the Ocean creating space for a rear stair, acting as a means of egress as well as a connection from the Ocean to the Sound. This stair is the closest element on this level to the Ocean. This important connection happens as you pass thru the house and identify the stair as a marker to ascend to the next level. The 'dissolving' of the wall hints to the difference between the front structure of the house verses the back. It starts as a massive volume, with little permeability, and breaks up into shifting, open planes of a stair.







A rendered ground floor showing the composition of the elements. The wall is on the South (right) side and the workspace framed by a screen is on the North (left) side.



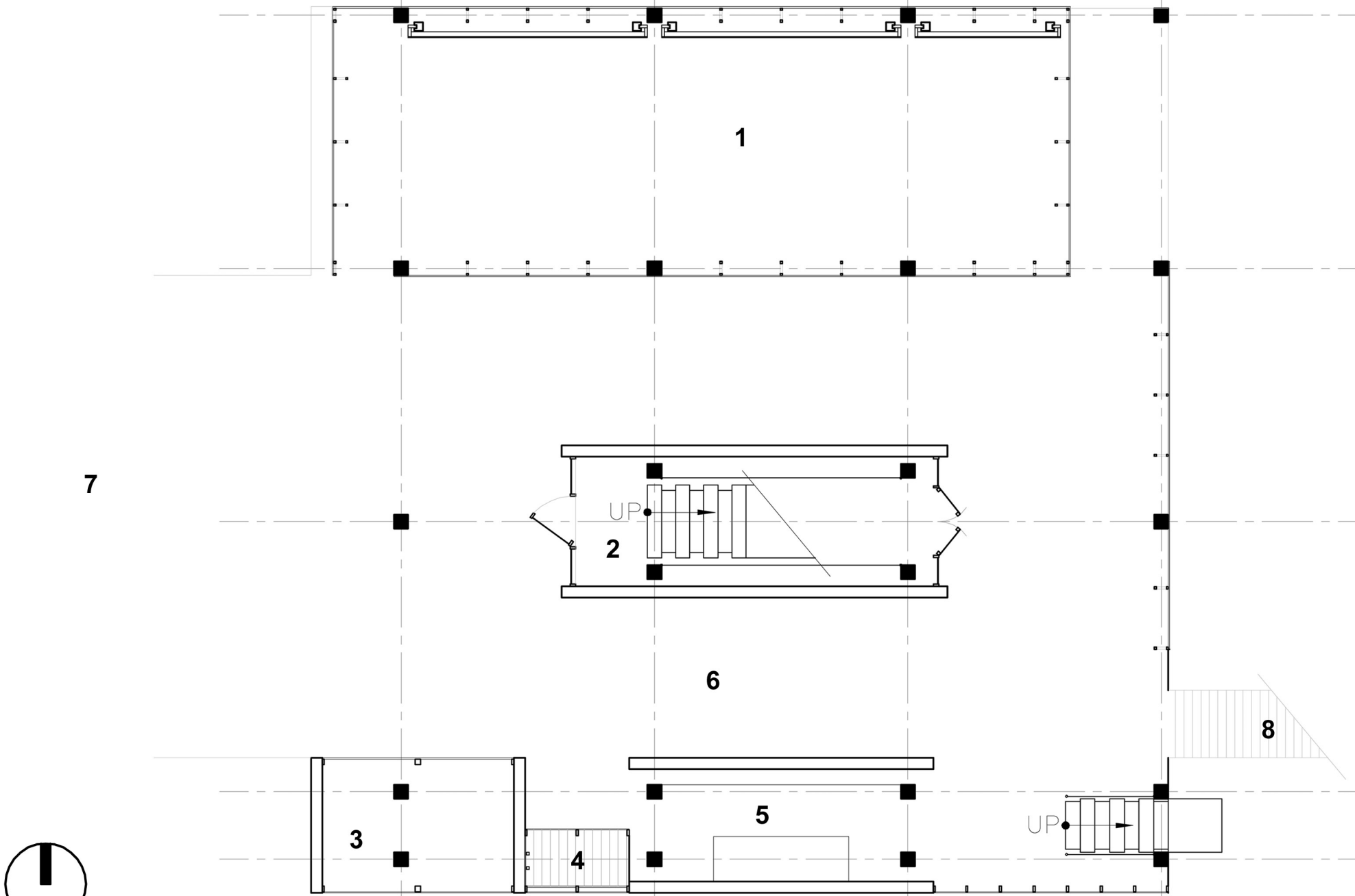
A diagram showing the ‘dissolving’ wall on the South side of the plan.

The approach from the front drive leads directly to the vehicle storage. The entry stair divides this storage from the other half of the plan. The workspace is on the North side, surrounded by a plank wall assembly. The heavy southern wall contains the mechanical space, shower, storage and stair to the next level, all the service elements on this floor. A walkway leads away from the East side of the plan to the Ocean.

In this plan, the wall construction becomes evident as each wall has a different composition. The partition around the workspace is a heavier stud assembly, necessary for the function of this space (maintenance and woodworking). The wall swings open to allow vehicles inside as well as heavy equipment. The North side contains what is called a movable wall in this project, the details of which will be discussed later. Essentially it gives more protection and screening of the North side. Thicker walls define the central entry stair, to envelope the structure and protect what will be the passageway into the house. The southern volume is composed of heavier walls as well, however, these are the only heavy walls oriented North/South, to define the massive nature of this element. It becomes clearer to see here how the wall "dissolves" into the stair to the next level. The mechanical space is formed by heavy walls and solid partitions, except for the necessary ventilation. The shower has some solid characteristics for privacy. The storage space opens up on the East side and the space in front of the stair remains open.

When comparing this plan to the three-dimensional drawing on the previous page, the wall composition and framing can be easily connected to the screen element and the idea of permeability. All the walls were identified as models in the permeability study section of the project. Seeing the plan in three dimensions (previous page) as well as two dimensions (right page) help to identify the construction of elements like the stairs which also have an open and airy feel to them. This plan also demonstrates the flow from West to East with the open space for vehicle storage creating the framed views to the Ocean, past a thin screen wall.

1. WORKSHOP
2. ENTRY STAIR
3. MECHANICAL
4. SHOWER
5. STORAGE
6. VEHICLE STORAGE
7. FRONT DRIVE
8. WALKWAY TO BEACH

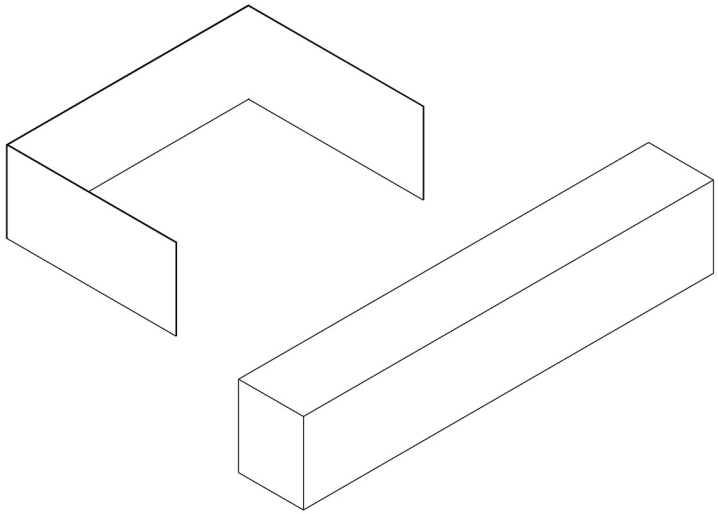


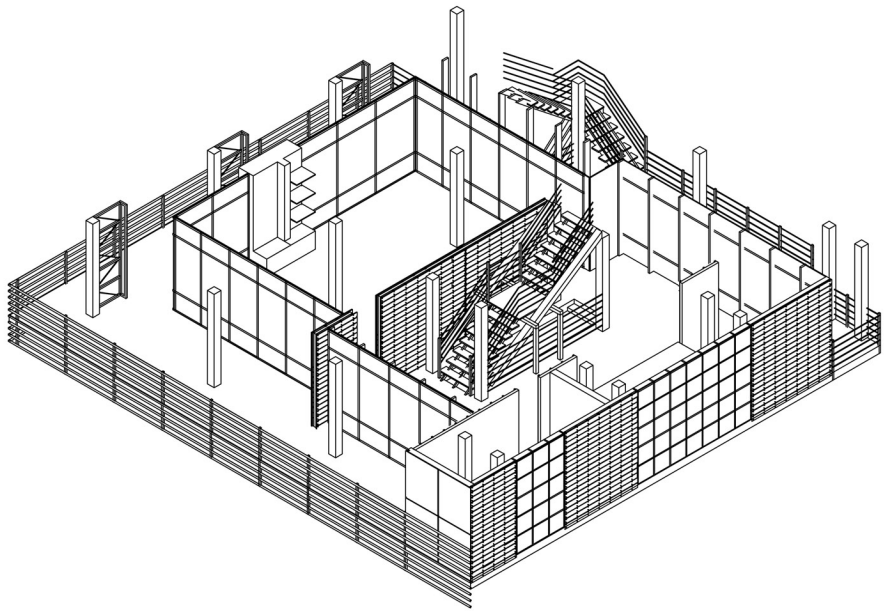
GROUND FLOOR PLAN

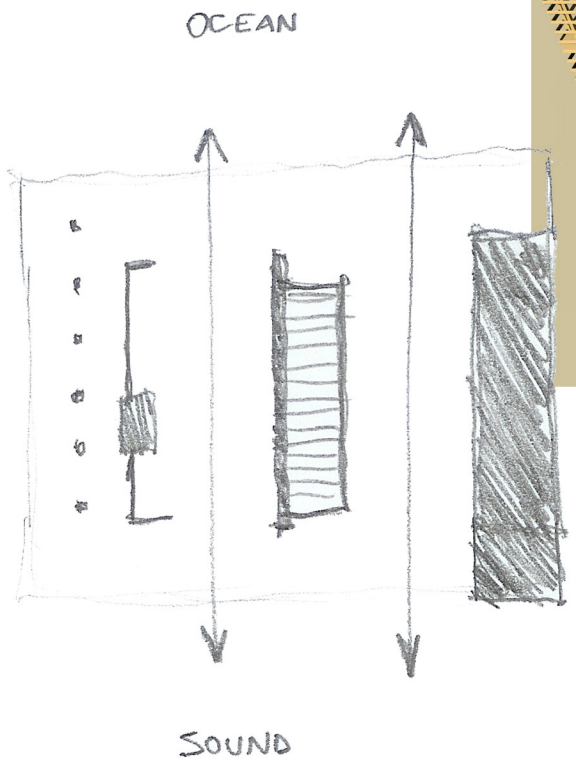
THE SECOND FLOOR

The second floor is devoted primarily to the living space. The main living area is on the North side, a room defined by transparent partitions which interact with the surrounding exterior spaces. The idea for the clear envelope is to allow interaction from inside the room to the exterior space and vice versa. Because it is the public element of the house, it is the most permeable, allowing light and wind to pass through. The relationship between the interior and exterior relates to how a material (screen) can separate two spaces. In this case, the screen is a transparent partition or an entire living volume, with the properties of a filter.

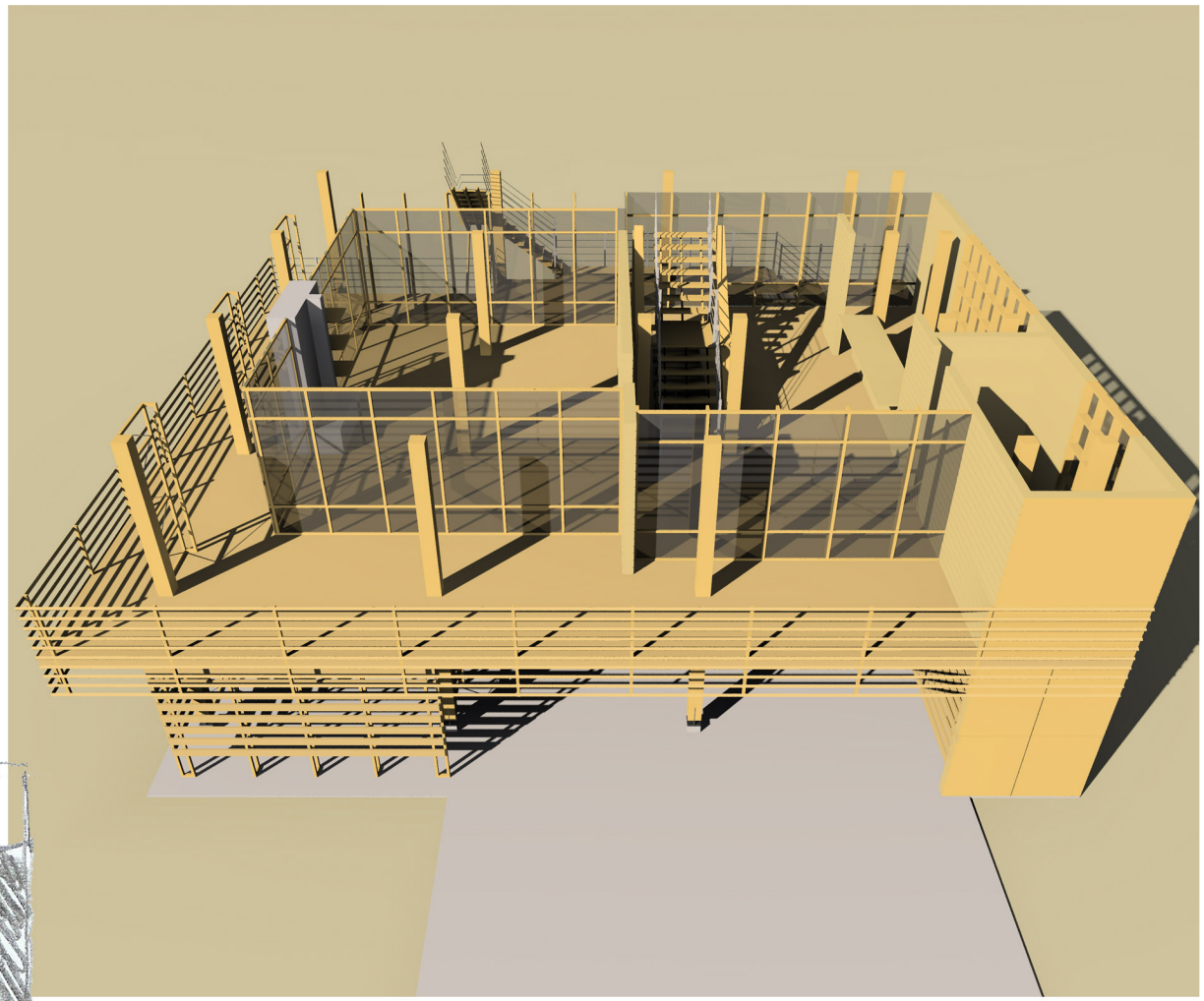
The glass walls make up the East, West, and North sides. A boundary wall separates the living space from the stair and acts as an internal focal point of the room. This wall is opposed by the hearth. The opposing sides create a wrapping of light, each becoming its own focal point, but it is the subtle movement between the two that creates the continuing connection. The dining space is located on the south side of the boundary wall and central stair. The service wall continues on this level and contains the kitchen and bathroom. The ocean stair continues to wrap around the East facade, constantly engaging the Ocean. The heavy volumes and massive walls are oriented East/West to promote the continuous connection to the Ocean and Sound.







A diagram showing the spaces opening to the Ocean and the Sound.



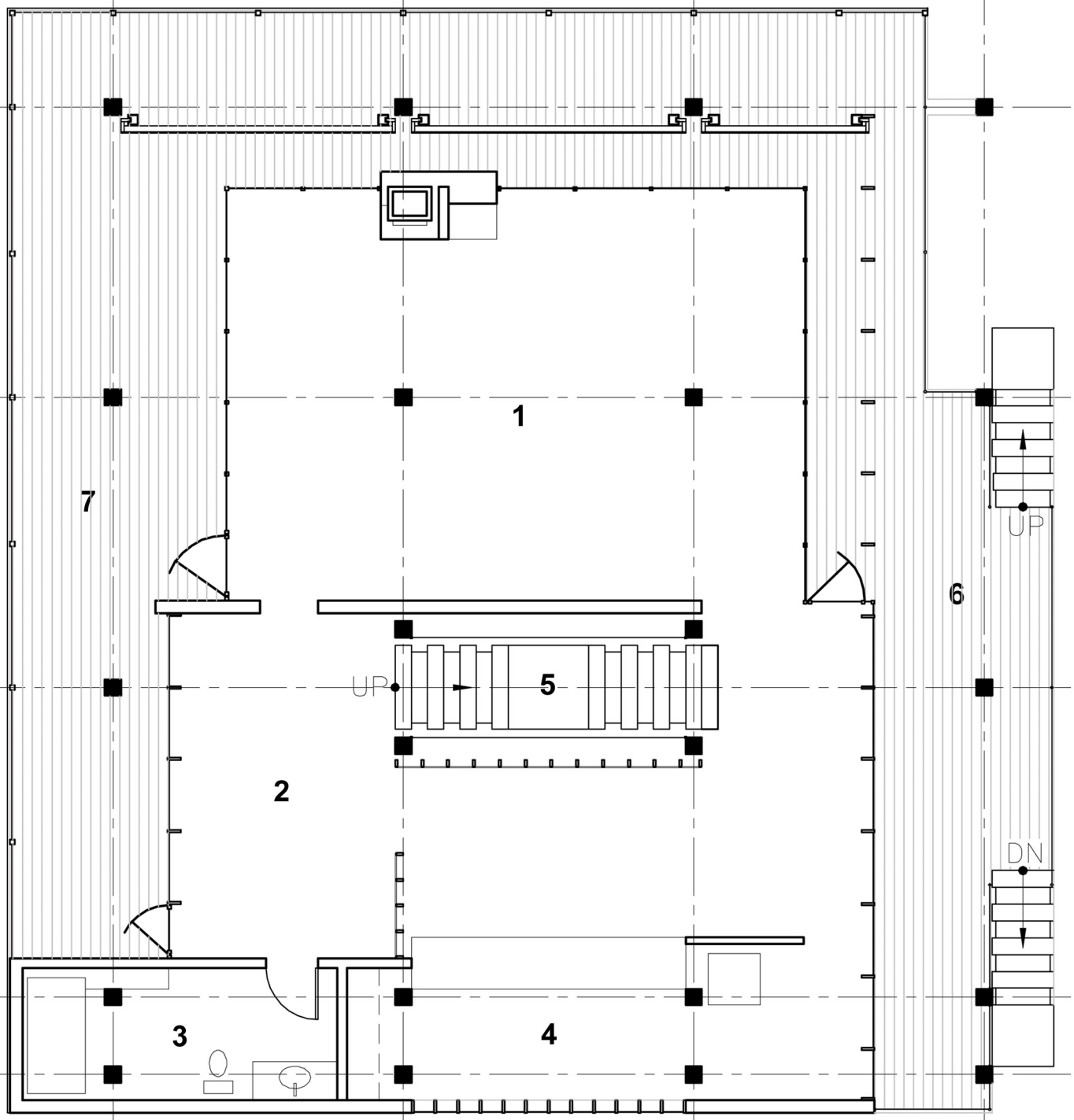
A rendered second floor showing how the elements frame the views to the Ocean and the Sound. The hearth is the volume on the North (left) side, the boundary wall and stair in the center, and the service component on the South (right) side.

The approach to the second floor of the house comes from two sets of stairs, one centrally located, one along the East side. The East stair is an exterior stair that offers a direct connection to the Ocean. The central stair is the interior circulation between levels that is marked by the shift in the structural grid. This volume also acts to divide the living space on the second floor and the dining and service elements. The juxtaposition of the interior and exterior stairs is a continuing theme of the second floor.

The main living space is on the North side of the central stair, surrounded by glass partitions. Framing the North and South sides are the hearth and entertainment wall. Just outside the envelope of interior living space is the exterior deck which wraps around three sides of the space. The dining space is located on the South side of the central stair, with the kitchen carved out of the service wall. A bathroom is occupying the western portion of the service wall. This service wall maintains the same heavy volume appearance as it did on the ground floor, except it opens to provide light to the kitchen. The opening however, is a wall of glazing with a deep mullion structure. The actual panels are small to make the composition feel heavier as it fits inside the massive wall.

The public nature of the living space and second floor of the house offers a relationship between interior and exterior space. The transparent walls allow this connection to take place not only between the interior and exterior, but also between the Ocean and the Sound. The envelope opens to allow air to pass through and provide ventilation to the space. This envelope relates directly to the amount of permeability this level of the house demands. The public nature of the spaces does not require as much privacy so transparent construction presents the ideal envelope of the space.

1. LIVING AREA
2. DINING AREA
3. BATHROOM
4. KITCHEN
5. CENTRAL STAIR
6. REAR DECK
7. FRONT DECK

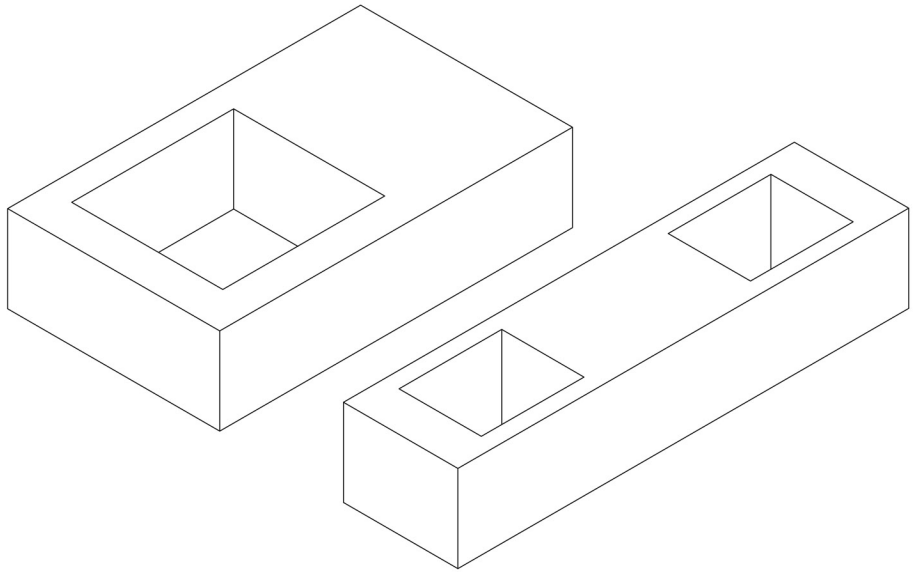


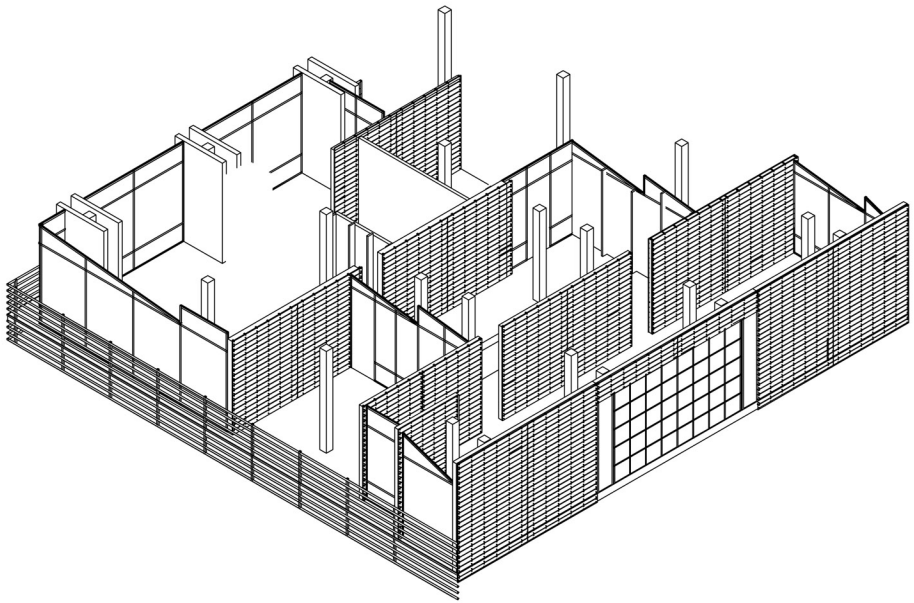
NORTH

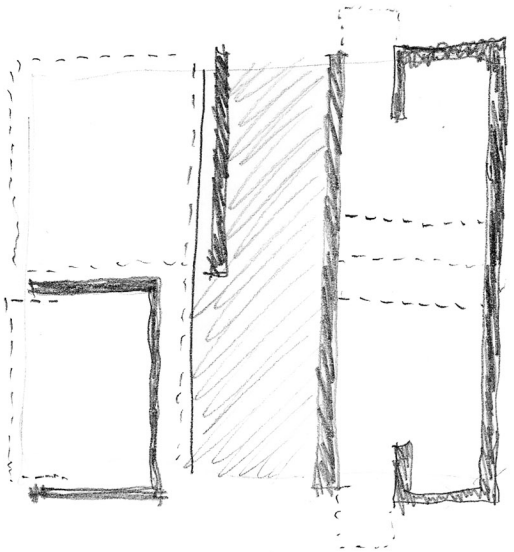
SECOND FLOOR PLAN

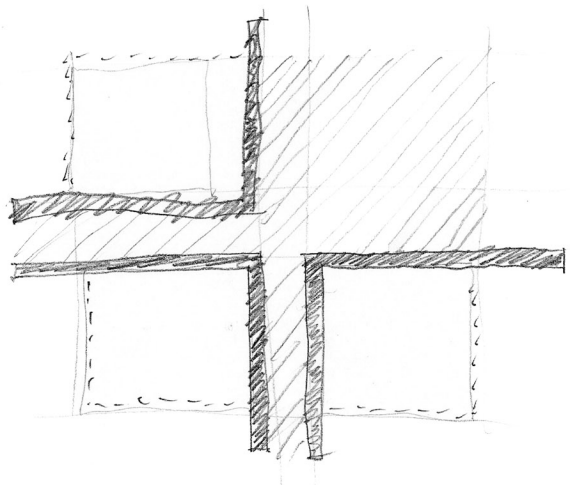
THE THIRD FLOOR

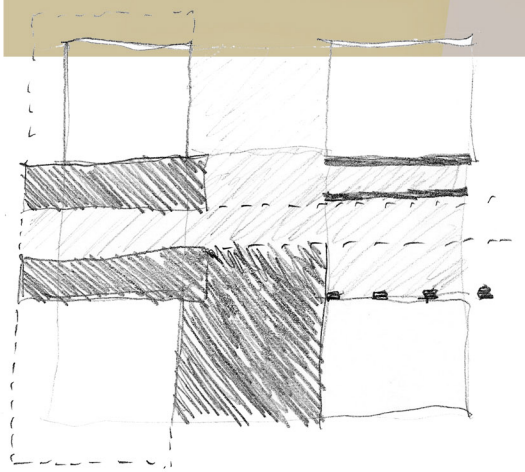
The third floor is devoted primarily to the sleeping quarters. A master suite is located on the North side to maximize indirect light and views out of the room. The suite occupies three sides of the plan, which allows for multiple connections to the surrounding landscape. The central stair is surrounded by a gathering area with interior and exterior spaces. This offers separation between bedrooms, thus creating a nested condition for each. On this level, the service wall transforms into two bedrooms divided by a pair of bathrooms. The wall maintains its presence on the Sound facade, but quickly dissipates to create the bedrooms. The bathrooms offer a connection to the service wall as well as provide separation between East and West bedrooms. Of the three plans, this is the least permeable, because the function of these rooms is private.



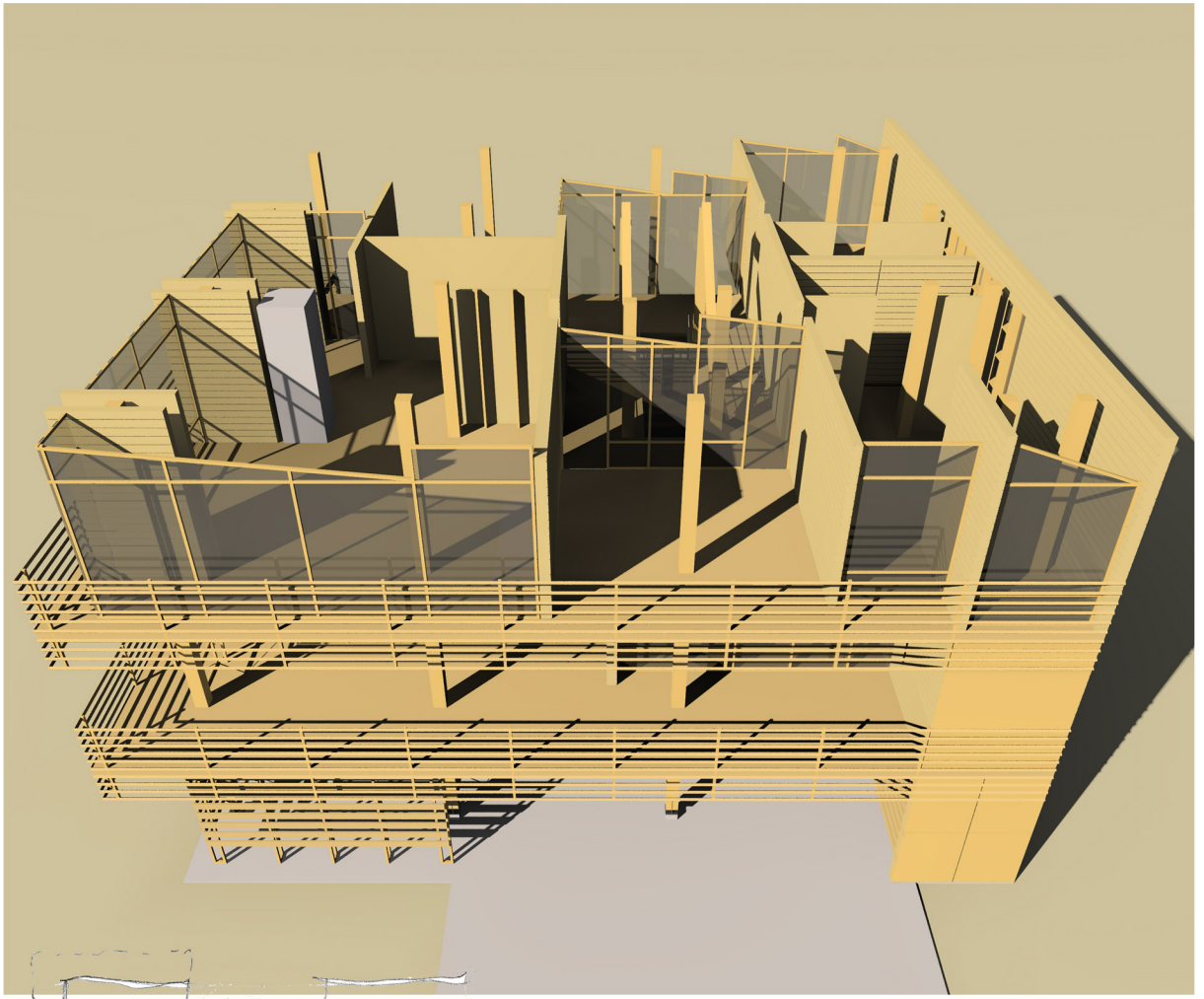








A series of diagrams showing how spaces can be separated.



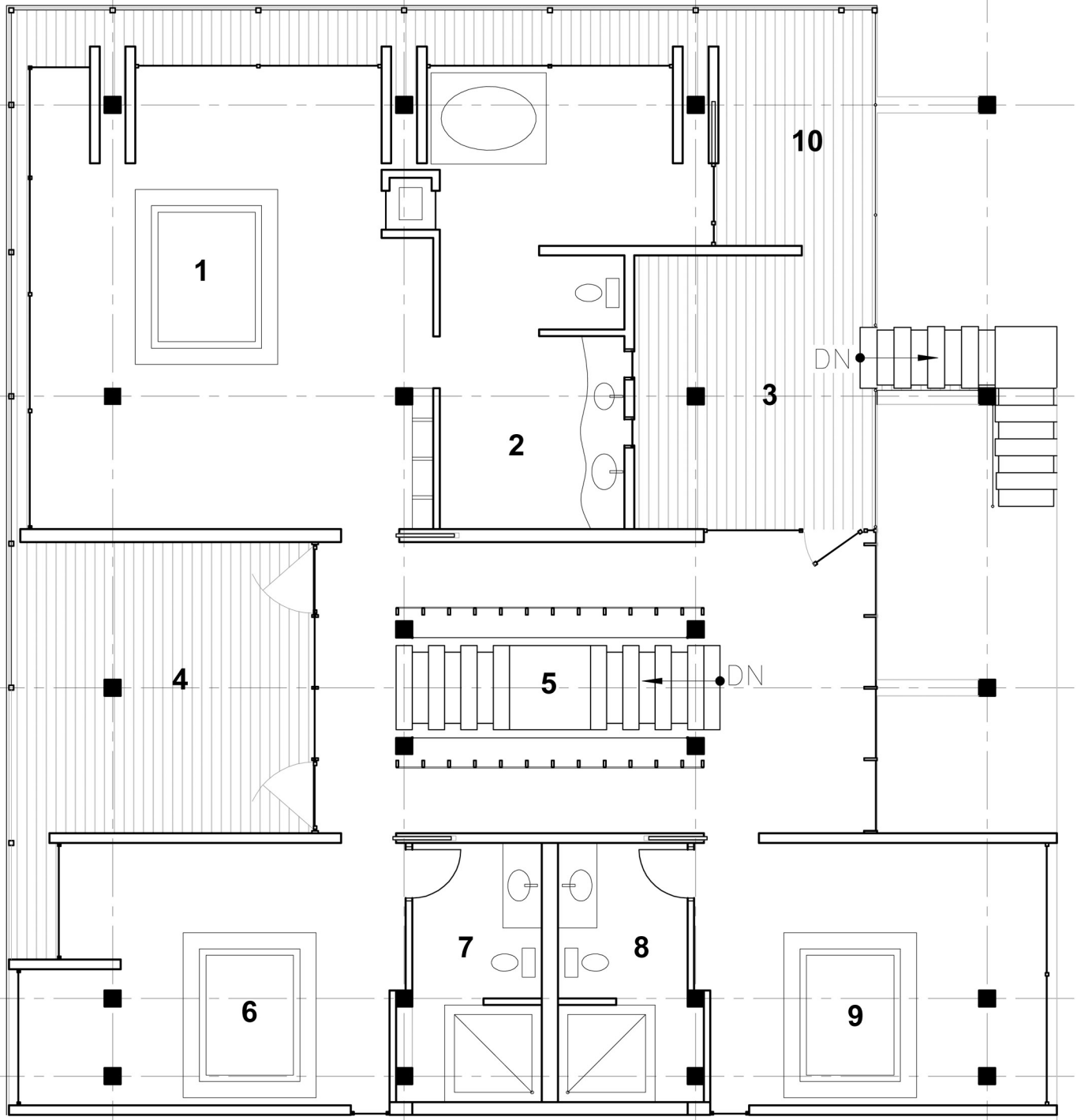
A rendered third floor plan showing the nested bedrooms and the dense floor plan as compared to the first two. The master suite is on the left side and the smaller bedrooms are on the right side (South) of the plan.

The central stair is the interior means of accessing the third floor. The East side exterior stair approaches the third floor from the Ocean side of the plan. A series of exterior gathering spaces surround the stairs and offer a separation from the bedroom spaces. A larger gathering area surrounds the central stair, and it is split between interior and exterior spaces. The exterior space is partially covered by exposed beams, which act to shade the space in the summer months. The East deck, near the East stair, is divided into two parts, a public space and a private deck for the master suite. These exterior spaces play a crucial role in the separation of the bedrooms, creating a nested, and more private condition for each space.

The master suite is located on the North side of the plan, taking up most of the North side. An interior door is located off the central corridor, which enters the master bedroom. Off the master bedroom is the master bathroom and changing room. These spaces are separated from the bedrooms by a wall with a fireplace, which opens to both sides. The columns along the North face are enclosed by walls to extend the interior space slightly, giving room for a large tub and sitting area in the master bath. Two exterior doors, on the North and East side, allow for easy access to the wraparound deck and private exterior spaces on the North side.

The two southern bedrooms are carved out of the massive service wall on this floor. They are separated by two bathrooms, which allow for each bedroom to remain more private. The entry to both bedrooms is off the central corridor. Because the bedrooms are smaller than the master, they only open to one side (Sound or Ocean) of the plan. The West bedroom maintains the integrity of the service wall by retaining the heavy wall element, which partially separates the space, but creates a pocket of space that will catch the setting sunlight in the summer. The East bedroom has a direct view of the Ocean and pushes past the structural grid to become physically closer to the Ocean. This breaking of the structural envelope is tied to the idea that the Ocean façade is more dynamic and relates to the movement of the Ocean. On the West façade, the railing defines the outermost façade element, creating a more homogeneous quality.

1. MASTER BEDROOM
2. MASTER BATHROOM
3. EXTERIOR DECK
4. EXTERIOR DECK
5. CENTRAL STAIR
6. BEDROOM
7. BATHROOM
8. BATHROOM
9. BEDROOM
10. PRIVATE EXTERIOR DECK



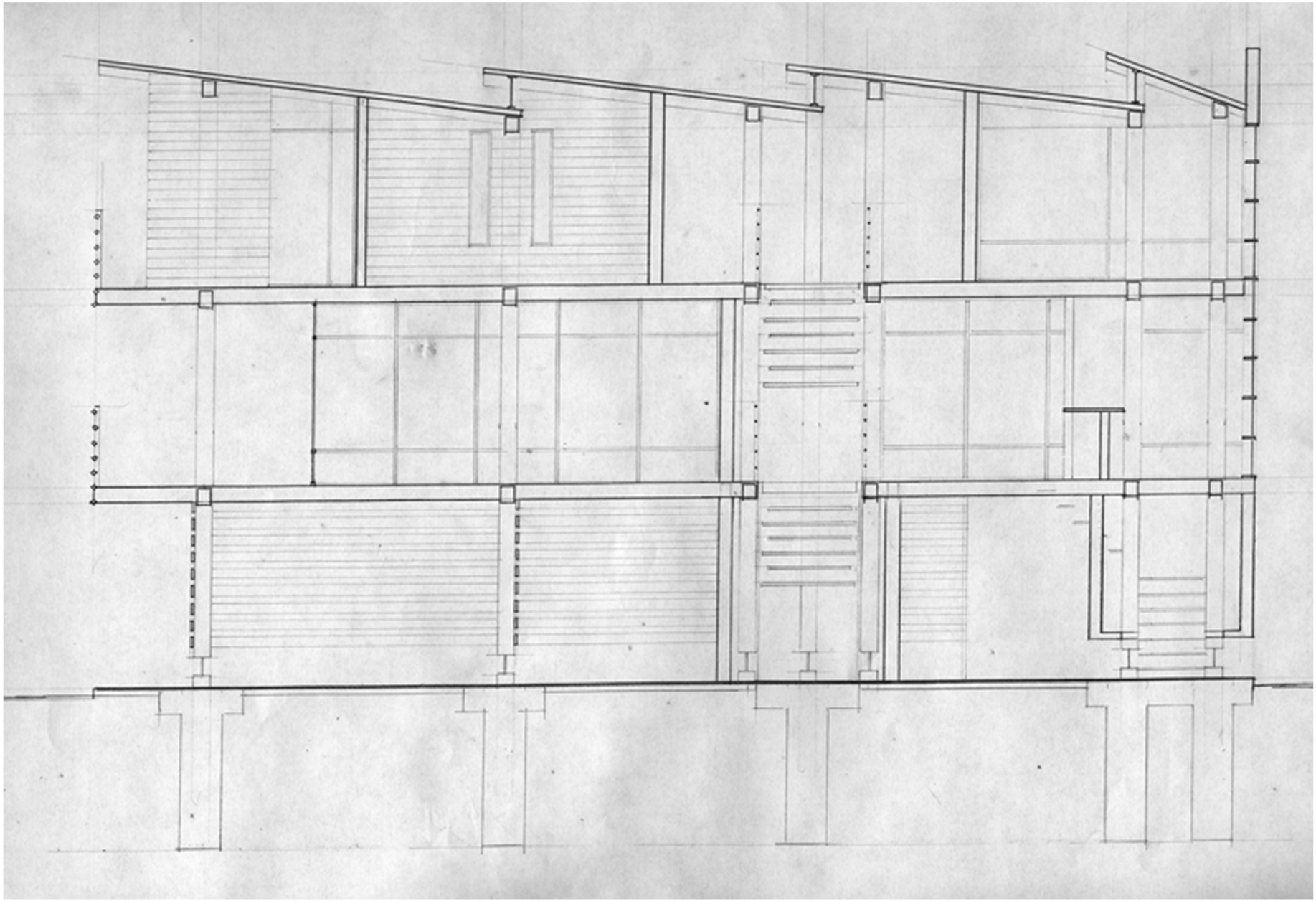
NORTH

THIRD FLOOR PLAN

The first section is cut showing the sawtooth roof structure. The openings face North to allow for indirect light to enter the spaces below. The central stair divides the plan, and the service spaces on the right side set up a boundary and shade from the southern light. The section also identifies the different wall structure at each floor. The ground floor has open slats to allow for light to enter the workspace. The second floor has glazing to open the space up to the exterior and allow for a maximum connection to the surroundings. The third floor has solid walls for privacy and separation between spaces.

The section explains further how the spaces are divided internally. Since the stair is not directly centered, the spaces on the North (left) side of the section are larger, and more open to serve their functions. The section also shows the relationship between interior and exterior spaces. On the first floor, the interior space opens to the exterior but the structure does not frame a space outside the envelope. On the second floor, the deck offers a public gathering space outside the living room. The railing frames a large space meant for many people to occupy. The third floor offers a small, private deck for the master suite. It is much smaller than the space on the second level and offers a more intimate setting.

This section also shows the way the house responds to the daily sun cycle. Many of the rooms open to the North to get the best indirect light where the structure on the South wall acts to shade as much light and heat from entering the space. Even though the a large window occupies the southern wall, the deep mullions and small windows provide shade during the summer months.

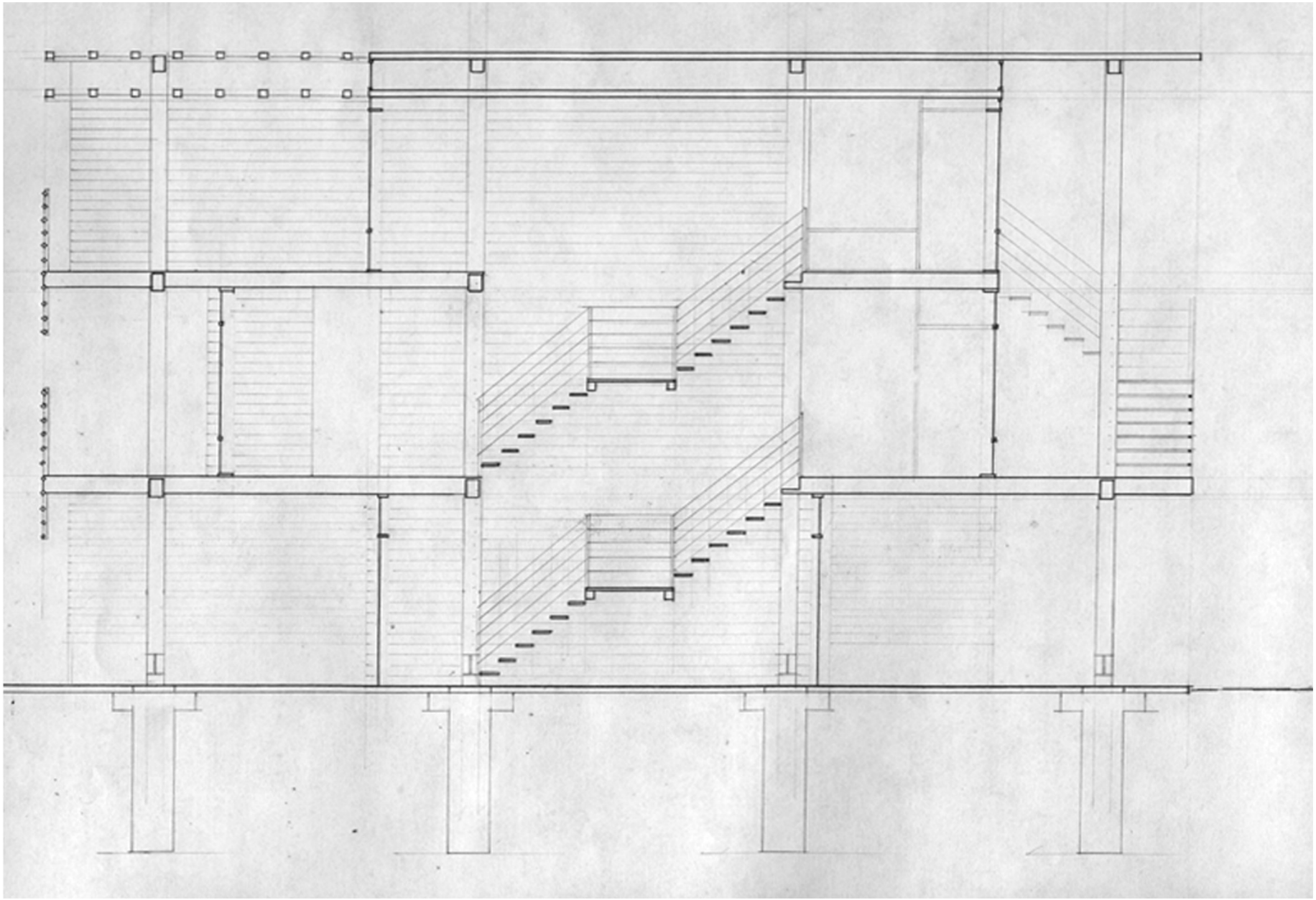


SECTION A

The second sections cuts thru the central stair. It shows the differences between the Sound facade and the ocean facade. The Sound facade on the left, is defined by the railing which frames the space outside and extends below the floor plane. This acts to give the railing more presence and screen more of the envelope beyond, just like the surface of the Sound. The Ocean facade on the right is made up of the building planes moving around the structural grid. It also has a stair closest to the Ocean which offers a connection back to the Atlantic Ocean as you move between the floors of the house. The composition of this facade is a response to the movement of the Ocean. The shifting of the building envelope around the structure is meant to reflect the motion of the waves and the erratic nature of the Ocean.

The central stair also divides the house in this section as well. It defines a front and a rear space which reacts to each respective facade. Again the composition of the walls is defined differently on each floor. The living space is open and surrounded by glass, and the third floor bedrooms have solid walls. The exterior space changes on each floor, to get away from the box-like section. On the second floor, the deck wraps around three sides. On the third floor a large exterior gathering space occupies the central area, while the oceanside deck is tucked away beyond the stair.

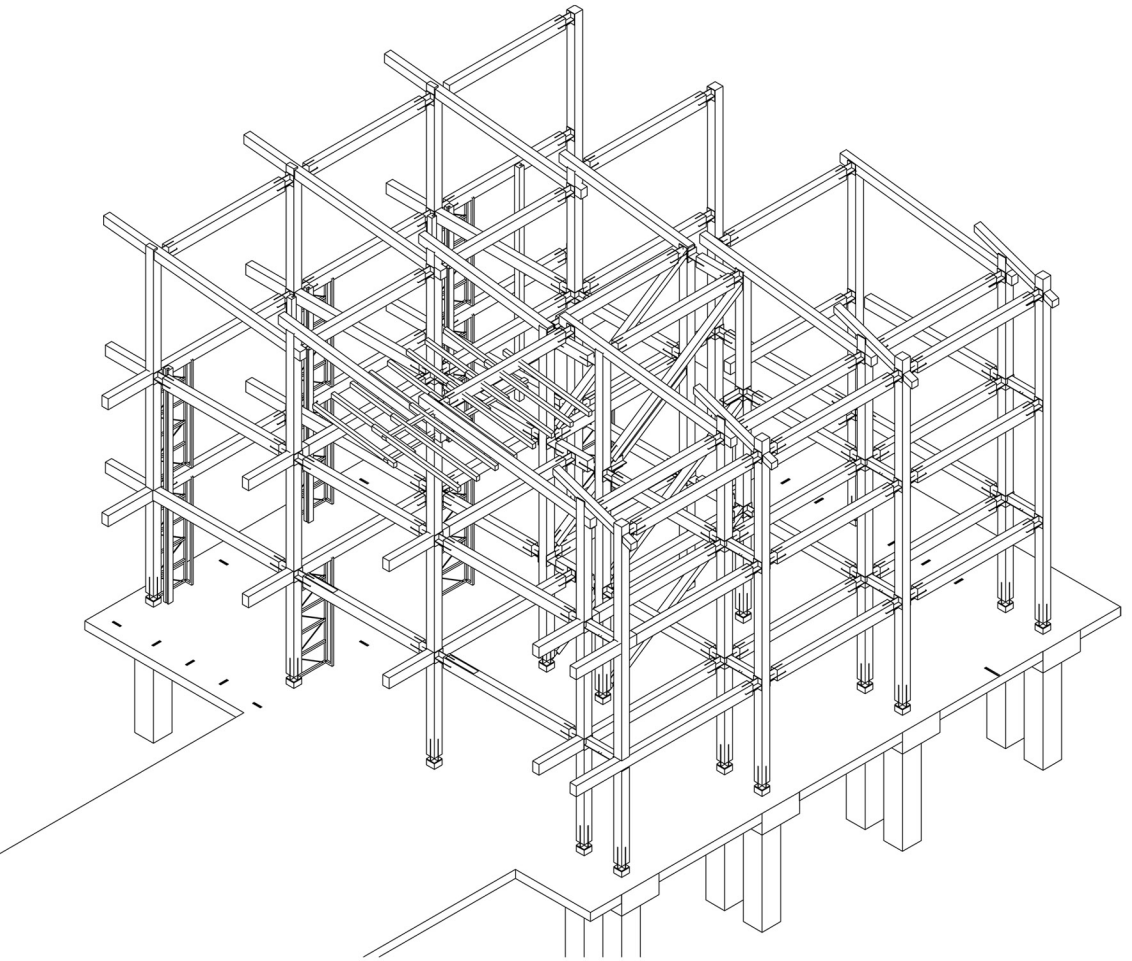
It is the opposite characteristics of the Ocean and the Sound that drive this project. These themes are reflected in the plans as well as the sections. The movement of the waves is reflected on the Ocean facade, and the rippled surface of the Sound can be identified in the railing that dominates the Sound facade.



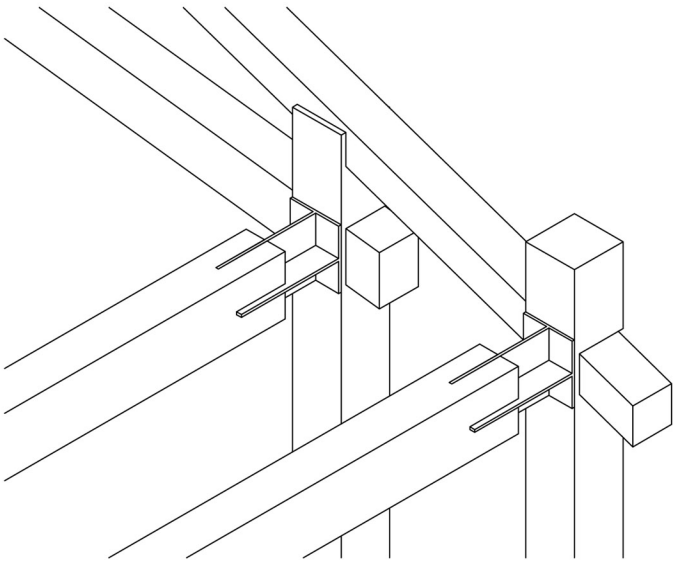
SECTION THRU STAIRS

THE STRUCTURE

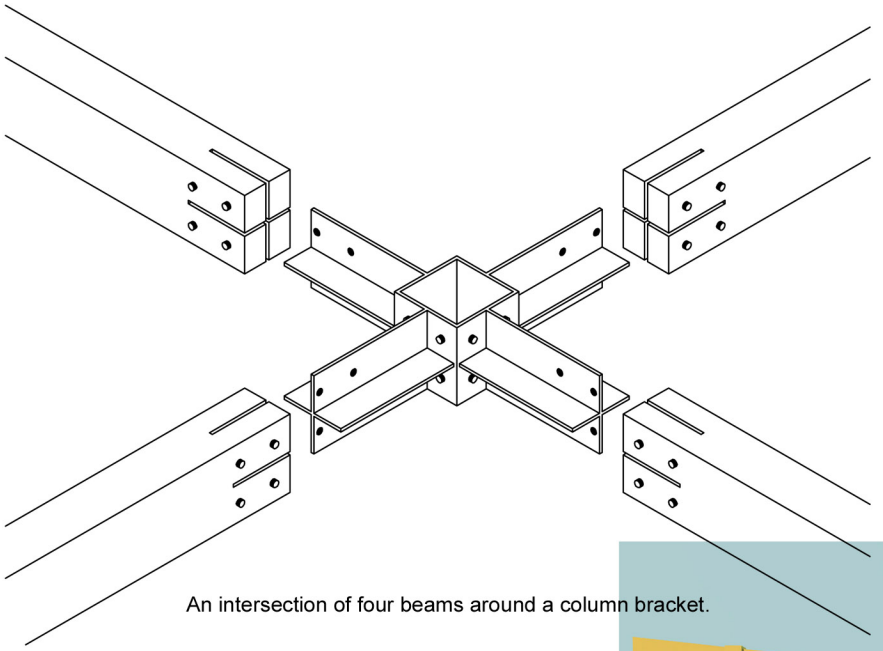
Because the house rests on an unstable landscape, the structure is very important. The idea for the project is a screen so the house will only appear to be lightly touching the ground. The sandy landscape requires a concrete plinth to provide the necessary foundation for the structural columns. The plinth rests on concrete caps formed at the top of the wood pilings. Small concrete pedestals sit under steel anchor brackets to accept the engineered wood columns. The beams are connected to the columns with a similar steel bracket fastened with steel bolts. The roof beams are locked into the columns with a simple lap joint, and then bolted. The secondary structure fills the bays between the columns and the beams.



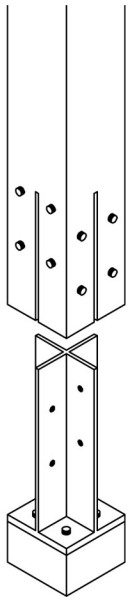
An axon showing the structural framing of the project with the concrete pad and substructure.



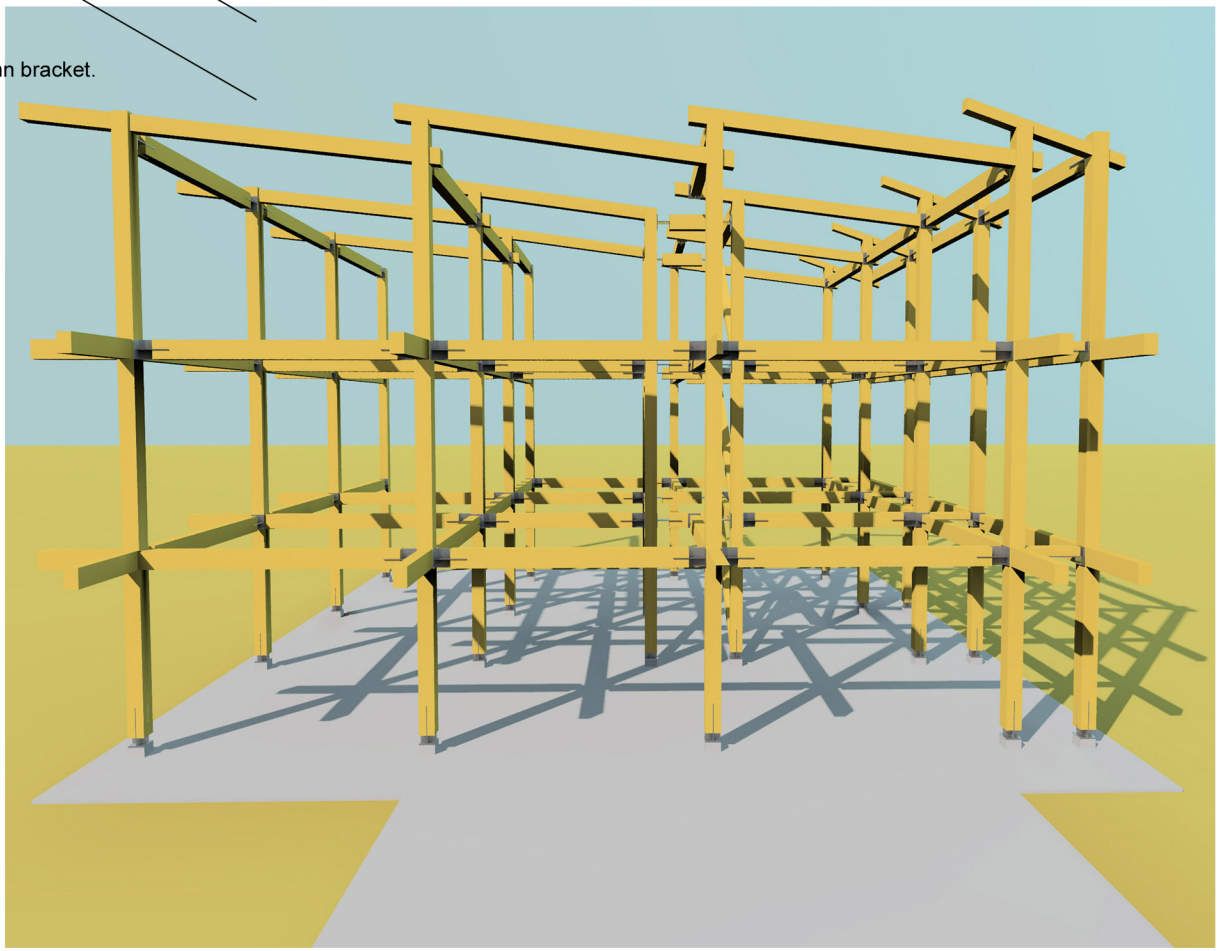
A sketch showing the angled beams intersecting the columns.



An intersection of four beams around a column bracket.



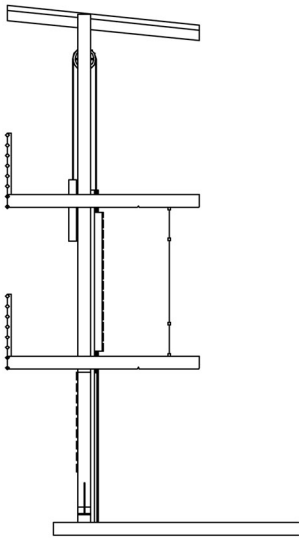
A diagram showing the way the column intersects the concrete footing.



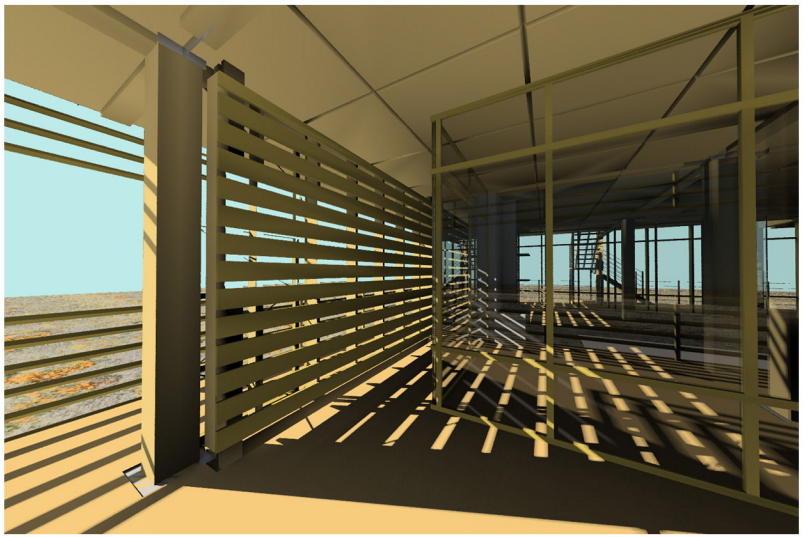
A rendering showing the structrual grid. On the right side is the heavy Southern wall demonstrated by the columns spaced closer together.

THE MACHINE - MOVABLE WALL

Late summer hurricanes and storms are a part of the landscape on Hatteras Island. Due to the storms, high wind and debris can severely damage a house. Therefore, a movable wall is built on the North side to protect all the glazing on the second floor, and to increase the protection on the ground floor. The movable wall has counterweights which can be filled with sand (readily available on the Island) to raise them to the second floor. A release valve lowers the wall and allows the sand to return back to the Earth. This movable wall is a valuable asset to protect the house and allow it to adapt to its environment.

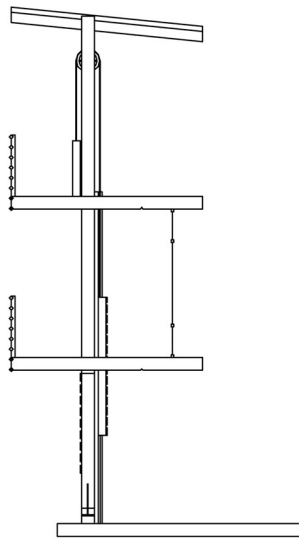


section A

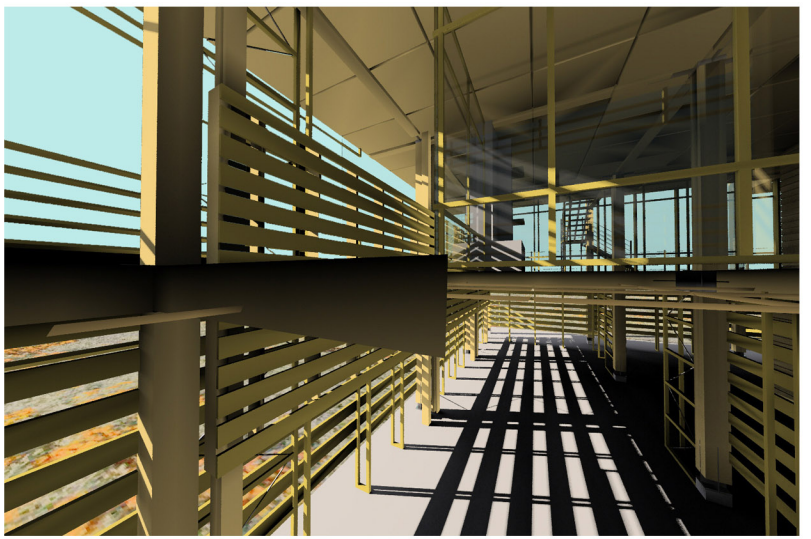


rendering A

The drawing and image to the left show the movable wall at the second floor, protecting the glazing surrounding the living area. At this point the counterweights are filled, causing them to raise the wall to its highest point. Because it is held against the columns, it still provides a space to occupy outside the building envelope but protected for any maintenance necessary during inclement weather. Section A shows the layers of protection starting with the railing, columns, movable wall, and glazing. The rendering gives an actual view of the spaces created by the wall in this position.

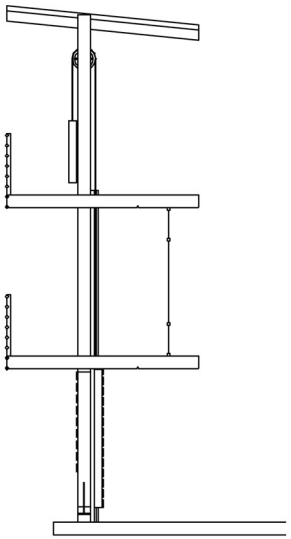


section B

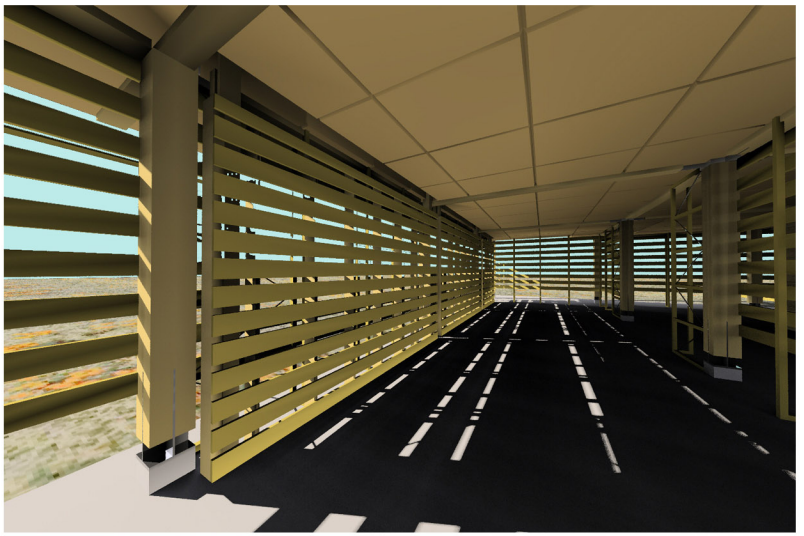


rendering B

The drawing and image to the left show the movable wall between the second and first floor. It is transitioning between floors, but still creating various effects in regards to lighting and partially protecting both areas. In section B, the wall can act as a second railing or other half-height functional element. Rendering B begins to show the effects the wall has on the light entering spaces. The spaces on the ground floor start very bright on the North side and as the wall lowers and more light is shielded, the interior spaces become darker, as shown in the rendering.

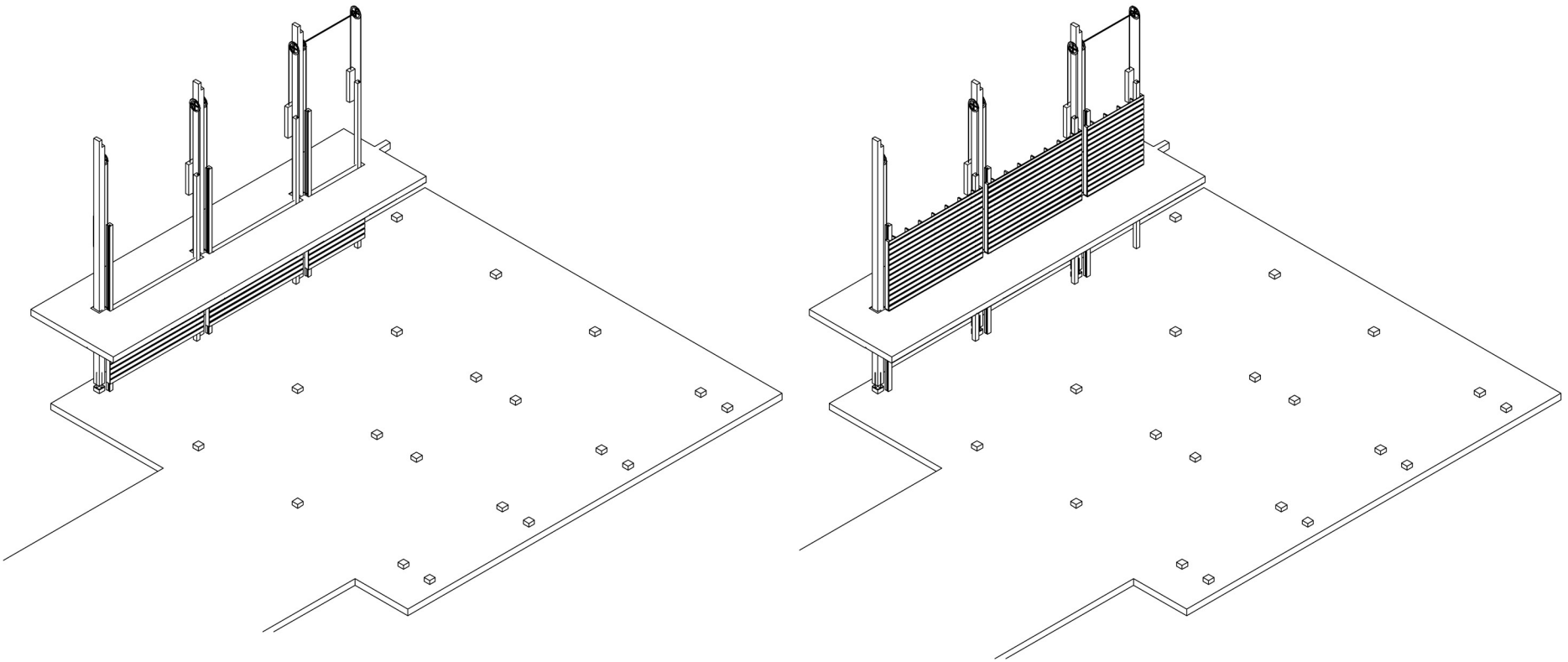


section C



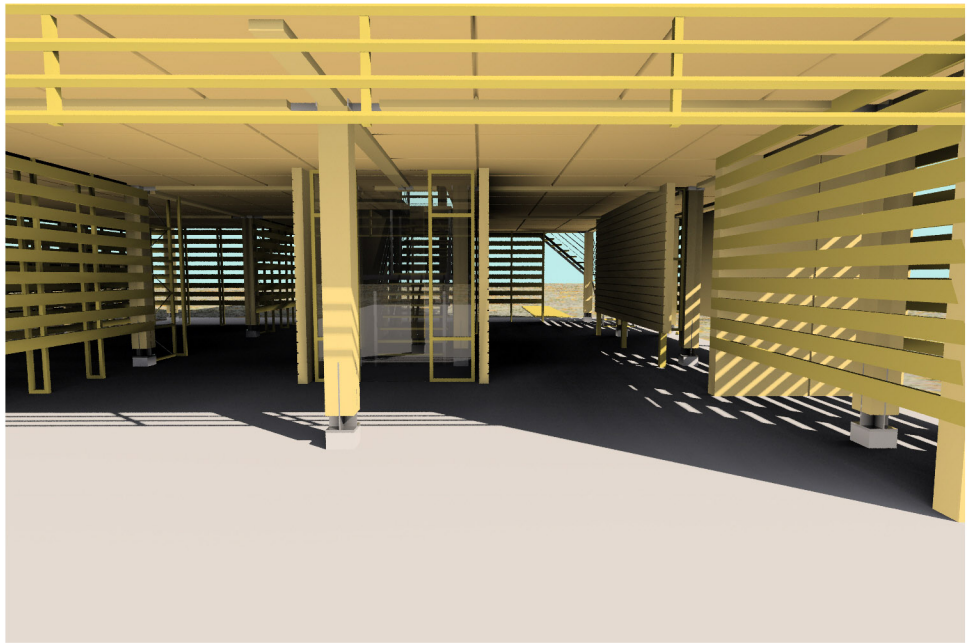
rendering C

The drawing and image to the left show the movable wall at its resting position on the ground floor. This is where it will stay until the counterweights are filled to lift it to the second floor. As section C shows, the wall adds a layer of permeability to the ground floor, screening it from the elements, while opening the second floor to create views across the landscape. The image to the left shows how the space on the ground floor is affected by another layer of screening. The work space is shaded more and visibility is reduced into and out of the space.



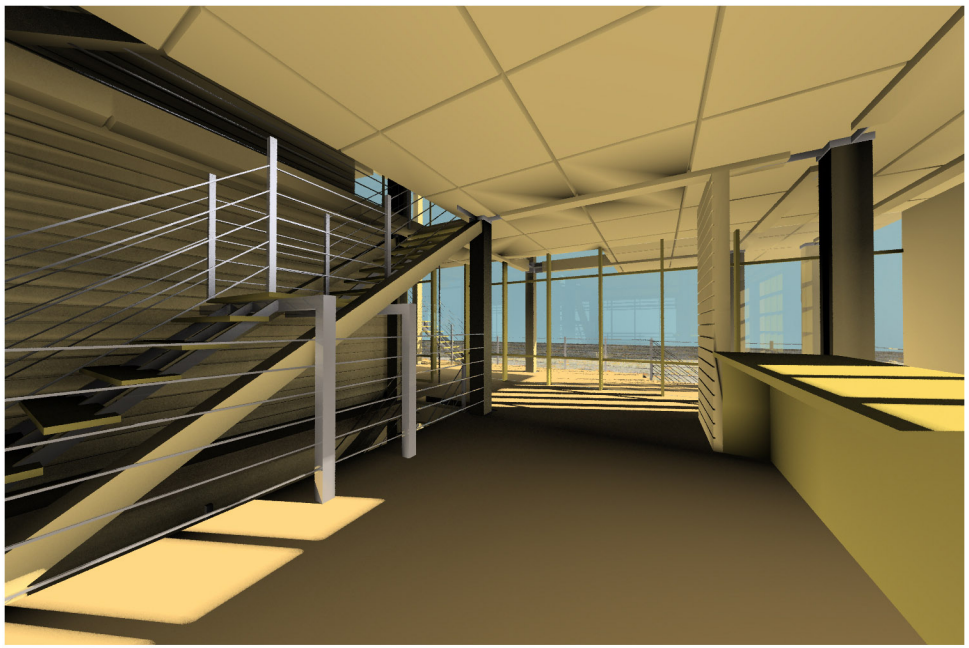
An axonometric drawing showing the position of the wall in relation to the rest of the plan.

VIEWS OF THE FLOORS



A view of the vehicle storage area.

The image to the left is a rendering showing the vehicle storage space on the ground floor. The service wall is on the right side, the workshop is on the left side and the central stair is right in the middle behind the first column. This image gives an idea of the filter effect of the slatted wall and how the volumes of space frame the view beyond. The rear stair can be seen leading up to the second floor and drawing the eye toward the East. Past the stair is the boardwalk which leads over the dunes to the beach. The different walls also envelope the rooms making up the ground floor, an idea which stems from the permeability study earlier in the project.



A view out of the dining area looking toward the Ocean.

This image of the dining area on the second floor faces out toward the Ocean. On the left is the central stair and on the right is the kitchen space. The wall that divides the dining space from the living space is on the far left. The kitchen occupies the service wall volume that continues through each floor. In this view, both of these walls act to frame the perspective out to the East and West. The East facade is mostly glass so it offers a connection to the exterior from many places on this floor. This connection ties to the permeability of the walls, how they transmit light and present an interaction on the other side. The walls oriented East/West are typically more opaque, whereas the walls fronting the Ocean and Sound are more transparent to give the connection back to the landscape on both sides. These views are important in identifying this project as a screen, framing views, and connecting the Ocean and Sound.

A view to the West from the central stair.

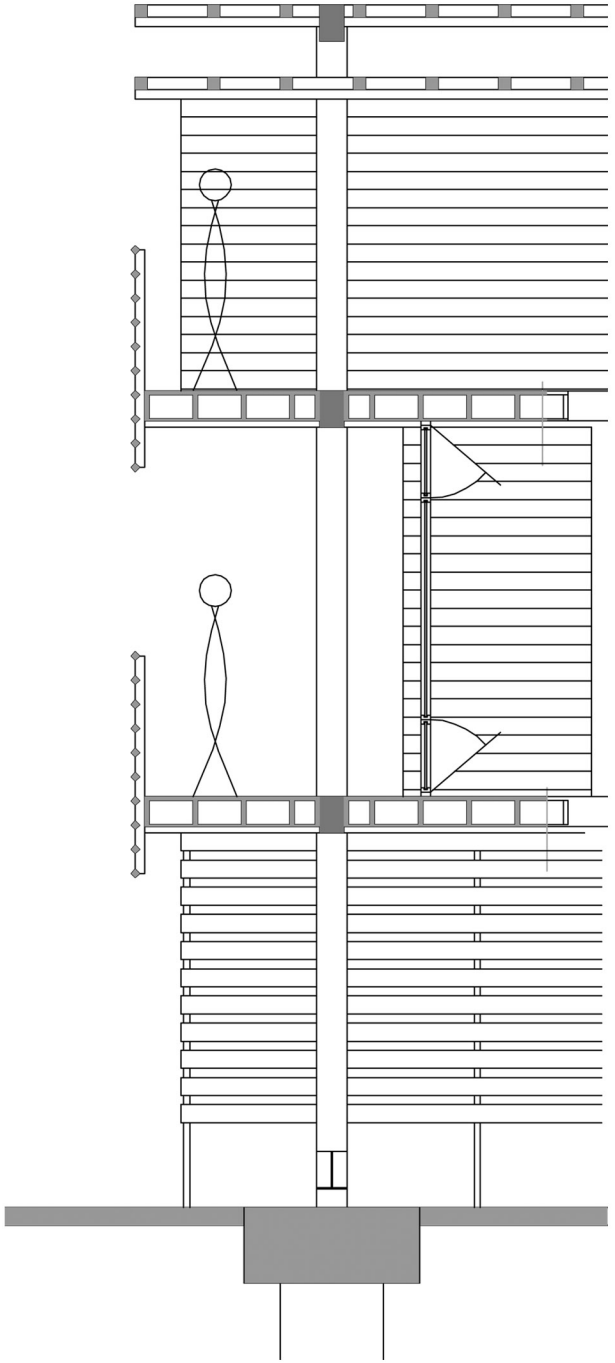
The view to the left is a view from the third floor looking out to the Pamlico Sound. This is the central stair which feeds all the bedrooms and leads outside to a gathering space, which is lit up by the sun in this rendering. The master bedroom is beyond the wall to the right and the Southern bedrooms are beyond the wall to the left. The stair leads down to the second level, and again offers a sense of orientation to the plan on all levels as it appears in this series of renderings. The walls, separating the bedrooms and running East/West, are again solid for privacy on this level, but continue to frame views like the one out to the Sound. Another important element of this rendering is the light from above. The same way the walls were diagrammed as having a certain permeability, the roof does as well. It is made up of solid planes tilted on each structural bay to allow northern light to enter the third floor. This is clearer in the images to follow, but it is important to note that the roof dissolves in the front portion to allow more light into the exterior gathering space on this level, at the far end of this image. The last issue this image conveys is the sense of an enclosed sheltered space on this floor. Since the bedrooms are private, they are enveloped by solid walls on the interior. Out of the three images on these two pages, this one expresses the idea of compression. This is because of the privacy involved with the functions of the spaces on this floor.

These images were generated to express the different qualities on each floor. Each one conveys the idea of the house as a screen by framing views with a series of solid walls and transparent facades (the focal point of the images). They also give a sense of how the walls in the permeability study were used on the project. This shows how the light enters the spaces and how the walls can reveal or hide the spaces beyond. The second and third floor images also introduce the light metal framing used as railing on the stairs. The metal compliments the natural wood finish while not interfering with the architectural language.

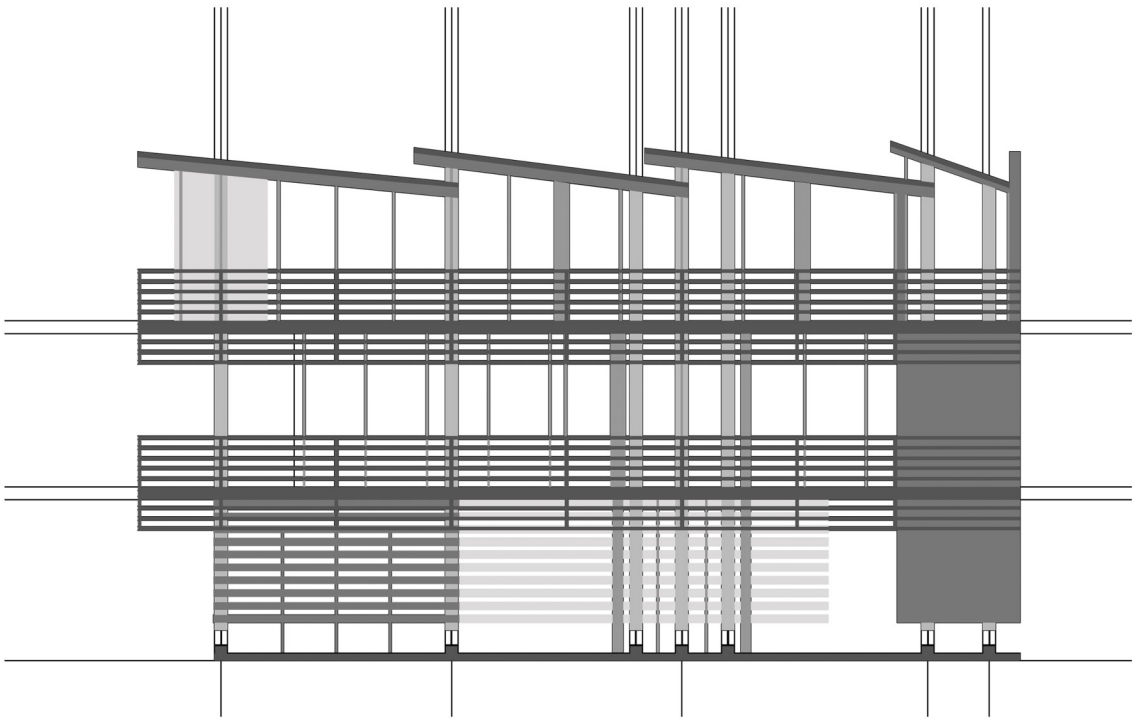
It is important to note how the interior spaces connect with the exterior spaces in this series of renderings as this relates to the idea of a house as a screen or filter. A filter can be defined as a porous object that allows liquids or gases to pass through. The house is designed to do exactly that. It is a filter of light, air, sand, and water.

THE SOUND ELEVATION

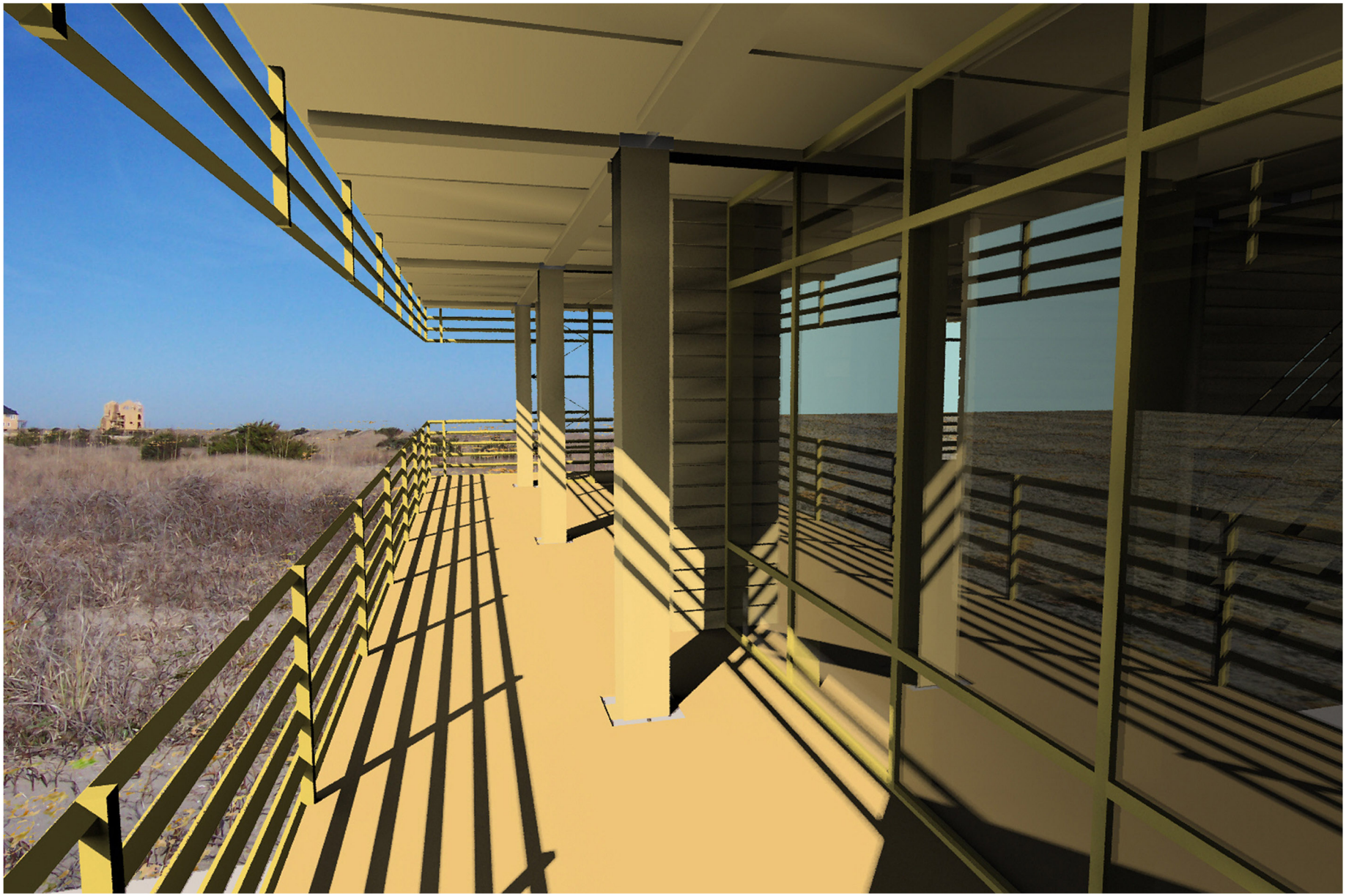
The West elevation is an immediate reaction to the characteristics of the Pamlico Sound. The facade is masked by the dominent railing which acts as the first layer of permeation. It is also a reflection of the rippled surface of the water on the sound, with the members tilted on a 45 degree angle.
The railing also hides the planes of the building envelope beyond, similar to the way the surface of the Sound conceals its depth. The service wall is located on the right side (south), clearly defined as a solid object, while the rest of the elevation resembles a filter of sorts, allowing partial visibility through the spaces. This is important in defining the service element as a volume of space, as well as keeping the idea of a screen clear. The elevation strives to address the issue of opaque versus transparent while revealing the layers of filtration and its relationship to the Pamlico Sound.



A section of the West elevation showing how the railing acts as a defining element and the spaces on each floor are terminated prior to reaching the railing. This accentuates the idea of the screening element hiding the spaces beyond.



A diagrammatic elevation showing the opacity and filtration qualities of the West facade.

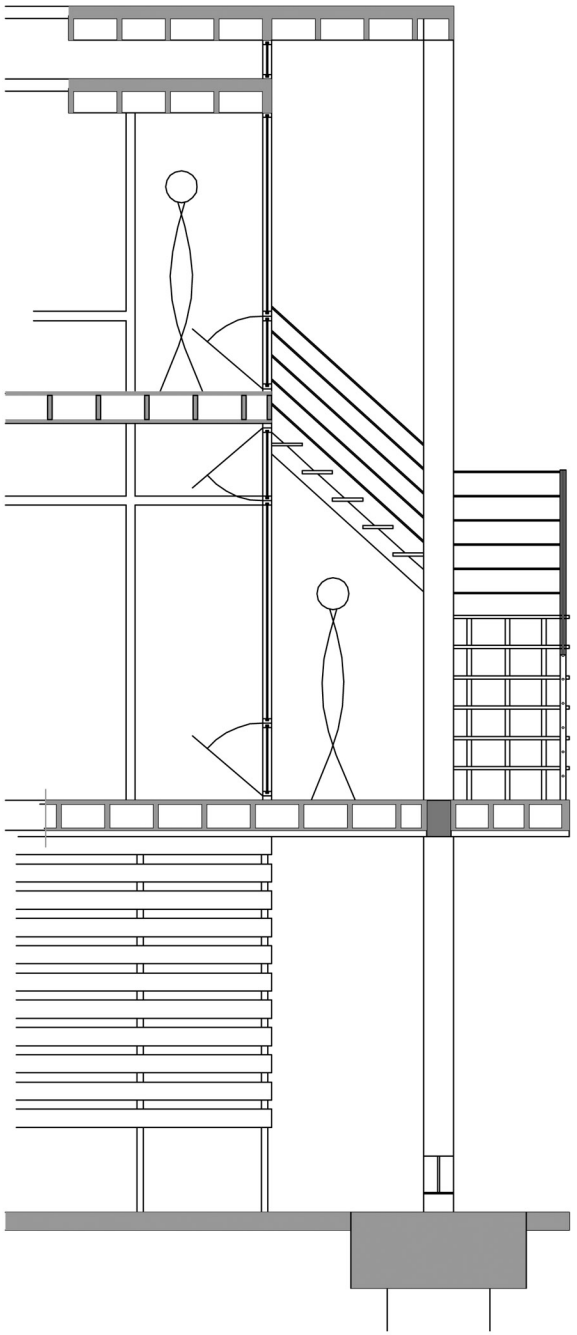


A view looking North from the western deck on the second floor.

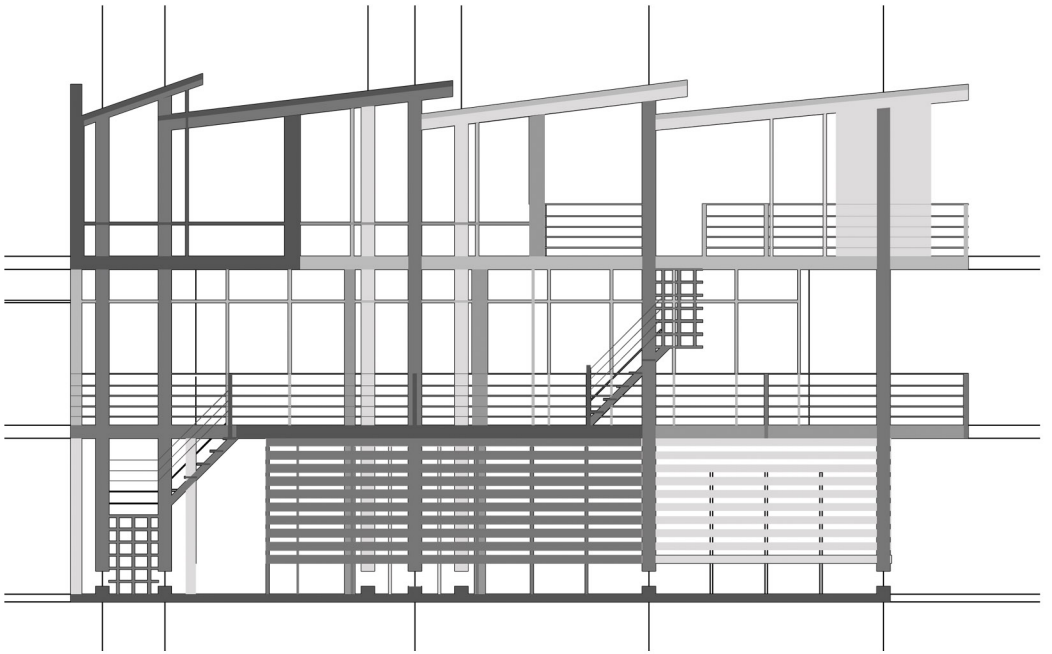
THE OCEAN ELEVATION

The East elevation is an immediate reaction to the Atlantic Ocean. It reflects the irregular nature of the moving water with a facade free from a dominant railing. The building envelope has broken away from the structure and shifts in and out of the structural grid. This undulating motion of the waves influenced the composition of the building planes. Movement between levels by stairs is concentrated on the East elevation, which adds to the dynamic nature of the facade.

The screen is still easily identifiable with the transparent walls making up the majority of the envelope. Only a few opaque surfaces exist on this elevation intentionally to open the East side up to the Ocean. This facade expresses the unpredictability of the Ocean showing that the only elements on the same plane are the structural columns. This facade opposes the west facade, reflecting the movement of the waves in the Ocean, and the energy they pass onto the shore.



A section of the East elevation showing how the building envelope moves around the columns. The stairs also add a dynamic nature to this façade. The second floor exterior space can be viewed from the third interior floor space, which is set back from the column grid. The movement in and out of the column grid directly realtes to the movement of the waves in the Ocean, for which the view out from this façade offers a connection.



A diagrammatic elevation showing the movement of planes past the column grid.

A view looking South from the eastern deck on the second floor.

The western facade (Sound facade) is dominated by the railing. The space between the workshop and the service wall acts to funnel people toward the central stair and entry into the house. Each floor is masked by the railing, reflecting the characteristics of the Sound toward which it faces. The wall composition is still visible behind the railing, allowing the spaces' function to be partially revealed; an example is the expanse of glazing on the public space of the second floor. The massive service wall has a presence on the facade for both hiding its contents, mechanical and plumbing, and sheilding the interior of the house by protecting it from the direct sunlight. The glazed portion of the South facade with the framed grid allows enough light to enter the kitchen and dining areas, but has a deep mullion to shade most of the light in the hot summer months. These windows extend up to the bedrooms and the bathrooms on the third floor allowing ample natural light into these spaces. The bedrooms on the third floor are separated by an exterior space allowing them to be nested in the corners of the house, as seen from the West. The West and South facades come together to form a hard edge, which vastly differs from the opposite corner of the house.

A view of the Southwest corner showing the western facade and the southern facade.

The eastern facade (Ocean facade) is the most dynamic of all four facades. Because it reflects the Ocean, it mimics the characteristics of the Ocean. The rhythm of the waves relate to the structural columns. The movement of the waves is reflected in the planes of the building envelope shifting around the structure. Where the other facades are masked by the railing or defined by a wall, the Ocean facade is a composition of many elements, all working to convey the qualities of the beach landscape. The railing is steel, like the stair, so as to give the most uninterrupted view of the Ocean. The functional elements still remain clear, the ground floor implements a different wall construction, the living spaces are enveloped by glass, and the bedrooms on the third floor are separated by walls. There is more room for movement on the Ocean facade with the stairs and larger exterior spaces. Overall, the facade embodies characteristics of the Ocean as well as keeps with the main idea of the screen.

The North facade gets a great deal of indirect sunlight, so it has a lot of glass. It is protected by a railing, though not as dominant as the Sound facade. The North side does have plenty of exterior space, in fact the entire second and third floor have occupiable balconies. This maintains the great views over the surrounding landscape. The separation walls on the third floor offer shade in the morning and afternoon periods of the summer months. Just like the other facades, it carries a connection from the Sound to the Ocean while having features of its own.

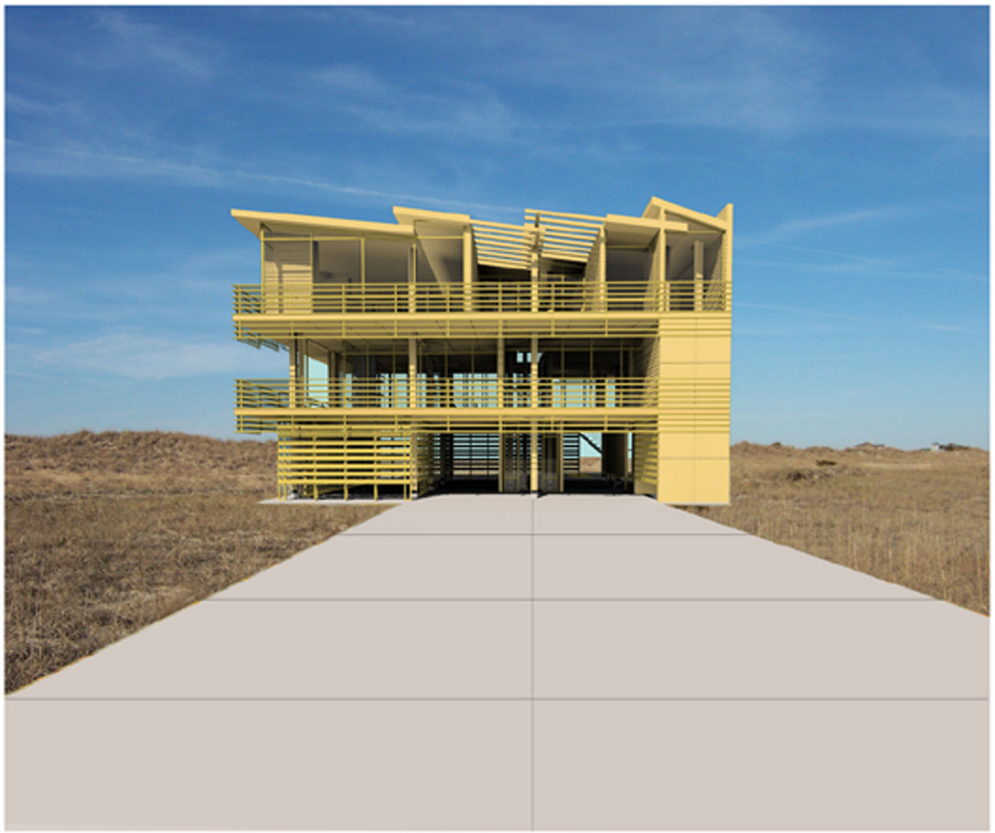
A view of the Northeast corner showing the northern facade and the eastern facade.

The initial development of the project was to somehow bring together the Ocean and the Sound with a screen (or filter) element. That element became a house for a carpenter and his family. The house had to embody the aspects of the site on which it rested, the surrounding landscape, the daylight cycle, and the hurricane season. The house brings together all the qualities of the site and changing environment and creates a structure that can be identified as a filter.

The project began as a simple diagram with walls oriented East/West to frame views through the structure and toward the Ocean and Sound. it developed into a complex hierarchy of spaces with different functions. The concept is clear, however, all the elements making up the house working together to convey the idea of a screen is slightly harder to express. The first step was to identify the elements involved in making up the house as well as the site: the Ocean, the Sound, the sand, the wind, and the sun. The service element required space on the ground floor, as well as heavy walls to conceal conduit and ductwork. The living space is a public space which can offer direct connection to the exterior and an open floor plan. The sleeping spaces require private, nested space, separate from the rest of the house. As for the site, each of these elements has to respond to the site in some way and they are successful in doing this. From almost every room, one can see the Ocean or the Sound. On the public second floor, one can see both bodies of water, an interaction that the nature of the space permits. Although they have great differences, these bodies of water have an important relationship with one another. They offer a clear boundary around Hatteras Island. During the day, a sea of blue reflects the sky above, and at night, the moon and stars light the night sky, but the reflection in water creates luminous bodies of water. The cycle continues every day with the sun and moon rising over the Ocean and setting over the Sound, the two bodies of water on which this project is based.

"Night is very beautiful in this great beach. It is the true other half of the day's tremendous wheel; no lights without meaning stab or trouble; it is beauty, it is fulfillment, it is rest. Thin clouds float in these heavens, islands of obscurity in the splendour of space and stars: the milky way bridges Earth and Ocean; the beach revolves itself into a unity of form, its summer lagoons, its slopes and uplands merging; against the western sky and the falling bow of sun rise the silent and superb undulations of the dunes."[3]

[3] Henry Beston, The Outermost House (New York: Henry Holt and Company, 1949) 166.



The House as a Screen.

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