The Placemaking of Ritual, Remembrance, and Loss

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This thesis is an attempt to understand and explore the ideas related to ritual and loss with the manipulation of the built and unbuilt landscape. This thesis looks to investigate the physical aspects of landscape and architecture through the design of three connected places: a chapel, a crematorium, and a columbarium. Through this design process and investigation this author looks to form a connection between physical forms and the nonphysical ideas of ritual, loss, and remembrance.
PROJECT SUMMARY

THE PLACEMAKING OF RITUAL,
REMEMBRANCE AND LOSS
A cemetery is a very complex space. The creation of something that is tangible, from a spiritual concept, that is intangible poses many obstacles. Further, the objects found in a cemetery are objects that serve a very long life. Although death is permanent, this does not mean that the architecture must reflect this. Cemeteries are places that are rarely changed, unless by increased boundaries, or structures. Looking at this in a different light, who is to say that by the manipulation of material, the process of weathering, or the placement of light in certain areas that can create an atmosphere that is unique at many different points of the day, and always evolving from hour to hour, day to day, month to month, and year to year.

Spiritual ideas as well as cultural aspects become very important with a responsibility of respecting the needs of the deceased as well as the visitors. Each visitor should also feel as if each individual site is important in itself, as well as the cemetery as a whole. By manipulating the use of light you can create any situation, or mood. If properly manipulated the objects that are concrete can fade into a void, or pushed to the background, and this void of space which is untouchable, can become an object itself.

This thesis is an attempt to understand and explore the ideas related to ritual and loss with the manipulation of the built unbuilt landscape. This thesis looks to investigate the physical aspects of landscape and architecture through the design of three connected places: a chapel, a crematorium, and a columbarium. Through this design process and investigation this author looks to form a connection between physical forms and the nonphysical ideas of ritual, loss, and remembrance.
This thesis paper will be a combination of written text along side of free flowing ideas such as a journal entry would be handled. When dealing with the individual and the individual experience and what he or she is thinking it is necessary to reflect in a way that is more free flowing such as a thought process rather that actual written text.

Thought Entry One

Who is one trying to satisfy when creating architecture that deals with emotion? Since emotions differ from person to person it seems to be a daunting task to accomplish. How can there be a creation that fulfills the needs of the people occupying it? The term social justice arises when trying to accomplish this goal. Social justice refers to conceptions of justice applied to an entire society. It is based on the idea of a just society, which gives individuals and groups fair treatment and a just share of the benefits of society. In other words, applying this to architecture, each visitor gets parallel treatment, feelings, thoughts, emotions, and conclusions. How can you suit the needs of each individual when every object, vision, smell, or sound may spark a different response? The texture of carpet could remind you of visiting your grandparents house, the length of shadows can remind you of playing outside on a summers evening, and the smell of cigarettes can remind you of playing baseball out on a diamond as a child. Maybe none of these memories strike a cord, depending on the reader. Maybe it is not about the social justice (or the pleasing) of each visitor, but about filling the needs of the architecture. The justice must be done for the sake of the architecture, and that only. The emotions, thoughts, and feelings of the visitors will spawn out of the architecture no matter what the final conclusion is.

The notion of intangible ideas, and how to relate them to architecture, raises interesting questions. So if answering the questions and needs of architecture, which in turn answers the needs of the individuals, is the goal than how is this accomplished. How can you respond to emotion, thoughts, memories, and feelings? How can you build for something that cannot be touched? To answer these questions you have to identify a group of ideas that are all interrelated but are not solved by math or functional design. By functional design it is meant as calculating a conclusion where an absolute answer will result. The designing of a shelving unit to house various objects is an example. In the end you will accomplish something that works with a concrete object. It is like a math problem where you start with an equation (design task) and in the end you will get an answer that is certain, there is no room for questioning. Where the interest of this thesis lies is how to design for a spiritual concept or ritual. How can you represent remembrance which is intangible, and attempt make it tangible? One area where you can find interrelated ideas that
are intangible is when you deal with belief. Things which are religious in nature raise these ideas. The intent of this thesis is to find a way to respond to individual's emotions, memory and beliefs without actually building it for them. Although the ideas of death strike most as morbid, there are many components that circle the idea that relate to the intangible. To provoke peoples' thoughts is the one way to start to reflect on the thesis questions. In what way can you use architecture to cause people to think? Looking at the human senses is where the answer lies. The goal is to create architecture that manipulates light, materials, path, beginning and end, and landscape to answer the question of creating the placemaking of ritual, remembrance, and loss. To test this thesis the designing of a cemetery will take place. The investigation of physical aspects of landscape and architecture will be undertaken through the design of three connected places: a chapel, a crematorium, and a columbarium.

In order to understand how design affects an individual one has to understand the event the individual is going through. This does not mean that one is designing for an individual but is designing or provoking the thoughts and event they are experiencing. Before jumping into the process of what an individual is going through when dealing with death, you have to understand how design can effect a person in general. Human interaction is one way to explain this idea of how design can influencing a person. If one were asked to design human interaction, it is impossible, but designing something that persuades interaction is different. Sociopetal and sociofugal settings are ways to facilitate or discourage interaction. A dinner table, which is designed for the function of eating, serves as a sociopetal setting. The occupants gather around a space and are facing each other causing conversation. On the other hand there are sociofugal settings, such as a bench around a tree. Although its function is for seating, it forces the individuals to look out and away from each other discouraging conversation. In this example you are not provoking thoughts, and memories, but you are dealing with ideas that are intangible. Another example of dealing with intangible ideas is in the designing of a public park. In “The Social Life of Small Urban Spaces,” author William H. Whyte illustrates how certain park designs can provoke the actions of individuals. Even though an area was designed as a boundary for a park, it causes individuals to perform certain actions such as sitting, gathering, talking, eating, or reading. This again takes an intangible idea, such as talking, and makes a space for it even though that is not what the space is intended for. Both of these examples cause an individual to perform a certain physical action, in this thesis the same approach it taken but instead of causing physical action there is a goal to stimulate the human thought process which then results in memories, feelings, or thoughts to run through the individuals mind.

Though Entry Two

After understanding this it is now time to look at the process the individual experiences
when handling death. Unfortunately this process is not quite straight forward. There is no straight road that all take when dealing with this moment. What can be understood is that due to the type of person and even their culture you can somewhat map out some understandings that are universal for each person when looking at their culture or religion.

In the writing “A Celebration of Death,” by James Stevens Curl he explains how vast of a field one is dealing in when trying to study death, and the whole process that surrounds death. In his 400 page writing he states, “My chosen title underlines the point that this volume is essentially and introductory survey, for a comprehensive study would run several large books.” In this he touches upon tombs of prehistory, classical times, mediaeval period and of the Renaissance. This emphasizes that death has many different facets. This writing gives quite a through understanding of the types of burials, and gives some insight into what the people of certain times did when dealing with burials, but what is absent or slightly touched upon is what is happening inside the living peoples minds throughout the process of the burial itself, or what is happening in the minds of visitors months or years past the actual burial.

One can either study the deceased themselves and their journey, or you can view the journey the visitor is taking. By viewing the burials themselves you can start to draw information about religion, or the beliefs of the individuals. One of the greatest examples of this is seen in Egyptian culture. In the writing Egypt: Architecture – Sculpture – Painting: In Three Thousand Years by K. Lange and M. Hirmer they describe the ritual behind the burial. Egyptians believed that for the deceased to reach immortality, the body had to be fully preserved. Even the mouths were kept in an open position so the individual could breathe and speak in the next life. Even though this process of death, for the body, is interesting, understanding the livings mind is the interest and part of the underpinnings of the thesis. There are three different situations of interest that can be studied when dealing with the living. The three states are grieving, celebration, and remembrance. What this thesis is trying to convey is that no matter the situation, you can design one thing that can satisfy their state. This is not insinuating that you can please all individuals, but you can spark the mind into a thought process by manipulating lighting, materials, path, and landscape. There is a collision of emotions taking place among the visitors, some may be dealing with loss, and others may be celebrating, but either way, you can create a situation where the individual will reflect on the deceased. If handled properly, you can create a location that begins to answer the ideas of ritual, remembrance and loss with the design of architecture.

Light

The use of light becomes the most important feature within this thesis investigation. In most applications lighting is used as a calculation. When investigating light the results found
are ones of application to light an area. Light in most situations is an addition which aids an individual in completing a task. Light becomes an object that is physical. The use of light aids something that is physical such as a painting, or looked at in a way to increase the output of work. Even in select chapels, light is looked at in a way only to aid the physical. It has a very literal meaning, and as well a meaning that starts to respond to intangible ideas. In Webster’s Collegiate Dictionary, light holds many different meanings. Light is not only seen as physical though, which makes it hard to understand why the application of it is mostly used in a math equation than as a way of reacting to its intangible meaning. The list below starts to talk about some meanings that get down to the root of how light will be investigated in this thesis.

Light
1. Something that makes vision possible
2. The sensation aroused by stimulation of the visual receptors.
3. Source of light
4. Spiritual illumination
5. Something that enlightens or informs
6. Animate, brighten

Lighten
1. To relieve of a burden in whole or in part
2. To make less wearisome
3. Cheer, Gladden
4. Alleviate (Our sorrow)

These definitions hold some intangible meanings that come along with the presence of light. Although it can be looked at as a way to make something more visible, you can also relate lighting to ritual.

Thought Entry Three

This idea of light in some religions heaven is referred to as “the light.” When someone passes away it is said that they journey towards the light, meaning a place that is pure, and trouble free. The sentence “something that makes vision possible” can be viewed in two ways. It is like in a Loony Toons cartoon where one of the characters has an epiphany, and a light bulb turns on over their head. This perfectly displays the goal of making the mind wander. No matter what the mind is thinking at the time, the goal is to use the light to make the visitor leave the physical and draw back into their minds. How to use lighting to ignite the minds thinking process is a task as well. How can you put something into words that is not ever meant to be in words?
The only way to help aid someone to understand this application is by use of example. One precedent study which can help depict this idea is the Krematorium Baumschulenweg in Berlin (see images in precedent study section). This structure is as concrete (solid / permanent) as can be. It was not woven into a landscape, but was placed so it made a presence. Even though it is so concrete in nature, it completely grasps the intangible in its design.

Thought Entry Four

The main room holds twenty concrete columns. At the base is a concrete slab floor, and at the top is a concrete ceiling. Around the crown of the columns is a slightly larger oval which allows light to flow into the structure. It is like the columns are piercing through the roof. This layout forms a progression of solid to void causing the viewers eyes to start from the floor and look up into the sky. This progression of vision from dark to light signifies earth and heaven. Even though it is strictly a manipulation of light and material it causes the individual to think of things such as a life past death, and heaven. Once the individual thought process starts churning, light turns to heaven, heaven turns to purity, and from that connection the individual will begin to think of the deceased and where they are at the time. Even just a simple light hanging from the ceiling of an empty room can start to create visions in the viewers mind, and this is why light becomes an important object in the thesis investigation. Light holds such intangible meanings, and can seem to be such a simple idea, but in all truth its metaphorical meanings are far more extensive than just the brightening of a space.

Materials

Materiality is also an important in causing the mind to work. This use of materials is an extension of lighting. The application of materials works twofold. It plays on two of the senses (maybe even four) sight and touch. One way you can look at material usage as a way to accentuate the light. The other way to look at it is through the process of touch. Using material to play with light is the focus of this. The reason for focusing on light so much is that no matter what the result, whether it is a smooth surface, rough, bending, or patterned there will always be a different texture. The goal is not to create a surface that’s goal is to remind people of a memory, just the fact that it has a texture can even spark some thought.

Aside from the previous two ways of viewing material there seems to be a third that can
have some impact on the final outcome of a project. It is not an immediate result but one that takes
place over time. It is a contradiction to the idea of death. Death in the dictionary is, “A permanent
cessation of all vital functions.”

Thought Entry Five

As stated, death is a very permanent thing, and very unchanging. That is one of the
hardships of death. Once you lose someone, there is no change from that day forward. Is there a
way to make the material change over time to show that since a person has died there has been a
lapse in time? If this could be accomplished, the visitor would subconsciously think that the final
place of death is growing older with the person. The cemetery becomes an extension of the person
and to see it aging may parallel to the fact that the person who is deceased is not in a vacuum
of time but also experiencing changes too. For example, on the first day of the burial you never
forget what a space looked like (especially if it is a close family member). If you visit it constantly
over the span of ten years and you can see a change in the architecture, than you can relate to
a laps in time. Just by sitting back and looking at all you have done in that span will allow an
individual to believe that the lost family member has taken a journey of change as well.

To accomplish this goal the first step is material selection. By choosing a select type of
material you can make certain that over time the material will grow with the architecture. In “On
Weathering,” weather is explained to be “the action of the elements in altering the color, texture,
composition, or form of exposed objects.” It is “a power of subtraction, a minus, under the sign of
which newly finished corners, surfaces, and colors are “taken away” by rain, wind, and sun.

Thought Entry Six

Is weathering only a subtraction, can it not also add and enhance?” This is how material
weathering will be used in order to show a passing of time. By designing the architecture to
purposefully cause lifting, shifting, cracking and pealing, you can show that a place has a history
and has withstood some amount of time. Even by designing some composition of materials to
collect debris whether it is snow, rain, or maybe even fragments of fallen leaves, you can start to
play with the textures. This collection of debris can start to show time in its self by emphasizing
the season change. By forming a lip on a concrete wall you can collect snow to bring out a season
change, rather than push it away with a plow. Ultimately not only will this show a progression of
time but also influence the way light falls on a certain object.
Thought Entry Seven

Beginning and End

After spending many months of research I found myself questioning this idea of end. Looking at life as something that is moving only until death I realized that I have completely forgotten about the life cycle. Since I have been raised in a certain fashion I have always believed that after life there is something else. What if there is no end. At the end of everything there is a beginning. If you are driving down a road and it dead ends there is not a black hole at the other end, but a field or body of water on the other side. I look at life in the same way, once you are gone from earth there is another part of life that begins. What if the same ideas were translated into architecture? What if the architecture never ended? What if the landscape was always changing like a desert? It is now quite necessary to explore this idea of changing architecture. Looking at architecture as a media to represent a change from hour to hour, day to day, month to month and year to year seems to be quite an interesting and relevant question.

Path and Landscape

Path and landscape are the last of the points of interest in investigating the thesis questions. This thought deals with the path of view for a visitor. The view could be obstructed, forced, or open in all directions. The most important goal to achieve is the importance of the journey. All spaces in a final resting place should hold just as much importance as the next space. Marc Treib says “At the outset I need confess to seeing the world with a bias. Trained as an architect, and having worked over the years as a graphic designer as well as an educator, my interest has focused on the form and space.” This is a brave confession, which allows readers to see that he has a different view from others (or the general public). What can be taken out of this writing is that in order to create something for a common individual you have to see as they see.

Thought Entry Eight

From the images presented in Treib’s writing, it is clear from the start that what makes a place important, and is seen in the images of his writing, is the variation of spaces. He talks about
stray paths as a way of representing a beautiful scenery, but in this case they will be looked upon as being a unique situation which will place a certain importance on a grave site. Even with the use of light and material you can guide a visitor through a site in order to make it distinctive. By doing this the individual visiting will have a journey of their own which will be unique, which then in itself will make the final resting place of a loved one all the more important.

In order to respond to ideas that are intangible you have to use some form of the tangible to create it. The key is to use the visual and touchable forms in a way that they provoke the intangible thoughts that are only housed inside a persons mind. The create the placemaking of ritual, remembrance, and loss you have to understand how these ideas only take place inside of a human mind, so in order to react to this you have to find ways to allow a mind to float among thoughts rather than just perceive something for what it is. By the use of light, material and path, which are concrete things, you can touch upon the things that the visitor may only think about. If used correctly the piece of architecture will no longer be a something that fills space but something that goes beyond the physical and starts to provoke things such as memory, and feeling.

(Endnotes)
1 Webster's New Millennium Dictionary of English.
2 Gifford, Robert, Environmental Psychology: Principals and Practice.
4 Curl, James Stevens, A Celebration of Death.
6 Webster's New Millennium Dictionary of English.
7 Webster's New Millennium Dictionary of English.
8 Mostafavi and Leatherbarrow, On Weathering
9 Treib, Marc, Settings and Stray Paths: Writing on Landscapes and Gardens
PRECEDENT STUDIES

17 - 18 - BRION VEGA CEMETERY STUDY
19 - 20 - KREMATORIUM BAUMSCHULENWEG
21 - 22 - WAYNE L. MORSE COURTHOUSE
This precedent was given with the conjunction of the Krematorium Baumschulenweg to analyze rather than critique. This analysis alongside abstract studies lead to an analysis that viewed personal understandings of the work rather than a critique of the architect. In this work I noticed right from the start that Scarpa placed great importance on detail, connection, nature, and form. This I believe was the result of his understanding of the permanence and placemaking of cemeteries and how it is a lasting and rarely manipulated architectural instance. Although the work was not altered by humans, nature caused weathering making his work change over time but not in the way of addition. Further than that it responded to the needs of a cemetery. It shows he has an understanding of how a cemetery should speak of the life cycle, death, birth and life. Scarpa also understands the collision of emotions that takes place between the grieving of loss of a loved one to the celebration of a loved ones life. The last thing I pulled from this precedent was Scarpa’s use of light. From this observation I felt that light is an important aspect because it forms a space itself which can be seen as a solid itself. The light now becomes an object.
In this precedent study there were obvious differences from the works of Carlo Scarpa. The techniques that Schultes and Frank took were far different than the ones Scarpa took. No matter the differences I feel that they both accomplished their main goal. In each instance they achieved the feeling of permanence. In the work of the Krematorium Baumschulenweg I also feel they used light to their advantage. The use of light wells on the ceiling connecting to the columns and the break of architecture to the sky in the entrance detail shows a connection to light, sky, and heaven. The use of these elements makes the eye start from the floor which is concrete and leads the eye to the ceiling and than to the openings to the sky. By doing this they blend their architecture from a solid all the way to a void. They blend their architecture to the sky. This again touches upon the use of light or void as an object itself. What is not there can form an object itself.
The Wayne L. Morse Courthouse by Morphosis was different than the two previous precedent studies. Even though this was not a cemetery or place dealing with spiritual aspects, it still achieves the main goal of answering the questions and doing justice to the main goal. In this project a courthouse but also a courthouse for the people was the main goal. In this example there is a shell around the actual courtroom. The shell is where the circulation takes place, and they represent this by having a flowing form. To me this represents the movement of people through a structure. Humans move in patterns that are very specific. This pattern can be seen in the flowing outside skin of the building. In the center of this is the courtrooms. These courtrooms are located in the center and very traditional dealing with material, scale and shape. What I found to be most interesting is the same connection to light. Light wells connect the courtroom to the outside, and that outside has the same blending of solid to void, and this is done by using the ceiling. The ceiling also is used as a way to guide the occupants through the courthouse.
PROGRAMMING

24 - 30 - SPACE DETAIL SUMMARY
31 - QUANTITATIVE SUMMARY
32 - 34 - PROGRAM DIAGRAM
**SPACE DETAIL SUMMARY**

**CHAPEL**

<table>
<thead>
<tr>
<th></th>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
<th>NET SQUARE FEET</th>
<th>TOTAL NET AREA</th>
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<tr>
<td>CHAPEL</td>
<td>15</td>
<td>3</td>
<td>550</td>
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**PURPOSE / FUNCTIONS**

- This space will be dedicated for any ceremonies that take place for the loss of a family member. Each space will be simple yet complex in what they are trying to accomplish.

**ACTIVITIES**

- Celebrating, praying, thinking, resting, relaxing, grieving, remembering, talking, gathering

**SPATIAL RELATIONSHIPS**

- Privacy is quite important to this area so by raising these units seven feet off of the ground level (in ground burial area) creates a situation where other visitors cannot view what is taking place within the chapel. On the entrance side of the chapel there are walls that allow the elements to pass through but disallow anyone from viewing from the outside.

**SPECIAL CONSIDERATIONS**

- This area needs to be simple and relaxing. It needs to allow the visitor to feel comfortable. Any distractions should be shielded from the people within.

**EQUIPMENT / FURNISHINGS**

- Seats for the visitors to rest during the ceremony.

**BEHAVIORAL CONSIDERATIONS**

- This area needs to have the clearance to allow a full casket to enter and exit with ease, allowing the visitors to move freely after it has been carried into the room.

**SITE / EXTERIOR ENVIRONMENT CONSIDERATIONS**

- There needs to be a relationship with the columbarium located on either side of the chapels but they still need to remain private. They should also frame views of the site so during the passing seasons a viewer has areas to stare off into to help the thinking and grieving process.
COLUMBARIUM

<table>
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<tr>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
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<tr>
<td>COLUMBARIUM</td>
<td>VISITORS - N/A</td>
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<td></td>
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<tr>
<td></td>
<td>DECEASED - 2,000</td>
<td>14</td>
<td>17,360</td>
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PURPOSE / FUNCTIONS
-This is the area where the urns are stored. It is an area that should be welcoming to visitors but yet powerful in the message that it speaks. This area will have visitors flowing in and out whether visiting or passing through to get the in ground burial section of the site.

ACTIVITIES
-Visiting, praying, relaxing, passing, resting, remembering, thinking, gathering, talking, grieving.

SPATIAL RELATIONSHIPS
-These architectural forms should be open yet closed so the viewer can feel enclosed but yet easily view what is taking place all around them. They should allow a dimly lit and quiet location so there is no disturbance when visiting a loved one.

SPECIAL CONSIDERATIONS
-These need to allow for change, whether it is from morning to night, day to day, season to season, or year to year. Their goal other than housing the urns is transforming at any point to represent the constant changing in our lives. It should represent that there is no end but just a new stage of something else.

BEHAVIORAL CONSIDERATIONS
-They should allow for people to pass through without interrupting any of the visitors and it should also allow for larger groups to gather around a certain area to pay respect to someone they have lost.

SITE / EXTERIOR ENVIRONMENT CONSIDERATIONS
-These need to pay respect to the entire site from the chapel all the way to the in ground burial. They need to feel as if they are part of the site as well as separate so the visitors can have comfort knowing they can pray or let their mind wander at ease.
IN GROUND BURIAL

<table>
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<tr>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
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<th>TOTAL NET AREA</th>
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<tr>
<td>IN GROUND BURIAL</td>
<td>VISITORS- N/A</td>
<td>1</td>
<td>66,920</td>
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<tr>
<td></td>
<td>DECEASED - 550</td>
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PURPOSE / FUNCTIONS
- This is the area where the full casket graves are located. They are in the center of the site which allows privacy in an area which is completely free of architecture.

ACTIVITIES
- Sitting, talking, relaxing, grieving, remembering, celebrating, praying, visiting

SPATIAL RELATIONSHIPS
- This area is meant to be open and easily navigated. It is created in a way that no matter the condition of the visitor they can easily move from place to place. It is also meant to be a quiet area isolated from motor vehicles.

SPECIAL CONSIDERATIONS
- This area should pay respect to all who are deceased and all who are visiting. No motor vehicles would be permitted but there are spaces for vehicles to enter in case of emergencies and as well for the transportation of the caskets.

BEHAVIORAL CONSIDERATIONS
- Accommodation for motor vehicles to transport the caskets to any of the graves.

SITE / EXTERIOR ENVIRONMENT CONSIDERATIONS
- There is relationship to the areas surrounding it so it is enclosed. It is set up in a visual fashion so a visitor can easily identify the area.
GRASS SPACES

<table>
<thead>
<tr>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
<th>NET SQUARE FEET</th>
<th>TOTAL NET AREA</th>
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<tr>
<td>GRASS SPACES</td>
<td>N/A</td>
<td>11</td>
<td>7,140</td>
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PURPOSE / FUNCTIONS

These spaces are located within the in ground burial section of the site. There are places in a random pattern to allow for breaks in the grave patter. They are designed to have an opposite effect of what a traditional cemetery would be like. Other than just for visual breaks they are also used as locators for the site. A visitor can relate to a certain grass area which will allow them to better navigate and find the location they are looking for.

ACTIVITIES

Resting, laying, sitting, thinking, locating

SPATIAL RELATIONSHIPS

These are designed as a break in the grid system of the in ground burial.

SPECIAL CONSIDERATIONS

These moments should happen at a regular interval but not overly placed. They are meant to be unique so the visitor can locate themselves in the site.

REFLECTION ROOM

<table>
<thead>
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<th>UNIT CAPACITY</th>
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<th>NET SQUARE FEET</th>
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<tbody>
<tr>
<td>REFLECTION</td>
<td>10</td>
<td>1</td>
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PURPOSE / FUNCTIONS

This area is for visitors to visit if they intend on watching the cremation process. The visitor cannot actually see the whole process but it allows for family to pay their final respects before cremation. It is large enough to hold a moderately sized family, and has areas for seating, and praying.

ACTIVITIES

Praying, paying respect, sitting, talking, gathering, grieving, thinking.

SPATIAL RELATIONSHIPS

It has relationships with the offices and lobby / welcome area.

SPECIAL CONSIDERATIONS

This area must be secluded and private so there are no distractions for the visitors. It should also be sensitive to the process that is taking place in order to help aid the grief of the family members.

EQUIPMENT / FURNISHINGS

Seating
Lobby / Reception / Welcome Area / Information

<table>
<thead>
<tr>
<th>Information</th>
<th>Unit Capacity</th>
<th># of Units</th>
<th>Net Square Feet</th>
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<td></td>
<td>20</td>
<td>1</td>
<td>800</td>
<td>800</td>
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**Purpose / Functions**
- This area is used for a gathering place before visiting the site, as well as a the area to enter if you need to find your way through the site. It is open on both sides so you can see thorough the entire area. This opening allows a visitor to view directly into the site.

**Activities**
- Waiting, orienting, conversing, gathering.

**Spatial Relationships**
- It has relationships with the offices, restrooms, and as well the cremation area. This is considered the center of the site, or starting place.

**Special Considerations**
- This area is meant to be open so the visitor can view the area they wish to attend before they enter the site. If the visitor is in need of directions the receptionist can just point in the direction they need to go and the visitor can actually view the area.

**Equipment / Furnishings**
- Chairs, couches, reception desk.

**Site / Exterior Environment Considerations**
- The lobby is the orienting point of the site. It is designed to allow the visitor to easily find the location they need to get to.
SPACE DETAIL SUMMARY

ADMINISTRATION

<table>
<thead>
<tr>
<th></th>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
<th>NET SQUARE FEET</th>
<th>TOTAL NET AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFFICE A</td>
<td>2</td>
<td>2</td>
<td>165</td>
<td>330</td>
</tr>
<tr>
<td>OFFICE B</td>
<td>1</td>
<td>1</td>
<td>330</td>
<td>330</td>
</tr>
</tbody>
</table>

PURPOSE / FUNCTIONS

- This area is houses all of the daily routine that would take place in a cemetery. Everything from scheduling appointments for services all the way to tasks needed to keep the cemetery running such as maintenance and accounting.

ACTIVITIES

- Working and meeting with customers.

SPATIAL RELATIONSHIPS

- These offices are located within the crematorium. This puts them close to all the actions that can take place in the cemetery. It is located off to the side of the ritual aspects that take place but is still close to the rest of the cemetery allowing easy transportation of remains.

SPECIAL CONSIDERATIONS

- Located in the northwest corner so daily activities do not interfere with what is taking place in the rest of the cemetery.

EQUIPMENT / FURNISHINGS

- Desks, computers, conference table, copy machine.

SITE / EXTERIOR ENVIRONMENT CONSIDERATIONS

- This space needs to be easily navigated and reached by the visitors so if there are any needs or questions about the cemetery they can answered.
### COLD ROOM

<table>
<thead>
<tr>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
<th>NET SQUARE FEET</th>
<th>TOTAL NET AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>COLD ROOM</td>
<td>10</td>
<td>333</td>
<td>333</td>
</tr>
</tbody>
</table>

**PURPOSE / FUNCTIONS**
- This area is where the deceased are held until the point of cremation. This room is located in the lower level of the crematorium. It is located opposite from where the visitors can enter.

**ACTIVITIES**
- Holding remains.

**SPATIAL RELATIONSHIPS**
- It has relationships with the offices, cremation room, and lobby.

**SPECIAL CONSIDERATIONS**
- This area is designed so the remains of the deceased are easily moved from place to place before, after and during the cremation process.

**MECHANICAL / ELECTRICAL**
- Cooling systems.

### RESTROOMS

<table>
<thead>
<tr>
<th>UNIT CAPACITY</th>
<th># OF UNITS</th>
<th>NET SQUARE FEET</th>
<th>TOTAL NET AREA</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESTROOM A</td>
<td>4</td>
<td>223</td>
<td>223</td>
</tr>
<tr>
<td>RESTROOM B</td>
<td>3</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>RESTROOM C</td>
<td>1</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

**PURPOSE / FUNCTIONS**
- To aid the needs of the visitors

**ACTIVITIES**
- Cleaning, washing

**SPATIAL RELATIONSHIPS**
- These areas are related to the crematorium, offices and lobby

**EQUIPMENT / FURNISHINGS**
- Normal bathroom facility fixtures

**BEHAVIORAL CONSIDERATIONS**
- ADA accessibility

**MECHANICAL / ELECTRICAL**
- Ventilation
QUANTITATIVE SUMMARY

TOTAL SITE SQUARE FOOTAGE: 296,500 SQ. FT.

PARKING:
- CHAPELS: 1,440 SQ. FT. (10 SPACES)
- CREMATORIUM: 1,728 SQ. FT. (12 SPACES)
- COLUMBARIUM / IN GROUND BURIAL: 2,160 SQ. FT. (15 SPACES)
- GROSS SPACE: 5,328 SQ. FT.

ADMINISTRATION:
- OFFICES: 330 SQ. FT.
- RESTROOMS: 423 SQ. FT.
- LOBBY / INFORMATION: 800 SQ. FT.
- GROSS SPACE: 1,553 SQ. FT.

CREMATORIUM:
- OFFICES: 2 @ 170 SQ. FT.
- COLD ROOM: 333 SQ. FT.
- REFLECTION ROOM: 432 SQ. FT.
- GROSS SPACE: 1,105 SQ. FT.

BURIAL AREA (IN GROUND):
- NUMBER OF SPACES: 550 GRAVES
- GROSS SPACE: 66,920 SQ. FT.

CHAPEL'S:
- INDIVIDUAL CHAPELS: 3 UNITS
- GROSS SPACE: 1,680 SQ. FT.

COLUMBARIUM:
- NUMBER OF SPACES: 14 UNITS
- GROSS SPACE: 2,000 SPACES FOR ASHES
- 17,360 SQ. FT.

ROADS / PATHWAYS / CIRCULATION (EXTERIOR):
- GROSS SPACE: 74,000 SQ. FT.

GRASS PATCHES:
- GROSS SPACE: 7,140 SQ. FT.
These next images were some of the first attempts to understand the site chosen in whole. The thoughts behind the images were those of filtering, solid and void. The attempt of these were to carry through the ideas related to the precedent studies of how a solid can turn to a void and the idea of leading the eye. The spaces that were void in the precedent studies were just as important as the architecture itself. There was meant to be a balance of solid and void in the study. This means that some areas were meant to be busy with architectural forms and the others were meant to be empty. In the end this abstract studies were one way to view the site in whole. There does not need to be objects covering the entire site, the spaces that are empty are just as important and full of thought as the rest of the site.
SITE STUDY

36   INITIAL SITE CRITERIA INVESTIGATION
37   SITE LOCATION / IMAGES & SITE PLAN
38   PANORAMIC IMAGES / BIRDS EYE
39   SITE SECTIONS / FIGURE GROUND
INITIAL SITE CRITERIA INVESTIGATION

- There are many ways to view a cemetery and they each call for their own site needs.
  - Traditional
  - Contemporary
  - Meaning (history of the current site)

01-Traditional/Contemporary Rural
- Plenty of land / space
- The influence of nature / Green
- Burial situation—any (above ground, below ground, cremation, inside a structure above or below ground)
- Grid pattern or natural pattern
- Wide open site / use of natural light
- Flat land, hillside, rolling land, sandy conditions
- Open for orientation and ways of accessing the site
- Example—Something with a close proximity to a historical location, or town. Maybe there is a need for a small, current community to become part of the history since they are living in the area that their ancestors or past community members lived.

02-Traditional/Contemporary Suburban
- Large amount of land / Space
- Influence of nature (green) as well as built structures (housing, complexes...)
- Burial situation—any (above ground, below ground, cremation, inside a structure above or below ground)
- Grid pattern or natural pattern
- Flat land, hillside, rolling land, sandy conditions
- Wide open / semi-enclosed. Surrounding may play a little bit on natural light
- Open for orientation and ways of accessing the site
- Example—Something with a need to preserve the identity of a growing suburban area. If a community is growing at fast rate maybe there is a need to preserve what was once there. A cemetery always creates the idea of history and those who came before us, and reminds of the history of the location.

03-Traditional/Contemporary Urban—All situations may sound negative but are a positive because they allow for unique situations
- Little space
- Little influence of nature / green
- Flat ground (most likely)
- Burial situation—Limited
  - Above ground (depending on space—cremation)
  - Below ground—More likely if burial method rather than cremation
  - Inside a structure
- Grid pattern (most favorable due to space)
- Enclosed site—Surroundings will play a large role on the natural light
- Limited orientation and ways of accessing site.
- Example—A historical site that’s location carries the meaning. For instance, a location that was altered in the past, which once represented a certain culture, that was lost. By creating a cemetery in this location the idea of history of site as well as the history of the deceased can be tied together.
ABSTRACT LIGHT STUDIES

41 LIGHT STUDY OF BEGINNING AND END
42 - 43 NEGATIVE SPACE STUDY
AFTER THE ANALYSIS OF THE PRECEDENT STUDIES THERE WAS A NEED TO FURTHER UNDERSTAND WHAT WAS TRYING TO BE ACCOMPLISHED, OR WHAT WAS TO BE FOUND IN EACH STUDY. INSTEAD OF CRITIQUING EACH STUDY AND COMPARING AND CONTRASTING THEM A DIFFERENT METHOD WAS TAKEN. THE USE OF SOLID AND VOID WAS A VERY IMPORTANT THEME IN EACH OF THE WORKS. THE USE OF LIGHT AND VOID BECAME JUST AS SOLID AS THE STRUCTURE OF THE BUILDINGS. FROM THIS IDEA AN INVESTIGATION WAS TAKEN TO FURTHER EXAMINE THIS SITUATION. EVEN THOUGH VOIDS DO NOT HAVE A WEIGHT, AND YOU CANNOT TOUCH THEM, THE AREA THAT THEY COVER CAN BE VIEWED JUST LIKE AN OBJECT ITSELF. MAKING THE INTANGIBLE BECOME TANGIBLE WAS A WAY OF PUSHING BACK THE SOLID FORMS AND ALLOWING THE ONES THAT ARE NOT SOLID TO BECOME VISIBLE. THESE ABSTRACT STUDIES WERE A WAY TO FURTHER INVESTIGATE THIS IDEA.
SPRINGBOARD STAGE

45 - 46
- STUDY OF LIGHT
- CREATING LIGHT
- STUDY OF PATH
- STUDY OF TEXTURE
- BEGINNING AND END
- CONNECTION / DETAIL / WEATHERING / COLLECTING

57 - 60
- STUDY OF SPACES: HUMAN SCALE
- COLUMBARIUM STUDY
- STAIR ABSTRACT
- SCHEMATIC DESIGN TWO
- PROGRESSION OF TIME STUDIES
- IN GROUND BURIAL STUDY
THIS INITIAL STUDY WAS IN REACTION TO THE PRECEDENT STUDIES ON LIGHTING. THE GOAL WAS TO BEGIN TO USE LIGHT AS A WAY OF CREATING ARCHITECTURE.
THE NEXT THREE STUDIES WERE OF PATH. IN A VERY SIMPLISTIC MANNER, THROUGH THE USE OF CERTAIN MEDIA, THE IDEAS OF LEADING OF THE EYE, AND DIRECTING OF THE BODY THROUGH THE ARCHITECTURE ON AN OVERALL (SITE) SCALE CAN BE ACHIEVED. THIS WAS NOT ONLY A STUDY OF HUMAN SCALE BUT A SITE STRATEGY AS WELL. IN THESE THE BALANCE OF SOLID AND VOID WERE STUDIED AS AN OVERALL APPROACH OF DEALING WITH THE SITE.
THE NEXT STUDY IS OF MATERIAL AND TEXTURE. BECAUSE THE SENSES ARE SUCH AN IMPORTANT ASPECT WHEN DEALING WITH EMOTION, AS STUDY WAS CONDUCTED DEALING WITH TOUCH, AND MEMORY.
AS THE STUDIES PROGRESSED, THE IDEAS OF BEGINNING AND END STARTED TO SURFACE. IN ORDER TO UNDERSTAND LIFE, AND STUDY THE LIFE CYCLE, AND THEN APPLY IT TO ARCHITECTURE, IT WAS FOUND NECESSARY THROUGH THE USE OF DIFFERENT MEDIA TO TEST THEIR BEGINNINGS AND ENDS. AFTER THE RESULTS WERE STUDIED, IT WAS FOUND THAT THERE IS NO SUCH THING AS A BEGINNING AND END, BUT RATHER WHERE THERE IS AN END THERE IS THE BEGINNING OF SOMETHING ELSE.
STUDY OF BEGINNING AND END
STUDY OF BEGINNING AND END
The next pages of study were in reaction to overall scale and human scale. The idea of time and its progression on architecture are an important parallel of the time that has gone since a loved one has passed away. By using techniques such as weathering you can show how architectural materials have deteriorated over time, and by using architecture to collect things such as snow or water can remind the visitor of the time of year that a loved one passed away. For example, if a visitor comes to the cemetery every winter, the snow may collect in a way that is very similar to the year previous. This experience will vary depending on the time of year. By collecting things such as snow, rain, leaves, or any other debris typical with a certain season, a visitor will make this connection with season and the time of year that their loved one passed away. As for detail, this reacts to the importance of each grave site. This importance must not only be seen on an individual scale, but as an overall scale of the site.
CONNECTION / DETAIL / WEATHERING / COLLECTING STUDIES
CONNECTION / DETAIL / WEATHERING / COLLECTING STUDIES
CONNECTION / DETAIL / WEATHERING / COLLECTING STUDIES
STUDY OF SPACES: HUMAN SCALE

THE IMAGES OF SPACES BELOW ARE NOT PROPOSED SPACES BUT INSTEAD SPACES THAT ARE USED TO TEST IDEAS OF LIGHT, WEATHERING, PATH AND SCALE.
THE NEXT IMAGE WAS AN ATTEMPT TO CARRY OVER THE IDEAS OF LIGHT AND PATH. THIS COLLAGE REPRESENTS HOW JUST A SLIVER OR BREAK IN THE ARCHITECTURE CAN LEAD THE EYE IN ONE DIRECTION. THE LIGHT THAT IS ALLOWED PAST THE ARCHITECTURE AND THE FORMS THAT ARE BEHIND IT COME FORWARD PUSHING THE IMMEDIATE SURROUNDINGS TO THE BACKGROUND.
SCHEMATIC DESIGN TWO - CEMETERY

THIS NEXT STUDY WAS THE FIRST ATTEMPT TO ANSWER ALL OF THE QUESTIONS THAT WERE BEING ASKED BY THE THESIS QUESTION. THE PLAN WAS SET UP IN THREE SECTIONS. THE FIRST WAS THE AREA DOMINATED BY LANDSCAPE. IN THIS AREA THERE WAS VERY LITTLE ARCHITECTURE BUT INSTEAD A SOFT-SCAPE WHICH WAS USED TO DIRECT THE WATER THAT IS COLLECTED BY THE EARTH INTO THE CENTER OF THE SITE. ONCE THE WATER HAS PASSED THROUGH THE FIRST SECTION OF THE SITE IT WOULD ENTER INTO THE CENTER OF THE SITE IN TWO DIFFERENT FASHIONS. FIRST WOULD BE THROUGH A PATH THAT WOULD RUN UNDERNEATH THE CHAPEL AND ON TO THE CONCRETE IN THE CENTER SECTION, AND THE SECOND WOULD BE BETWEEN THE CENTER AND SOFT-SCAPE SECTION INTO A GARDEN. THE WATER THAT PASSES UNDER THE CHAPEL WOULD RUN ALONG THE CONCRETE WHICH WOULD, IN TURN, OVER TIME STAIN THE CONCRETE CAUSING A CHANGING LANDSCAPE FROM YEAR TO YEAR. THE GARDEN AREA WAS A WAY OF DEALING WITH BEGINNING AND END, AND WHEN THE WATER REACHES THE GARDEN IT DOES NOT JUST GET CARRIED AWAY DOWN A DRAIN BUT INSTEAD IT IS THE CATALYST FOR A GARDEN TO GROW, OR NEW LIFE. THIS IDEA GOES BACK TO THE BEGINNING THOUGHTS OF HOW THERE IS NOT AN END BUT JUST A BEGINNING OF SOME OTHER EXPERIENCE. THE LAST SECTION CONTAINS THE COLUMBARIUM WHICH HOLDS THREE SIX STORY TOWERS WHICH HOLD THE URNS OF THE DECEASED. THE CENTER SECTION DEAD-ENDS INTO THIS LAST SECTION WHICH IS BOUND BY THE LODGE FREEWAY. THIS AREA IS RAISED ABOUT TWELVE FEET. THIS CHANGE IN LEVELS WAS DESIGNED TO CREATE A HARD EDGE. WHERE THERE WAS A SOFT EDGE ON THE OTHER SIDE OF THE SITE THERE IS A HARD EDGE TO COUNTER IT. THIS WOULD BE ONE OF THE MAIN ENTRY WAYS FOR VISITORS. IT WOULD ALLOW FOR THE VIEWER TO BE RAISED ON A PLATFORM WHERE THEY COULD OVERLOOK THE ENTIRE SITE.

ON PAGE 69 YOU CAN SEE THIS RAISE IN LEVEL. ON THE OTHER SIDE OF THE DROP-OFF YOU CAN SEE WHAT WOULD BE THE OTHER ENTRANCE WHICH IS THE ADMINISTRATION / VISITORS CENTER. IT IS LOCATED AWAY FROM THE CEMETERY ITSELF AND IS PLACED NEXT TO THE MAINTENANCE BUILDING.

ON PAGE 70 IS A SECTION OF THE COLUMBARIUM WHICH ALSO SHOWS THE HEIGHT CHANGE BETWEEN THE CENTER SECTION AND THE SECTION BOUND BY THE LODGE FREEWAY. THE COLUMBARIUM IS CREATED IN A WAY THAT IT IS A SHELL OR SKELETON IN WHICH FILLS AS TIME PROGRESSES. THIS WAS ANOTHER ATTEMPT TO CREATE SOMETHING THAT IS STILL TRANSPARENT WHERE THE VISITOR CAN LOOK THROUGH IT, MEANING THAT THE ARCHITECTURE IS PUSHED BACK AND THE SURROUNDINGS ARE WHAT ARE IMPORTANT. AS TIME PROGRESSES IT WILL FILL AND THE ARCHITECTURE WILL START TO SHOW.

ON PAGE 71 IS AN EAST WEST SECTION CUT SHOWING ALL THREE OF THE ZONES AND HOW THEY MERGE TOGETHER. STARTING FROM SOFT-SCAPE IT THEN TRANSFORMS INTO CONCRETE AND THEN INTO THE THIRD SECTION WHERE THE ARCHITECTURE AND GROUND ARE RAISED.
PLAN AND SECTION OF COLUMBARIUM
THE NEXT STUDIES WERE A CONTINUATION OF BEGINNING AND END. THE INTENT WAS TO CARRY ON THIS IDEA INTO THE ARCHITECTURE ITSELF, AND AS TIME PROGRESSES THE ARCHITECTURE ITSELF WILL CHANGE. THIS STUDY DEALT WITH THE COLUMBARIUM AND HOW OVER TIME IT FILLS. WHAT WOULD START AS A SKELETON WILL OVER TIME TRANSFORM WITH THE URNS OF THE FAMILY MEMBERS WHO WERE LOST. AS TIME MOVES ON THE ARCHITECTURE WILL BECOME COMPLETE. THIS ALWAYS CHANGING LANDSCAPE WILL THEN MIRROR THE IDEAS THAT THERE IS NO END BUT JUST A BEGINNING FOR SOME OTHER EXPERIENCE TO TAKE PLACE.
PROGRESSION OF TIME - COLUMBARIUM EXTERIOR
PROGRESSION OF TIME - COLUMBARIUM INTERIOR
IN GROUND BURRIAL DESIGN

His was the first attempt to answer the thesis questions in the design of the grave sites. This study was done to explore the in ground burial graves. The ideas behind them were to have materials in which over time weather, and as well collect the elements such as snow, rain and debris. This change in the aesthetics of the grave stone would progress over time. This idea relates back to the beginning and end, where there is no end but just a beginning of something new. The grave stones themselves face down until there is someone placed into the grave. Once the grave is filled the grave stone will fold out of the ground. As time moves on more and more graves will fold out of the ground causing constantly changing scenery. The grave stones themselves will have voids which are carved out of them so the visitor will not only be looking at the grave they are visiting but it forces them to look beyond the immediate burial place of their loved one and see that there are many others in their position. It was an attempt to let the visitor know that they are not alone in what they are experiencing when they visit the site.
35 - 56 FINAL DESIGN

- PROJECT INTRODUCTION
- SITE
- CHAPEL
- COLUMBARIUM
- IN GROUND BURIAL
- CREMATORIUM
- SITE SECTIONS
PROJECT INTRODUCTION

As stated previously the intent of this thesis is to create a place that answers the questions of ritual, remembrance, and loss. By using the ideas of solid and void, and finding a way to push the architecture to the back, you can make something that was once invisible become apparent. Using the ideas of beginning and end, and understanding that there is no end, but just a beginning of something new, you can relate things that are architectural in form to the human life cycle. Lastly, making a parallel between weathering and time allows for the architecture to grow and change as time moves forward.

SITE EXPLANATION

The area bound by the lodge freeway, railroad tracks, 3rd avenue, and Holden is the site which was broken down into three areas. First is the 3rd avenue entrances, the second is the center, or the in ground burial, and the third is the area bound by the lodge which contains the crematorium as well as more columbarium.

Along the west side (point to), or the first zone, is the first entrance into my site. This allows for individual visitors to come in and park (which is located on the north east corner), as well as allowing the funeral processions to enter in on one side and continue driving out without having to turn around. The procession can just park in a straight line perpendicular to the chapels and columbarium's which runs parallel to 3rd avenue. From here individuals can move into one of three chapels.
These first studies were an exploration into the relation of the in-ground burial to the columbarium and chapels. Using voids was also examined as ways to break the strong pattern that is formed when graves are laid side by side.
FINAL DESIGN - SITE MODEL
These studies were initial chapel design studies. Each one was created in a way to let in the elements such as light, snow, wind, or rain. How much they let in would vary but it would not be over excessive. Other than letting in the elements they were also designed for line of site, or what the individual inside of them experience. Brief moments frame views into the site, and in the same sense they limit the amount of vision allowed into the chapel itself.
THESE NEXT STUDIES WERE EXPRESSED IN THE INTRODUCTION OF THE CHAPEL DESIGN. THEY SERVE THE PURPOSE OF HOUSING ANY CEREMONIES WITHIN. THEY ALSO SERVE ANOTHER PURPOSE OF SHOWING A PROGRESSION OF TIME. AS TIME PASSES AND WATER RUNS ALONG THE COR-TEN STEEL PANELS ATTACHED TO THE CHAPEL, THEY CAUSE THE RUST TO RUN OFF OF THEM AND STAIN THE SURROUNDING AREA. AS TIME PROGRESSES THE STAIN TRAVELS FURTHER AND FURTHER ALONG THE CEMENT MAKING THE GROUND PLAIN CHANGE FROM YEAR TO YEAR.
THE NEXT AREA WHICH IS STILL LOCATED IN THE FIRST SECTION OF THE SITE ARE THE COLUMBARIUM'S. THEY ARE AS WELL 40 FEET LONG, BUT THE PURPOSE OF THESE ARE TO PROVIDE A SKELETON TO BE FILLED. THESE ARE AS WELL SET EIGHT FEET OFF GROUND LEVEL BUT ARE MADE SO AN INDIVIDUAL CAN PROCEED DOWN A RAMP AND ENTER THE IN GROUND BURIAL SECTION OF THE SITE. THIS AS WELL WAS CREATED SO OVER TIME IT CHANGES. THIS CHANGE CAN HAPPEN FROM DAY TO DAY (WITH THE WAY LIGHT ENTERS INTO THE STRUCTURE), MONTH TO MONTH (BY THE WAY RAIN, SNOW, OR LEAVES COLLECT ON THE LEDGES OF THE EMPTY SPACES FOR THE URNS), OR YEAR BY YEAR (WHERE THE FILLING OF THE SPACES WITH URNS CREATES VARIOUS FORMS THROUGH THE YEARS). IT IS NOT TO BE SEEN AS ARCHITECTURE ITSELF, BUT ONCE IT HAS BEEN FILLED BY THE URNS IT WILL COMPLETE THE ARCHITECTURE. THIS DESIGN WAS DONE IN A WAY TO PUSH THE ARCHITECTURE TO THE BACKGROUND BUT ALLOW THE WAY THE LIGHT ENTERS THE STRUCTURE, OR THE VIEWS IT CREATES TO APPEAR.
THESE STUDIES WERE INITIAL STUDIES OF DETERMINING THE RHYTHM THAT WOULD TAKE PLACE BETWEEN THE COLUMBARIUM AND CHAPELS. AS WELL, THIS STUDY HELPED DETERMINE HEIGHTS, SPACING, AND GROUPING OF THE COLUMBARIUM.
THESE NEXT IMAGES DEAL WITH THE IDEA OF PROGRESSION OF TIME. THE COLUMBARIUM, WHICH ARE LOCATED ON EACH SIDE OF THE SITE, WILL OVER TIME FILL WITH URNS BUT THEY WILL NOT FILL IN AN ORDERED PATTERN. AS FAMILY MEMBERS WANT TO BE PLACED NEXT TO OTHER FAMILY MEMBERS THE RANDOM PLACEMENT OF THE URNS WILL FILL THE CEMETERY OVER TIME CREATING A DIFFERENT ARCHITECTURAL SITUATION FROM YEAR TO YEAR. ALONG WITH THIS THE CHANGES OF SEASON TO SEASON AND DAY TO DAY TAKE PLACE BY THE PATTERNS OF THE SUN OR THE COLLECTING OF SNOW AND RAIN THROUGHOUT THE YEAR.
COLUMBARIUM
COLUMBARIUM

INTERIOR OF COLUMBARIUM

URN SPACES

INTERIOR OF COLUMBARIUM
ONCE YOU PROCEED THROUGH THE COLUMBARIUM YOU ENTER INTO THE SECOND AREA OF THE SITE WHICH IS THE IN GROUND BURIAL. THE BURIAL AREA IS MEANT TO BE A CONCENTRATION OF GRAVE SITES WITH PERIODICAL BREAKS OF GRASS SECTIONS. THESE GRASS SECTIONS ARE PLACED FOR LOCATORS FOR VISITORS, AS WELL AS AREAS TO REST. THE PLACEMENT OF THESE GRASS PATCHES, WHICH ARE ALL DIFFERENT DIMENSIONS, ALLOWS THE VISITOR TO REMEMBER THE LOCATION OF THE GRAVE THEY ARE VISITING FROM YEAR TO YEAR. UNDER THE GROUND THE GRAVE AREAS ARE BROKEN INTO CHAMBERS. THESE SPACES ARE SIZED TO HOLD ONE CASKET ALL THE WAY TO SIX DEPENDING ON THE SIZE OF THE CHAMBERS. THIS ALLOWS FAMILIES TO BE TOGETHER IN INDIVIDUAL CHAMBERS. IN THE INITIAL STAGES OF THE CEMETERY EACH GRAVE MARKER WILL LAY PARALLEL TO THE GROUND. AS PEOPLE ARE PLACED INSIDE THE CHAMBERS EACH MARKER WILL FOLD OUT OF THE GROUND. THIS AGAIN CREATES A CHANGING LANDSCAPE FROM YEAR TO YEAR. WHEN THE GRAVES FOLD OUT OF THE GROUND IT ALSO CREATES A SPACE THAT IS SUNKEN A FEW INCHES WHICH ALLOWS SNOW AND DEBRIS TO COLLECT CAUSING A CHANGE FROM SEASON TO SEASON. AS FOR THE MARKERS THEMSELVES, WHEN THEY ARE LAYING FLAT, THEY WILL WEATHER OVER TIME FROM EITHER PEOPLE WALKING OVER THEM OR THE ELEMENTS. ONCE THEY ARE LIFTED THE CUTS IN THE MARKERS COLLECT WATER OR SNOW THAT IS DIRECTED TO THE MARKER ITSELF WHICH WILL IN TIME STAIN THE CONCRETE. AS FOR THE INDIVIDUAL EXPERIENCE THE VISITOR WILL LOOK AT THE MARKER ITSELF, BUT AS THEY LOOK UP THERE ARE CUTS IN THE STONE THAT ALLOW THE VIEWER TO SEE THROUGH THE MARKER CAUSING THEM TO LOOK AT THE REST OF THE SITE. THIS HOLE CUT OUT OF THE MARKER WILL AGAIN LEAD THE VISION OF THE VIEWER MAKING THEM LOOK AT THE VOIDS AND WHAT IS BEYOND, RATHER THAN THE ARCHITECTURE ITSELF.
These studies were dealing with the actual grave stones themselves. It focused on the voids that take place on the graves. They represent what the grave stones look like once they fold out of the ground as well as what the ground looks like after the grave stone leaves the ground.
IN GROUND BURIAL
These next images were created to show what the cemetery would look like from year to year. As more people are placed in the in ground burial section of the cemetery, the more grave stones fold out of the earth. As time goes on, the landscape which was once flat will transform into a concentration of stones that have pulled away from the earth.
IN GROUND BURIAL
LESSONS LEARNED

This thesis project challenged everything that I have learned in my five years in the school of architecture. I have learned that you can never make any decisions without having some thought process involved. Even when you have thought something through to the fullest you can take what you knew, turn it upside down, and see things from a whole new angle. The biggest thing taken from this experience is that you can always improve the work you have done, and you can never have completely answered the questions you set out to answer. You can take the project to a level that is your highest capability but it can always go further.

As for the thesis investigation I feel that, in the end, I am where I think I should be. This does not mean the process is over, in a way it feels as if it has just begun and there is still work left to do. In whole, I feel that I have answered the questions the thesis has asked to my full potential. There are always things that could be different in the end but at some point you have to step back and ask if you feel that you have put your all into what you have been working on. This experience was one of the most rewarding things I have accomplished, and this experience was also one of the most humbling as well. To know where the process began and see where it has ended, there is comfort in knowing that you have done all you can to reach a final goal.

PROJECT SUCCESSES

In the end I feel that the project answered the questions that the thesis asked. It may not have answered the questions to the fullest or have been the most absolutely correct answer, but it did succeed in answering the many questions that designing a cemetery can present. The ideas of weathering, beginning and end, light, progression of time, and path were all very large questions, and each of them had a strong place in the thesis. Each of these main aspects I feel, were very apparent in the architecture that I had created as well. The attention to detail and understanding of the human experience are very hard questions to tackle when all you have are your two hands and the media in front of you to answer them, but short of visiting every place that represents what I have been trying to accomplish, the goal has been reached.

PROJECT FAILURES

As well as all the rewards a project of this magnitude can bring there were also disappointments. The lack of construction comprehension and understanding the construction process I felt hindered my project. Without understanding the architecture down to the smallest detail you can never fully understand what you have accomplished. This in turn reflects on the human experience. Not understanding what a corner detail would look like to an actual visitor, or understanding the construction methods to give concrete a specific texture results in negative effects when you are trying to accomplish something that is meant for an individual to see, or feel. If these types of questions could have been answered the final result would have been much more powerful and rich.
1 Webster's New Millennium Dictionary of English.
2 Gifford, Robert, Environmental Psychology: Principals and Practice.
4 Curl, James Stevens, A Celebration of Death.
6 Webster's New Millennium Dictionary of English.
7 Webster's New Millennium Dictionary of English.
8 Mostafavi and Leatherbarrow, On Weathering.
9 Treib, Marc, Settings and Stray Paths: Writing on Landscapes and Gardens.
**BOOKS**

- Concrete precedent analysis.

- Study of the effects of memory on architecture.

- Study of concrete construction.

- Burial method study - Thesis writing.

- Abstract light studies - independent precedent studies.

- Precedent Studies – Wayne L Morse Courthouse.

Futagawa, Yoshio. “Morphosis: Wayne L. Morse U.S. Courthouse.”
- Precedent Studies – Wayne L. Morse Courthouse.

- Study of behavior due to environments.

- Study of concrete construction.

- Study of burial methods.

- Precedent Studies – Brion Vega Cemetery.

- Abstract light studies - independent precedent studies.

- Study of material weathering.


- Precedent Studies – Brion Vega Cemetery


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WEBSITES


- Precedent Studies – Krematorium Baumschulenweg.


-- Precedent Studies – Krematorium Baumschulenweg. (Ritual of Death)

http://www.art-in-berlin.de (Krematorium Stuff)

- Precedent Studies – Krematorium Baumschulenweg.