There are a few ceremonies practiced in the Protestant Church. These include Communion, Weddings, Funerals and Baptism. These are all events where a group of people will take part. The number of people can range from a very small group gathering in the Chapel to a very large group assembling in the Auditorium.

Communion is a ceremony where the whole congregation takes part in the remembrance of what Jesus did for each human being on earth. It is symbolized by drinking a bit of wine and eating a piece of bread. This can also be in the form of a complete meal. This ceremony will most probably take place in the Auditorium, unless only a small group prefers the intimacy of the Chapel.

Usually the table with the tokens (wine and bread), is positioned on or close to the stage. From this point the tokens will be distributed to the congregation. Thus it is essential that there be adequate circulation space around the stage and table.

In such a large gathering of Christians this ceremony can become very long because each individual must receive both the tokens. Therefore it is necessary to allow for quick and easy distribution of tokens. The space around the stage must allow for at least more than two people to pass each other.

Weddings are joyous celebrations and usually consist of a service in the Auditorium or Chapel and a function afterwards in the Hall or somewhere else. It can be held in the morning, afternoon or evening. The number of people attending Can range from as little as 10 to more than 250.

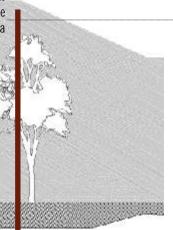
The Chapel is suitable for weddings with up to 250 people. A small wedding will feel lost inside the huge Auditorium. The Chapel is specifically positioned apart from the rest of the buildings to give it some significance. It is orientated to have a view across the Biblical garden. It should house an atmosphere of peace, rest and tranquility.

The wedding ceremony would first take place in the Chapel. There should be enough space in front of the Chapel for the various ceremonial activities and instruments. The Biblical garden would prove excellent for photographs. After the ceremony in the Chapel, the newly wed couple and their guests could gather in the Hall. The Kitchen is adequate to cater for a large number of people. The Hall can accommodate up to 250 quests. If space for more than 250 quests is required, the boundary wall between the Coffee Shop and Hall is removed and the available space increased. These two venues connect with the garden just outside and can also act as an overflow space for quests. Many a

Weddings

Ceremonies

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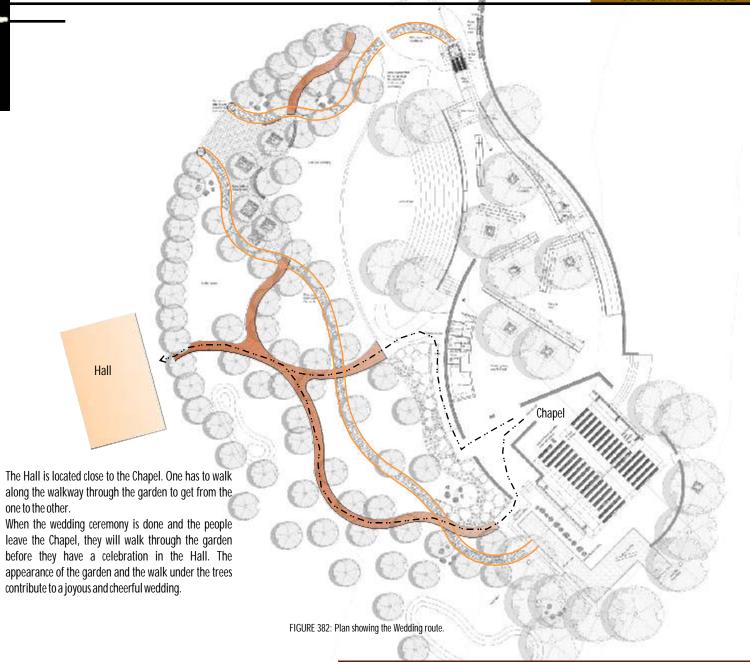
Economic - Environmental - Social :BASELINE

successful wedding was held under trees in a garden.

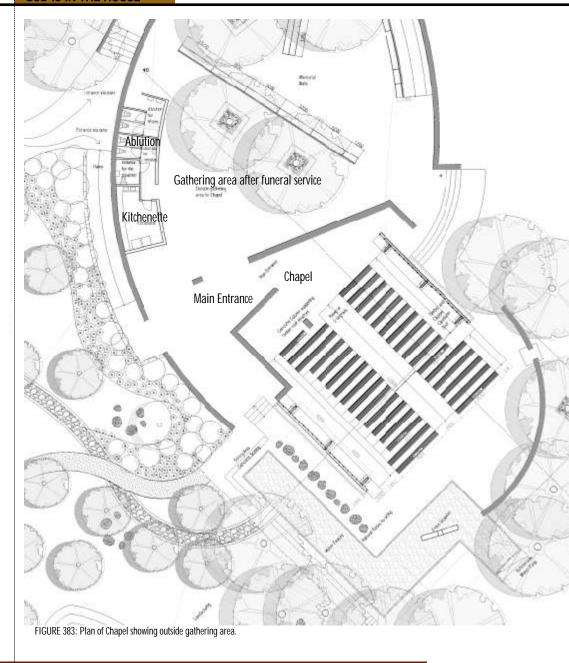
FIGURE 381: Section through the Chapel. See A0 drawing page 3 no 3.1

Ceremonies

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Funerals

A funeral is a service in remembrance of a deceased loved one. Funerals will mainly be held in the Chapel unless it is a very big funeral and the Auditorium is needed.

The funeral service will probably be concluded with a gathering at the memorial wall. Otherwise the people would end the ceremony or drive to a cemetery. No special elements are required unless when the coffin is placed at the front of the Chapel. There should once again be enough space to position the coffin and for the family members and friends to remove it afterwards. From the garden a ramp leads to the entrance of the Chapel. This will facilitate the handling of the coffin.

A funeral is usually concluded where the people gather for refreshments and to comfort the grieving persons. This is likely to happen in the Hall or next to the Chapel. Just outside the main entrance of the Chapel is a gathering area with kitchenette and ablution facilities.

If a coffin is present at the funeral service, it will be placed in the front close to the water feature. The seated people will look onto it with the cross, water and trees in the background. This serene image will bring some comfort. The cross reminds one once again that life on earth is but a small measure compared to eternal life, which each believer receives inChrist Jesus.

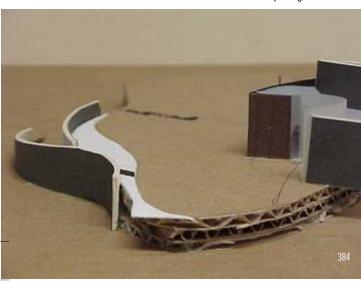
Ceremonies

Ceremonies

Memorial Wall

Available spaces in cemeteries for new graves are becoming more and more scarce to find. The concept of a Memorial Wall is relatively new in South Africa but readily preferred these days. A wall takes up far less space than a cemetery and can be placed on the church-site, conveniently close and safe.

A memorial wall replaces an actual gravesite in a cemetery. In stead of inearthing the corpse, the body is cremated and the resulting ash placed in a small box. This box is equivalent to the coffin. The small box is securely placed inside a niche in the memorial wall. A memorial plate, similar to that of a gravestone, is engraved with the deceased person's details. A Memorial Wall is thus an unusual thick wall with numerous openings inside where boxes with ash are placed inside and kept for a period of at least 30 years.





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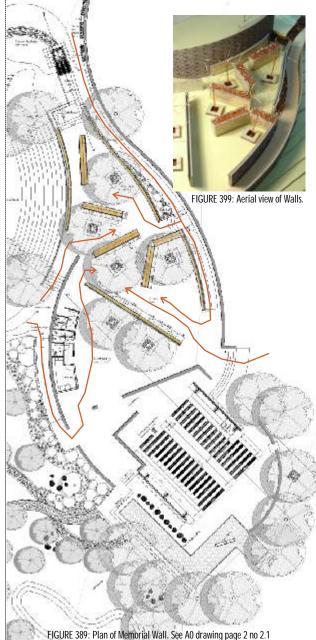
FIGURES 384,385: Photographs of the concept model showing the memorial wall.

FIGURES 386-388: Photographs of second concept model.









A Memorial Wall can serve as an income for a congregation. Church members or outside people can buy a niche or more than one for a family or couple. These niches are then kept empty until the assigned person passes away. The moment the box with ash is placed inside the wall, a period of 30 years starts before the box is removed. If the niche is reserved for a couple, the 30-year period will start as soon as both boxes are inside. Statistics show that 30 years is a reasonable time, thereafter people seldom visit the Memorial Wall. If no one claims the box after 30 years, the ash will go into a mass grave where the person's details are displayed. Or the contract can be renewed for another 30 years.

Memorial Walls are open to the public 24 hours a day and 7 days a week. Thus it is of immense importance to ensure safe visits and vandal proof construction. Because the boxes with ash remain for a considerable long time inside the wall, drainage of moisture is substantially important. Furthermore the user must be comfortable in finding the specific niche and reading the plate. The implementation of these aspects will be discussed in the design description.

The client has stipulated the need for a Memorial Wall in this project. The designer has decided to position the Memorial Wall close to the Chapel to facilitate easy circulation between a memorial service and the wall. The Wall area can be accessed from different positions, all employing the element of surprise. There is a choice between two ramps, suitable for wheelchairs, and two sets of staircases. When one is coming from the garden following the pathways to the Wall area, one descends with one meter to the level of the walls. This immediately creates a secluded pocket around the walls. People visiting the wall would prefer more privacy than that of the garden. By lowering the level, the feeling of privacy is increased. The walls are randomly placed to create smaller spaces in between, and with the walls being higher than even extremely tall people, outdoor 'rooms' are created. Thus, an individual can peacefully spend some time at the niche either standing or sitting while feeling concealed and secure. This is crucial to the success of the wall. People visiting the wall come with a definite purpose and have many grief-filled feelings to deal with. Their needs have to be tended to for them to make use of the healing time spent reminiscing.

There are few precedent studies on Memorial Walls in South Africa. The most frequently used design principle is to construct long horizontal strips of memorial plates. Persons visiting the wall want to leave something visible at the niche, something like a flower or small object. Usually the design doesn't allow for extras. In this design the designer has specifically designed for a flat surface inside the niche where a small pot with flowers can be placed. Because it is recessed into the wall, it will be partially sheltered from rain and direct sunlight. This will make the niche more personal for the people visiting the wall. The openings in the wall are spaced randomly to break with the monotonous horizontal lines. These openings are all in proportion to one another and the larger concrete blocks. The proportions deriving from the Golden rectangle system. These dimensions are again repeated in the Chapel structure.

Memorial Wall





FIGURES 390-391: Memorial Wall at Pretoria East Congregation.

Memorial Wall



FIGURE 392: Model of a section of the Wall

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The working of the Wall

The wall is constructed of custom designed precast concrete blocks, stacked on top of one another. These concrete blocks have openings cast into them. Into these openings smaller precast concrete boxes are placed. The concrete boxes slope downwards to ensure adequate drainage in the case of water penetration. The water will run down the plastered brick wall, situated between the two sides of concrete blocks.

FIGURE 394: Section through the Wall. See Appendix drawing page 4 no 4.2

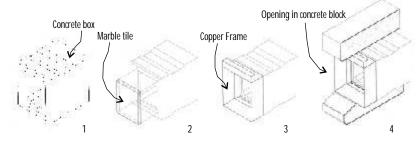


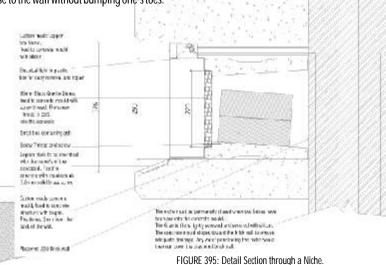
FIGURE 393: Construction of a Niche.

The precast concrete boxes are placed into the openings in the concrete blocks (4).

A custom designed copper frame is fixed to the concrete box with epoxy to prevent theft and vandalism (3). At the top of the copper frame is an opening for a light bulb. Every niche has its own internal light. This light will illuminate the inside of the niche and the name plate. This is necessary for proper orientation in the evenings. Someone visiting the Memorial Wall at night will then be greeted by a wall full of lit openings. These boxes of light would then also reflect in the water feature.

A marble tile is secured with screwed wire into the concrete box (2). After both boxes of ash have been placed inside, the tile will be fixed with epoxy and only opened after 30 years. This will ensure thorough security.

Most of the niches can contain two boxes with ash. The positioning of the openings in the concrete blocks have been determined by the Golden Spiral. The heights of these openings consider the sight lines of a person of average height. At the foot of the wall is a recess into the wall. This allows for someone to come real close to the wall without bumping one's toes.



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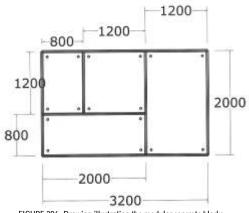


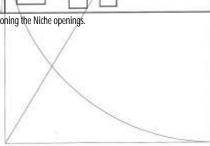


FIGURE 397: Golden Spirals used for positioning the Niche openings.

The positioning of the niche openings are conceptualized by using Golden Spirals. The proportions of the openings all correlate with one another. From here the final elevation is determined to fit in as many openings as possible.

The larger concrete blocks are also derived at by using the Golden Rectangle System. These proportions again correspond to that of the niche openings. A modular set of 4 blocks are repeated along the wall. Thus limiting the number of molds for the precast concrete blocks.

The appearance of the concrete faces are broken with the addition of slate cladding at the top and bottom part. The slate is found on the site and creates a slightly warmer atmosphere than only bare concrete. On top of the wall one finds numerous planters filled with Biblical flowers. These colourful flowers soften the top edge of the wall and adds to the intimate character of the wall's purpose. A sprinkler system in each planter waters the plants and is drained down the middle of the wall by means of a full bore system.



Memorial Wall



FIGURE 399: Model of Walls showing concrete blocks with niches.

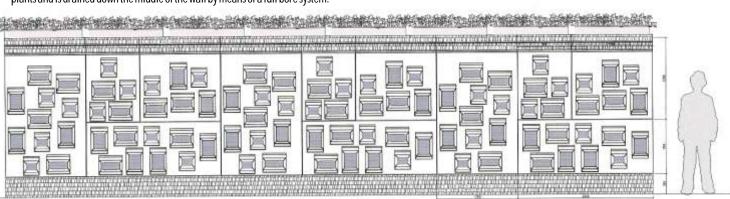


FIGURE 398: An elevation of the Memorial Wall.

Memorial Wall



FIGURE 400: Eastern view of the Memorial Wall.

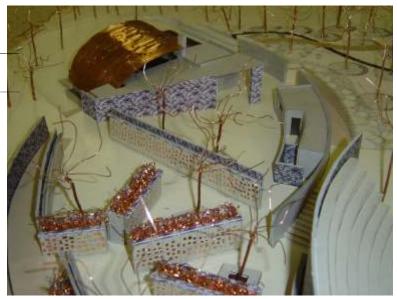




FIGURE 402: Aerial view of the Memorial Wall from a south western angle.



FIGURE 403: Ramp and walls.



FIGURE 404: Back of Amphi Theater and wall.

FIGURE 401: Southern view of the Memorial Wall.

BASELINE: Social - Environmental - Economic





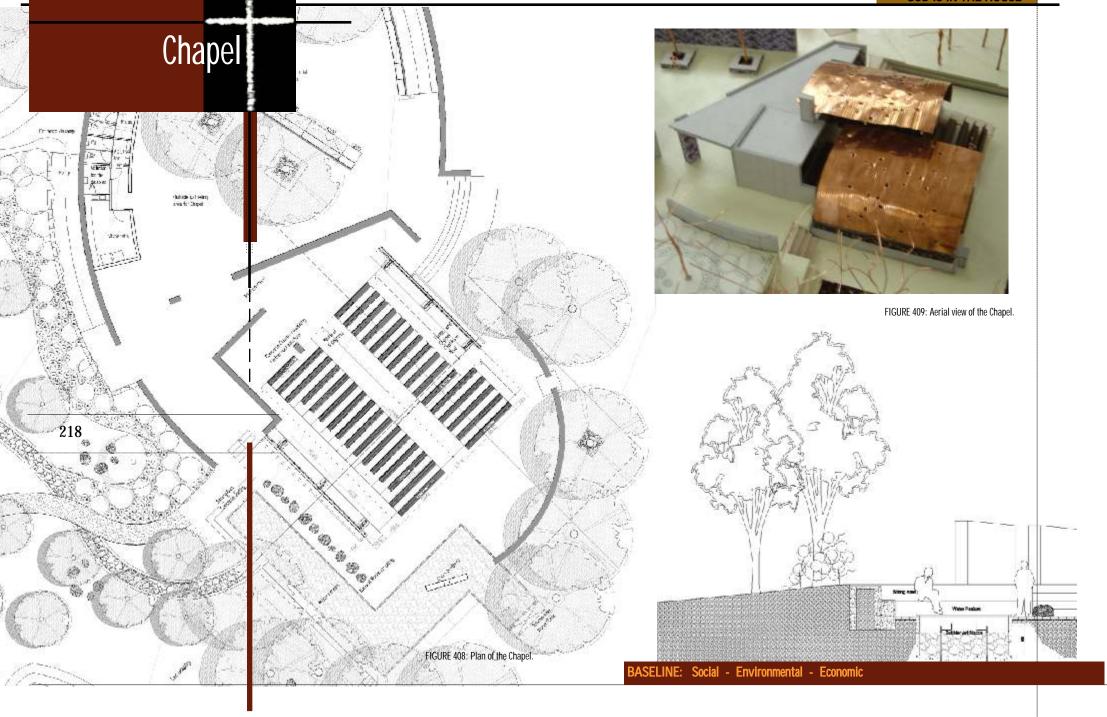


Memorial Wall

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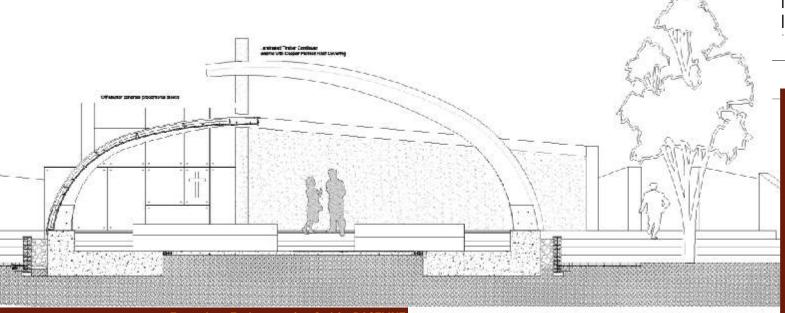
FIGURES 405-407: Photographs of a portion of the Memorial Wall.

Economic - Environmental - Social :BASELINE



One strolls along the meandering path leading through the garden and ending unexpectedly at the Chapel. One cannot as yet see what happens on the inside. The cantilever copper roof catches the eye and splendidly reflects the rays of the sun. One passes the bubbling water of the pond and stair into the sculpture of the cross. Many different feelings flood one's soul as one remembers the suffering and price the Savior had to pay, but at the same time, His love and service to others and one's own mandate to do the same. The curved wall at the front directs the movement and one turns to face the inside of the Chapel. The floor with timber benches slopes upwards to the back of the Chapel and main entrance. From here one can see another image of the cross. A cross has been cut out of one of the concrete blocks. Thus an imprint of light, God is our light. From the openings in the copper roof come beams of light down onto the darker interior, onto the seats. God is our light in darkness. The inside of the curving roofs are clad with rich timber ceiling planks. The timber is a symbol of Christ's true humanity and the immortality of one's soul.

While sitting down, one becomes aware of the many trees surrounding the Chapel and providing shade for the front part. The trees are a symbol of abundant life and healing. The leaves rustle in the wind and a bird, somewhere in the many branches, bursts into joyful song. The water bubbles in the background and peacefulness creeps across the green landscape and into one's soul. The combination of trees and walls form a protective space where one can meet with the Father. The curving roofs remind of loving arms embracing all hurt and insecurities. It is a calming experience and a blessed relief from the mad rush of life. One hears the whisper: "Take my yoke upon you and learn from me, for I am gentle and humble in heart, and you will find rest for your souls. For my yoke is easy and my burden is light." Matthew 11:29 (NIV, 1985:1458) One lingers for yet another while, and then, renewed in strength, one walks back into the world, part of it, but not from it.



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FIGURE 410: Section through the Chapel.

Chapel

Chapel

Uses

The Chapel is a small and intimate building when compared to the thousand-seat-Auditorium. From the Delta information sessions at the congregation, Church members have stated the need for a small Chapel. This Chapel is mainly used for Weddings, Funerals, Memorial Services and then also any other activity in need of seats. It is then also an outstanding place to become quiet before the Lord. During the day when the Chapel is not in use, it becomes a haven for individuals and small groups to spend time with God, have a few moments of rest or simple converse on matters from the Word.

Position in the Landscape

The entire site is 18ha making it a strenuous exercise to identify the most suitable area for positioning the Chapel. The primary criteria for choosing an area required the Chapel to be within reasonable walking distance from the Auditorium, but yet far enough to ensure privacy and quietness. The next logical step was to place the Chapel on the other side of the level area facing in the opposite direction than the Auditorium. The direction in which the Chapel faces is then also the best view across the landscape. The scene that enfolds is mainly still natural landscape. However, the surrounding landscape is subject to future residential development and will thus not remain untouched for very long. But for the time being the natural landscape is a bonus for the users of the Chapel.

Interaction with the Memorial Wall

The Chapel and Memorial Wall are deliberately placed along side each other. The working of the Wall is closely related to the Chapel. A Funeral or Memorial Service will most probably make use of the Wall after the ceremony. A Funeral or Memorial Service are emotionally draining experiences and people should not have to walk very far. One must especially think of the elderly people. Therefore the memorial area and the Chapel is generously provided with ramps accessible to wheelchairs. The ramps inside the Chapel are suitable for wheelchair users and there is space for wheelchairs to park at the back of the Chapel, close to the main entrance. There are a few different routes one can follow between the Chapel and Wall. Thus giving the user the privilege of choice.



FIGURE 411: Chapel as an intimate space.



FIGURE 412: Aerial view of garden, Walls and Chapel.



FIGURE 413: Positioning of Walls and Chapel.



FIGURE 414: The interior is exposed to the exterior.



FIGURE 415: The front of the Chapel is exposed to direct sunlight

The open-air principle

For some people it is a strange idea to have a Chapel that is open to the elements, and some parts exposed to the sun. The presence of natural light, wind and sometimes water, is part of the experience of this unique Chapel. South Africa has very favorable weather conditions and designers must make better use of it. It is true that believers experience God more intensely when out in a natural environment. This Chapel is definitely not creating a complete natural environment, but by incorporating some natural elements, it is hitting closer to the target than usual. When one is out in the open, the things that bring the most pleasure are a cool breeze of fresh air, rustling leaves,, bubbling water and sound nearby of life like birds and insects. The design of the Chapel aims to incorporate all of these elements in the person's experience.

What if it rains, this is of course a possibility. The curving roofs are detailed such that rainwater will run down the slope and not over the edge of the roof. The water runs into the concrete containers filled with rocks. Water running over a copper roof is not suitable for plants, thus the water is directed into the storm water system instead of onto the landscape. If it rains in the same time slot as a scheduled wedding, the wedding will move to the Auditorium where the required space is defined with partitioning, thus creating a small Chapel inside the Auditorium.

The front part of the Chapel is exposed to direct sunlight. This is the area where the preacher, couple to be married or speaker will stand. The direct sunrays are controlled by big trees creating shade over this area in the mornings, and the roof structure throwing a shadow in the afternoons. Thus the persons in front will be surrounded by beautiful natural light without being in the direct sun. This provides favorable conditions for professional photography.

Chapel

Chapel

Use of light and dark

To successfully implement the use of light, darkness is required. It is a logical deduction that intense light in an outside structure will only be visible against a dark fore- or background. The front and lowest part of the Chapel is the most exposed to natural light, while the back and main entrance is mostly closed on all sides and thus quite dark. This contrast between light and dark bears meaning in that God is our light when we find ourselves in darkness. He is the one to give relief and insight.

The ramp leading down to the Chapel almost leads directly into the main entrance of the Chapel. The first thing one sees when turning from the ramp is the wall at the end of the corridor leading into the Chapel. This stonewall has over it a wash of light from a slit in the concrete roof. This is to remind the visitor that there is always light, always hope. The light focuses the attention on this wall and makes it an ideal spot to place an artwork, done by one of the congregation members. It also directs the user to another entrance. When it rains the water, collected on the sloping concrete roof, will flow down the slit and into a grid underneath in the concrete floor.

When standing at the front and looking to the Chapel, one sees the cross of light. This is an image of the cross cut from one of the precast concrete blocks. The image is bright against the darkness on the inside. It gives the same effect when looking at it from the outside gathering area, in front of the kitchenette. The cross is a distinctive characteristic of a place of Christian activities. This cross will direct new users to the purpose of the building.



FIGURE 416: Contrast of light and dark.



FIGURE 417: Ramp leading to the main entrance of the Chapel.



FIGURE 418: Viewing the Chapel roof from the top.

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The curving cantilever roofs also play a part in the use of light. The roofs comprise a timber structure clad with profiled copper sheeting on the outside and ceiling planks on the inside. Within this composite structure are numerous openings. The proportions of the openings correspond with the openings in the Memorial Walls. Copper boxes are positioned in the openings and thick glass stuck to the outer end of the boxes, thus creating tunnels of light penetrating the roof. These numerous openings will create many spots of light inside the Chapel. When sitting underneath and looking upwards, one sees a roof of lights, resembling a night sky with stars. Within each hole an individual light is placed, creating a roof with lights all over it at night. This will have a stunning effect for someone walking through the garden to the Chapel at night. One sees the Chapel slightly from above before descending to the bottom level of the Chapel.



FIGURE 419: Pockets of light streaming into the Chapel through the small openings in the roof.

Chapel

Chapel

Use of materials

The Chapel consists of a number of materials. The custom designed concrete blocks correspond with the concrete blocks found in the Memorial Wall. These blocks are exactly the same except that the blocks in the Chapel don't have openings in them. These blocks are modular units and fit onto each other in a number of different compositions. The shadow lines of the different blocks break the smoothness of the concrete surface and create some texture. The stonewalls contrast against the precast concrete blocks. This creates diversity of colour and texture. The stone is warmer and more humane than the clean concrete blocks. The combination of the two creates a pleasing balance. On the inside one is overwhelmed with a rich timber cladding in the curving roofs. The timber brings about warmth and intimacy. The benches are also a dark, smooth timber and stand out against the concrete floor. At the bottom end of the copper roofs are concrete holders with natural rocks. These rocks remind one of God as the rock upon which one should build. The material finishes have relatively low maintenance It will be necessary to regularly clean the timber benches.

The water feature

Part of the Chapel configuration is a water pond filled with natural stone. This water feature runs along the side of the Chapel and bends 90 degrees to form part of the front area also The section of the pond at the side of the Chapel is secluded from the activities inside. Seating area in the form of built-in concrete seats and large natural rocks surrounds it. This is once again a splendid space for contemplation or small group interaction. It is a calming and relaxing experience sitting close to bubbling and moving water. The water feature is open for touch and someone can indulge in putting his or her hand or feet into the cold water. Sitting at the water feature, one looks across the green landscape and is aware of the luscious vegetation around the Chapel. The moving water is once again a reminder of God's blessings and the companionship of the Holy Spirit.



FIGURE 420: Different materials are used in the Chapel construction.



FIGURE 421: Water feature next to the Chapel.

FIGURE 422: Outside gathering area next to the Chapel.

Connection with the landscape

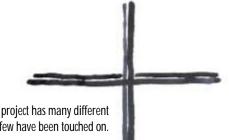
Space flows in and out of the Chapel and its surrounding areas. It flows across the water feature and in between the trees. It moves over the walls and downwards into the garden. It drifts from the main entrance and passes the front of the Chapel. A person sitting or walking around the Chapel will constantly be aware that indoor and outdoor space virtually becomes one. One can enjoy many different views from the Chapel across the gardens, connecting the Chapel with the surrounding elements. The branches of the surrounding trees lean over the edges and walls, full of benevolence reaching into the man-made space. Although most of the surfaces inside the Chapel area are hard and impermeable, the soft edges of the landscape delude the focus.

Outside gathering area

Next to the Chapel one finds an outside gathering area with a kitchenette and ablution facility. The kitchenette is ideal to serve refreshments and eatables after a Funeral or Memorial Service. After the service in the Chapel, the people circulate to the gathering area and enjoy refreshments. From the gathering area it is easy for people to move to the Memorial Wall if need be. The ablution facilities are open all the time. People in the garden and at the Wall can also make use of it.

Chapel

Conclusion



Designing for a Church is an extensive project. This project has many different facets and only a few have been touched on.

In conclusion, one can see that the experience of space and the facilitation of religious activities are the most important issues. The detailing of the structural elements must stir the senses. It will be in the use of materials and form, that spaces are created that will, through the work of the Holy Spirit, inflame people to bring glory to God.