


A GREEK ORTHODOX CHAPEL

BY
NICHOLAS BYRON KYRUS

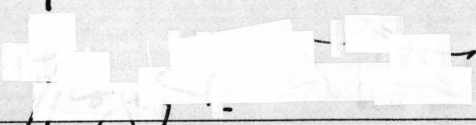
DESIGN THESIS
SUBMITTED TO THE FACULTY OF THE
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARCHITECTURE

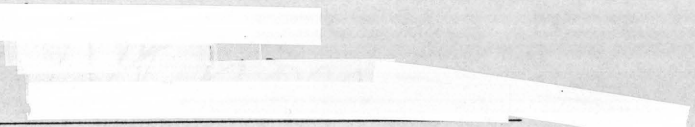
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JULY 1986
BLACKSBURG, VIRGINIA

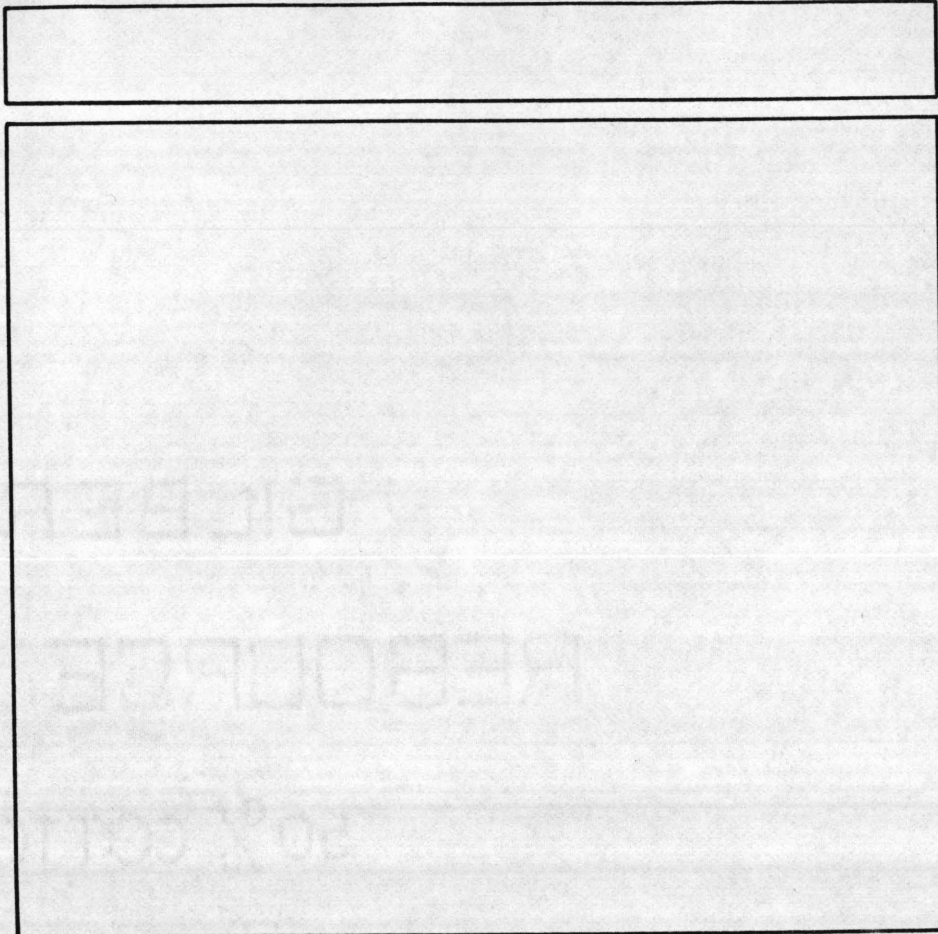
A GREEK ORTHODOX CHAPEL

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(ABSTRACT)

MY INTENTION IS TO EXAMINE THE EVOLUTION OF EARLY CHRISTIAN ARCHITECTURE AND REDEFINE THE ROLE OF THE BUILDING TYPE TODAY, PROPOSING AN ALTERNATIVE DESIGN FOR THE SETTING OF THE LITURGY IN THE GREEK ORTHODOX TRADITION.





ACKNOWLEDGEMENTS

I OFFER THANKS TO GOD, WITHOUT WHOM NOTHING IS POSSIBLE.

THIS PROJECT IS PROUDLY DEDICATED TO MY PARENTS.

I EXPRESS SINCERE GRATITUDE TO MY FAMILY AND FRIENDS FOR THEIR LOVE, SUPPORT, PATIENCE, AND MORE PATIENCE. "MUCH HAS BEEN LEARNED FROM YOU ALL. MANY THANKS."

NICHOLAS B. KYRUS

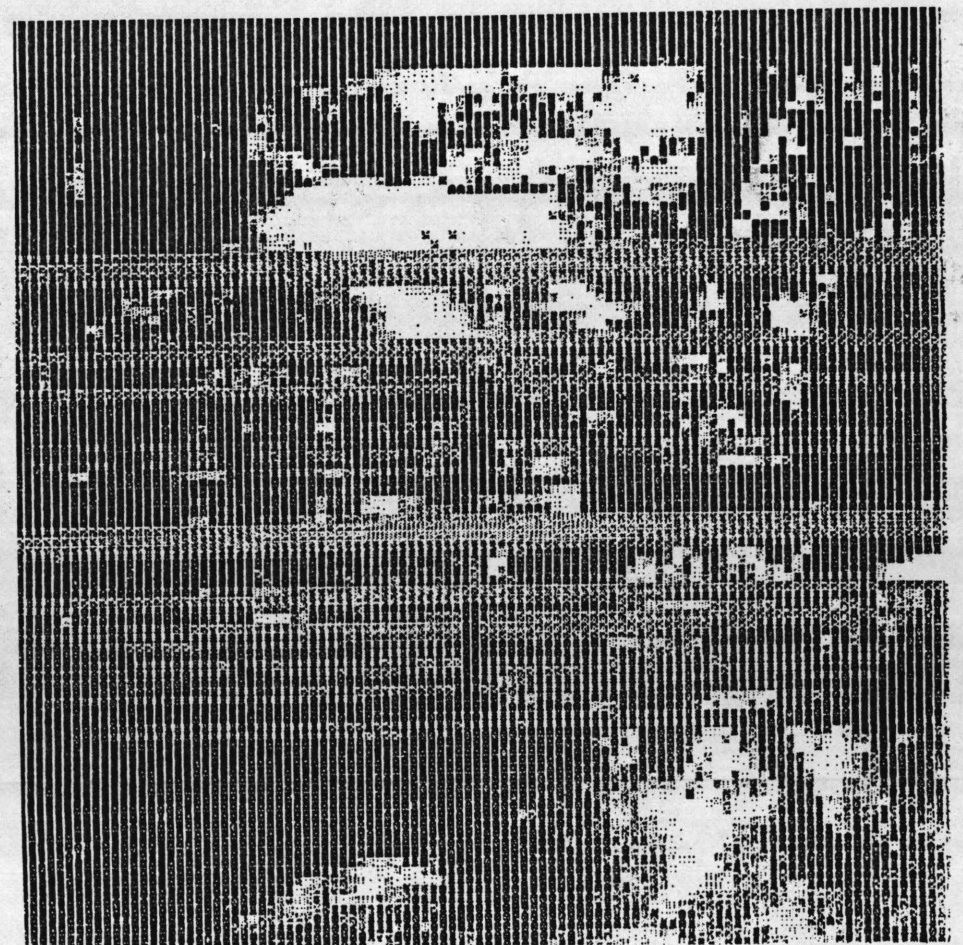
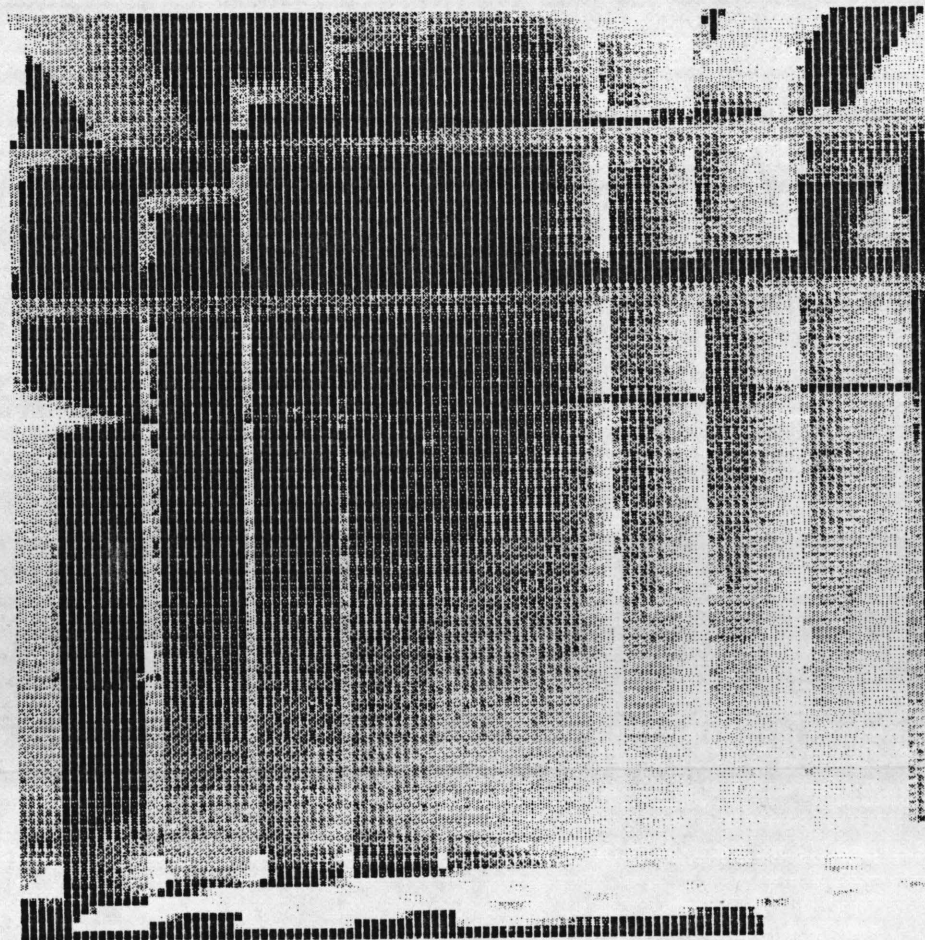
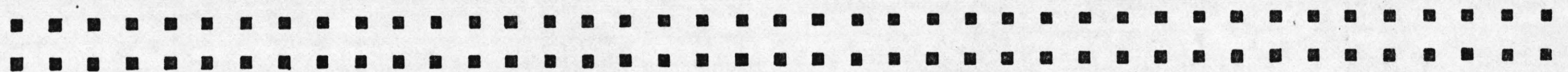
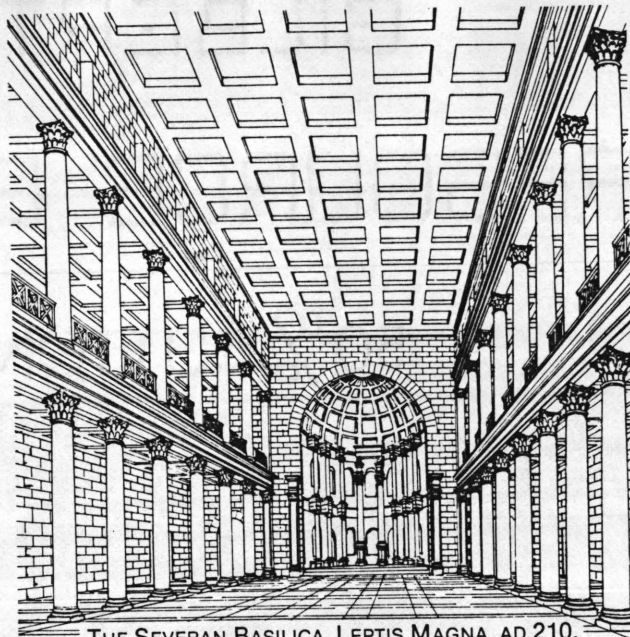




TABLE OF CONTENTS

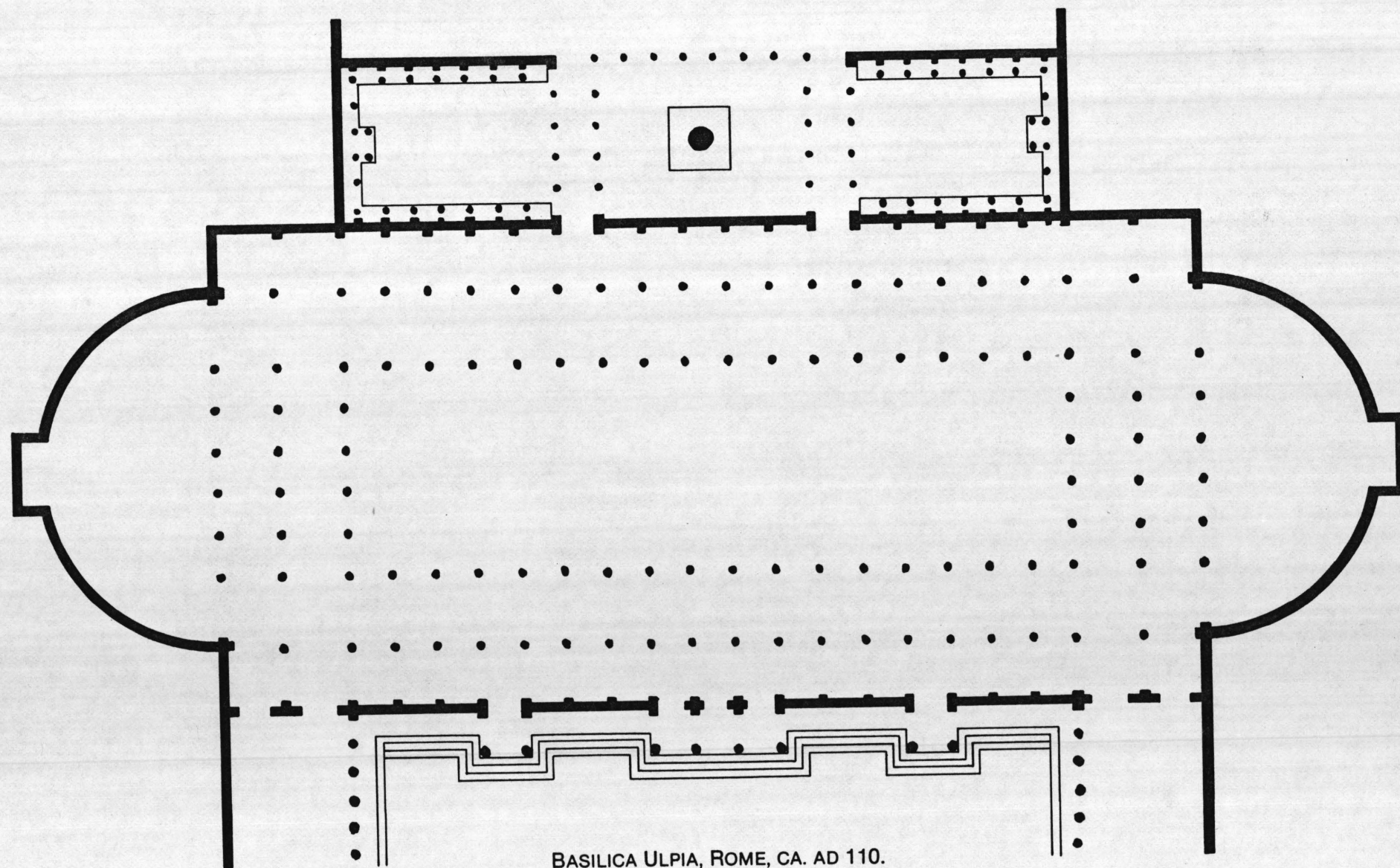
TITLE	I
ABSTRACT	II
ACKNOWLEDGEMENTS	III
TABLE OF CONTENTS	IV
INTRODUCTION	1
THE EARLY LITURGY	5
THE LITURGY OF TODAY	6
THE SITE	7
THE PROJECT	10
BIBLIOGRAPHY	23
VITA	24



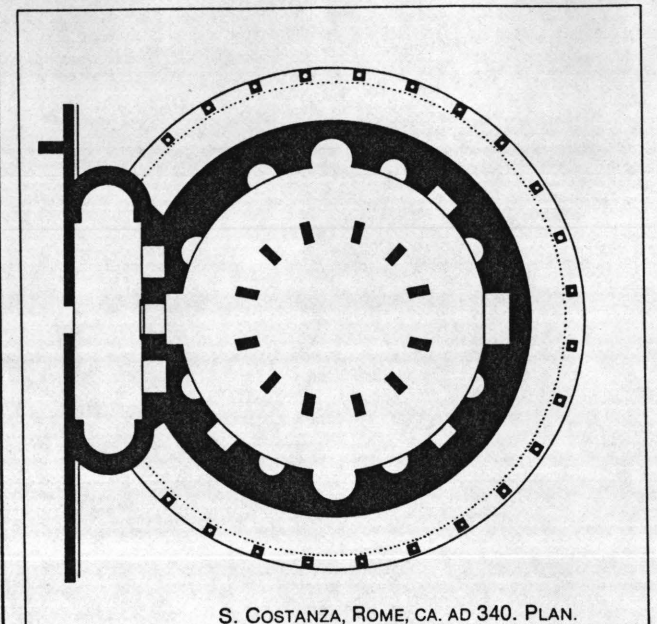
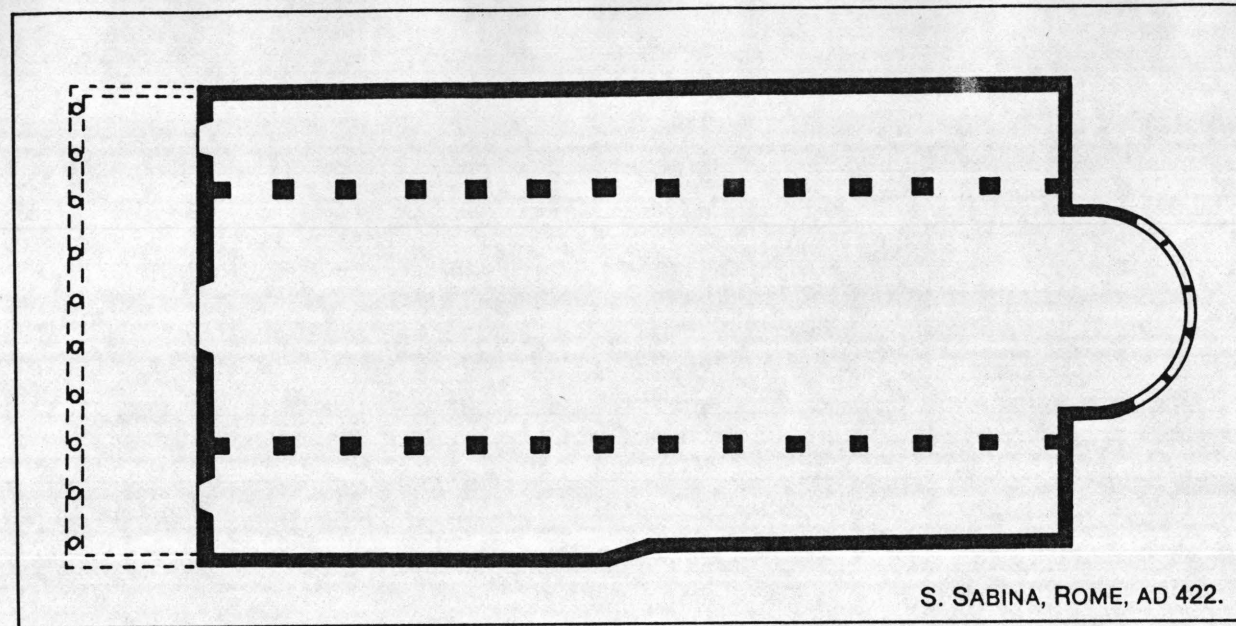


THE SEVERAN BASILICA, LEPTIS MAGNA, AD 210.

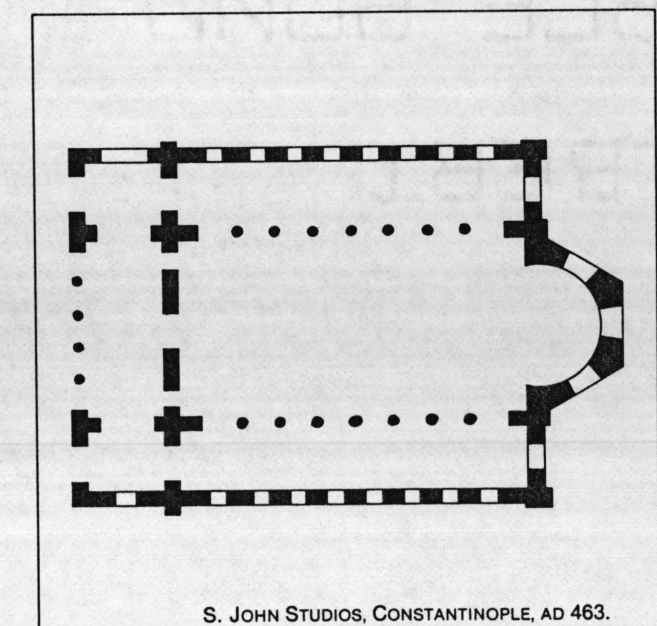
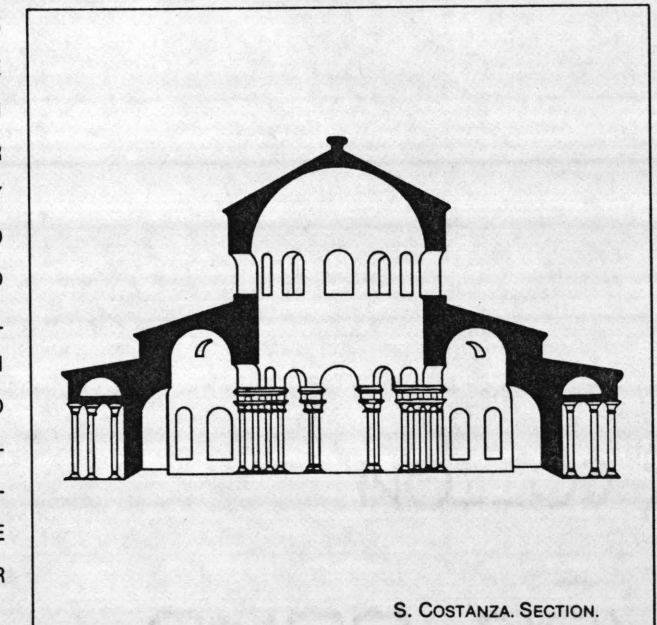
IN 313 A.D. EMPEROR CONSTANTINE AUGUSTUS PROCLAIMED CHRISTIANITY THE OFFICIAL STATE RELIGION OF THE ROMAN EMPIRE. IN 330, HE MOVED THE SEAT OF GOVERNMENT FROM ROME TO THE ANCIENT GREEK TOWN OF BYZANTIUM IN ASIA MINOR, SUBSEQUENTLY FOUNDING CONSTANTIOPLE. THROUGH THIS NEW IMPERIAL ASSOCIATION, CHRISTIANITY STARTED TO FLOURISH, EXEMPLIFIED PRIMARILY THROUGH MONUMENTAL ARCHITECTURE. THE ROMAN BASILICAN FORM WAS ADOPTED TO HOUSE THE CONGREGATIONS, AS IT WAS THE ONLY SIZABLE BUILDING FORM OF THE TIME NOT USED FOR PAGAN RIGHTS. THE BASILICA HAD BEEN IN USE IN THE GRECO-ROMAN WORLD, AND WAS A SYMBOL OF AUTHORITY AND SOCIAL ORDER, HAVING APPLICATIONS IN MARKETS, TOWN HALLS AND THRONE ROOMS. THE BASIC FORM WAS OF TWO OR FOUR LONG PARALLEL FILES OF COLUMNS SURROUNDED BY AN OUTER WALL AT AN AISLE'S DISTANCE. THE ROOF OF THE CENTRAL SPACE WAS HIGHER THAN THAT OF THE SIDE AISLES. THERE WAS AN APSE AT EACH END, AND THE ENTRANCE WAS IN THE CENTER OF ONE OF THE LONG WALLS. OPPOSITE THE ENTRANCE WAS OFTEN LOCATED A SMALL TEMPLE. EVEN IF THE SCALE AND PROPORTIONS OF THE BASILICAS DIFFERED, THIS UNDERLYING STRUCTURE PREVAILED. THE BASILICA LENT ITSELF WELL TO THE NEEDS OF ECCLESIASTICAL ARCHITECTURE.

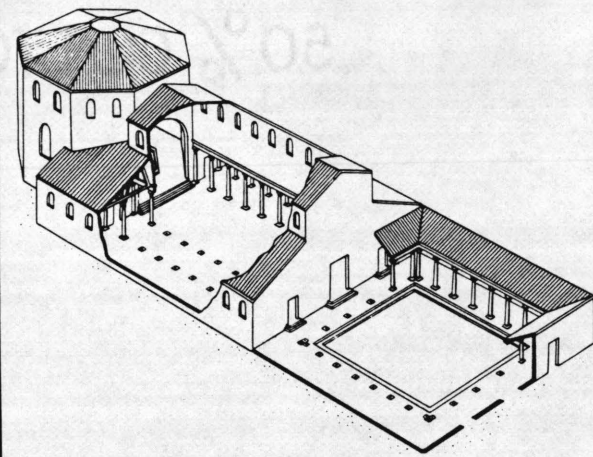


BASILICA ULPIA, ROME, CA. AD 110.

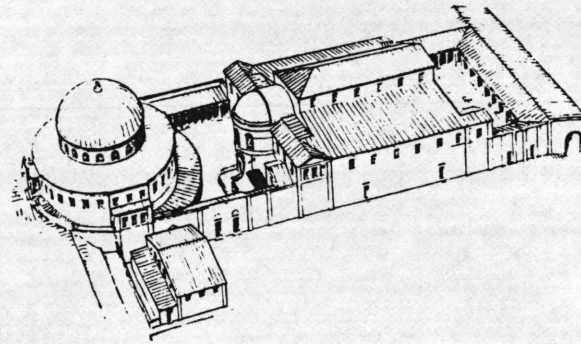


THE OBJECTIVE OF THE EARLY ARCHITECTS WAS TO CREATE SPACES AS SETTINGS FOR THE EUCHARIST. THE CHURCHES WERE TO BE A "HEAVEN ON EARTH" (EPIGIOS OURANOS) - A DWELLING FOR GOD ON EARTH. IN ADAPTING THE BASILICAS, THEY RELOCATED THE ENTRANCE TO ONE END, AND PLACED AN ALTAR IN THE APSE AT THE OTHER. THIS CREATED A HORIZONTAL AXIS FORCING THE EYE TO TRAVEL DOWN A LONG VISTA OF COLUMNS TO THE ALTAR IN THE APSE. CENTRALIZED STRUCTURES WERE ALSO USED FOR THE EUCHARIST BUT THEIR PRIMARY PURPOSE WAS TO "MARK AND ENSHRINE PLACES OR OBJECTS ASSOCIATED WITH GOSPEL EVENTS OF THE THREE CENTURIES PAST", OR TO HOUSE A TOMB OR BAPTISTRY.





CHURCH OF THE NATIVITY, BETHLEHEM, AD 333.

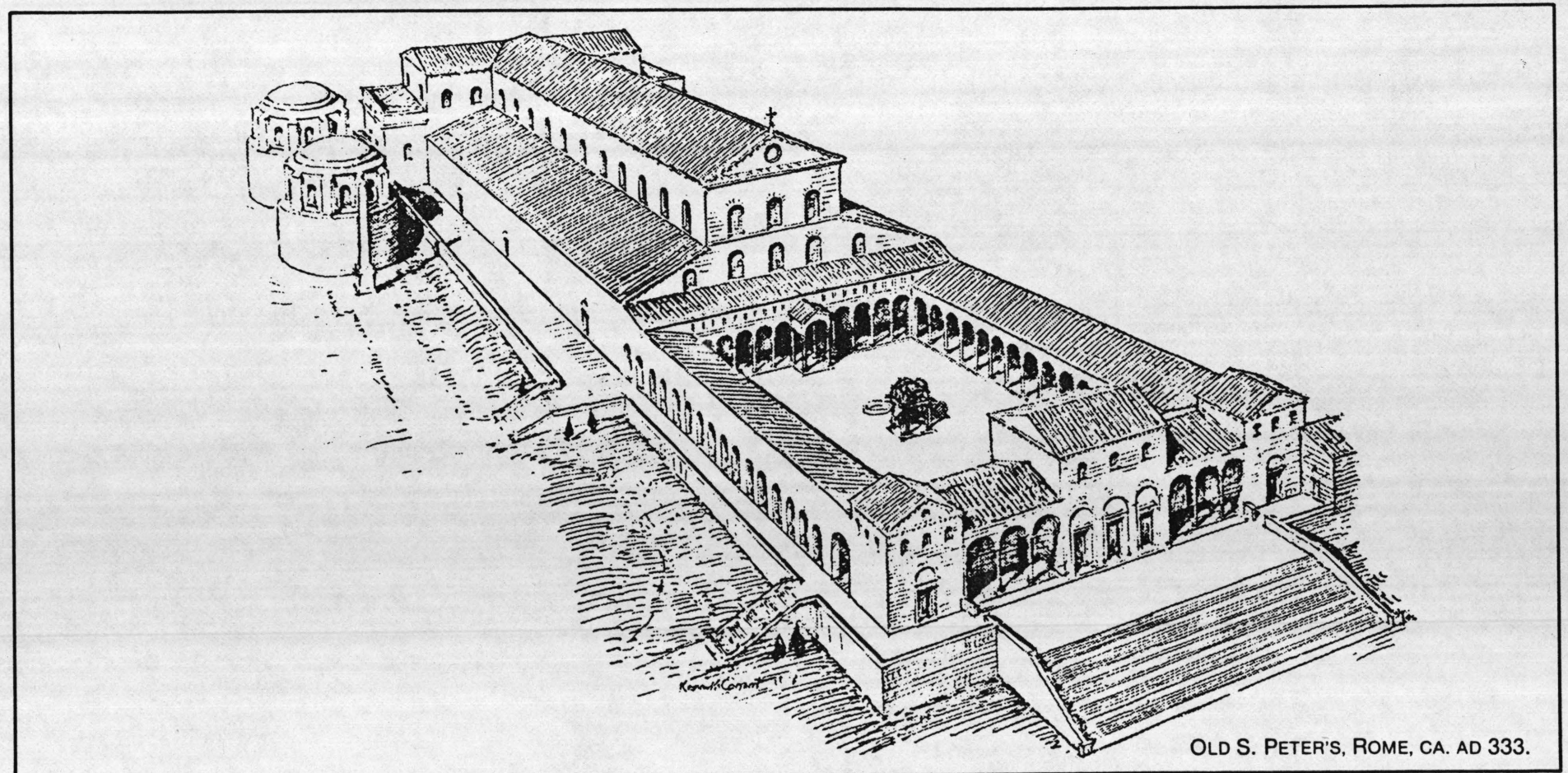
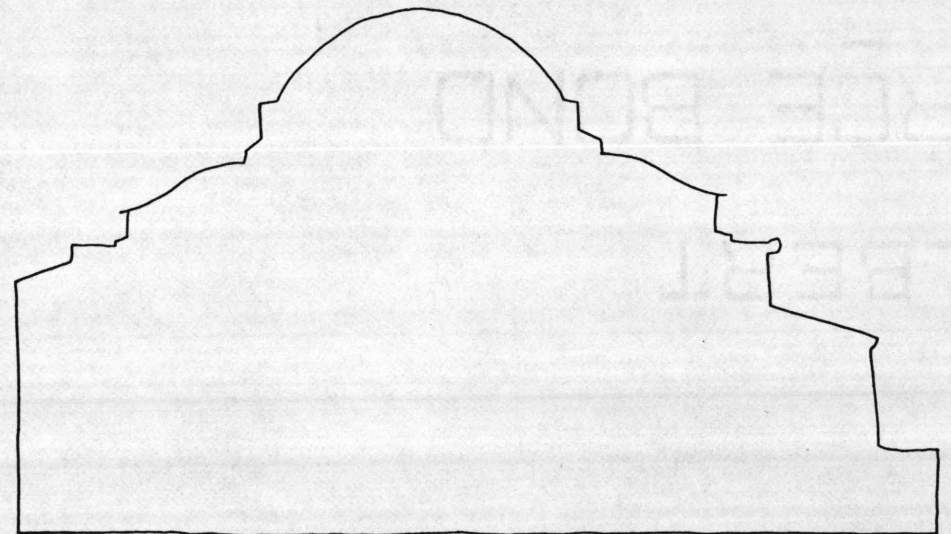
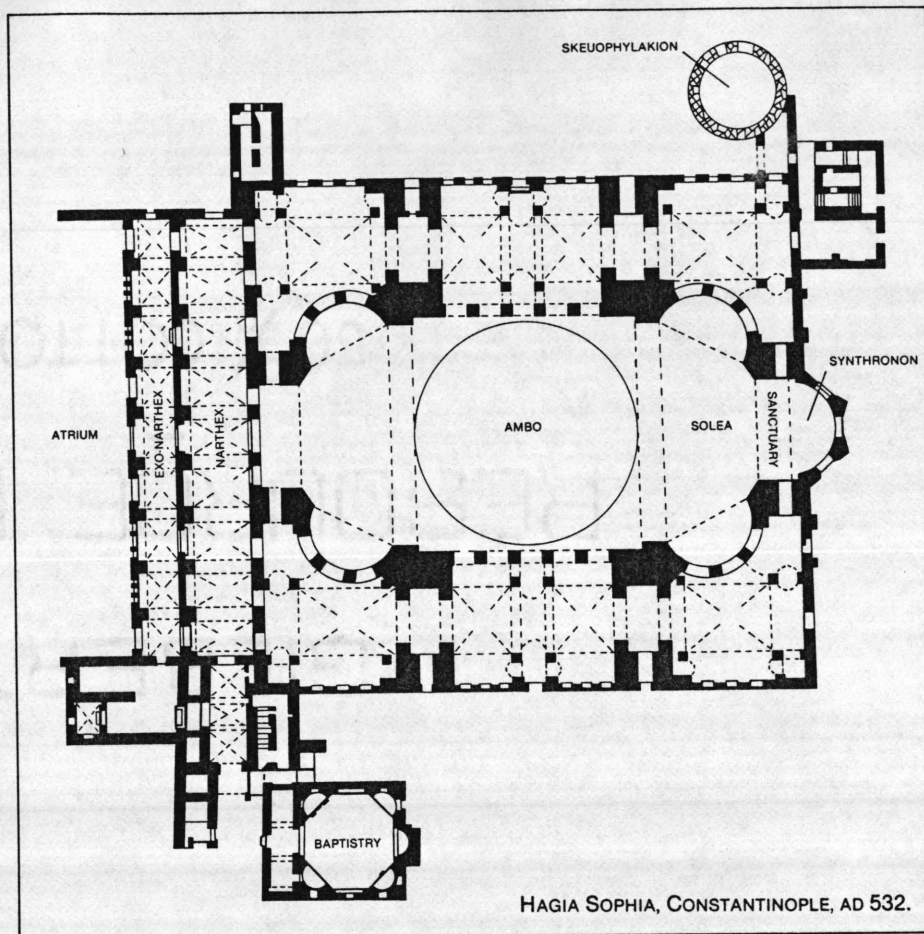


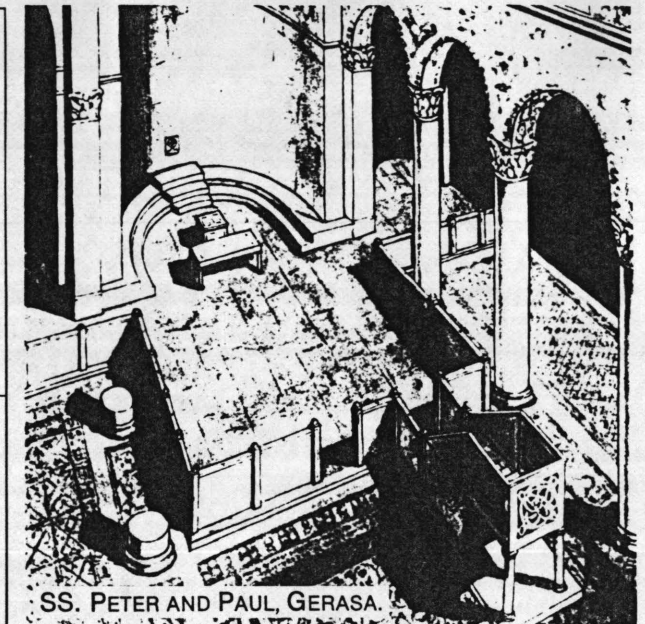
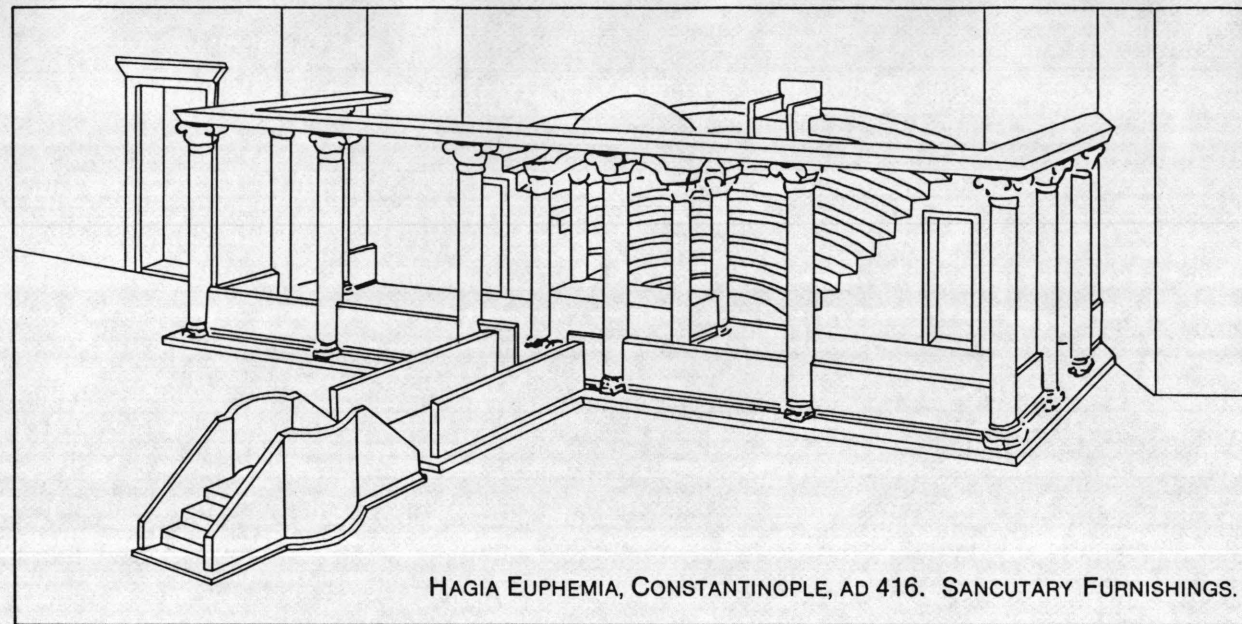
THE HOLY SEPULCHRE, JERUSALEM, AD 335.

INITIALLY, CONSTANTINE ORDERED THE CONSTRUCTION OF CHURCHES AT THE SITES OF THE NATIVITY AND THE ENTOMBMENT IN PALESTINE. THEIR ASSOCIATION WITH THE "SACRED OF ALL CHRISTIAN LOCALITIES AND THEIR EARLY DATE, ENSURED A DIRECT INFLUENCE UPON THE FUTURE OF CHURCH ARCHITECTURE" AS DID HAGIA SOPHIA IN CONSTANTINOPLE AND ST. PETER'S IN ROME.



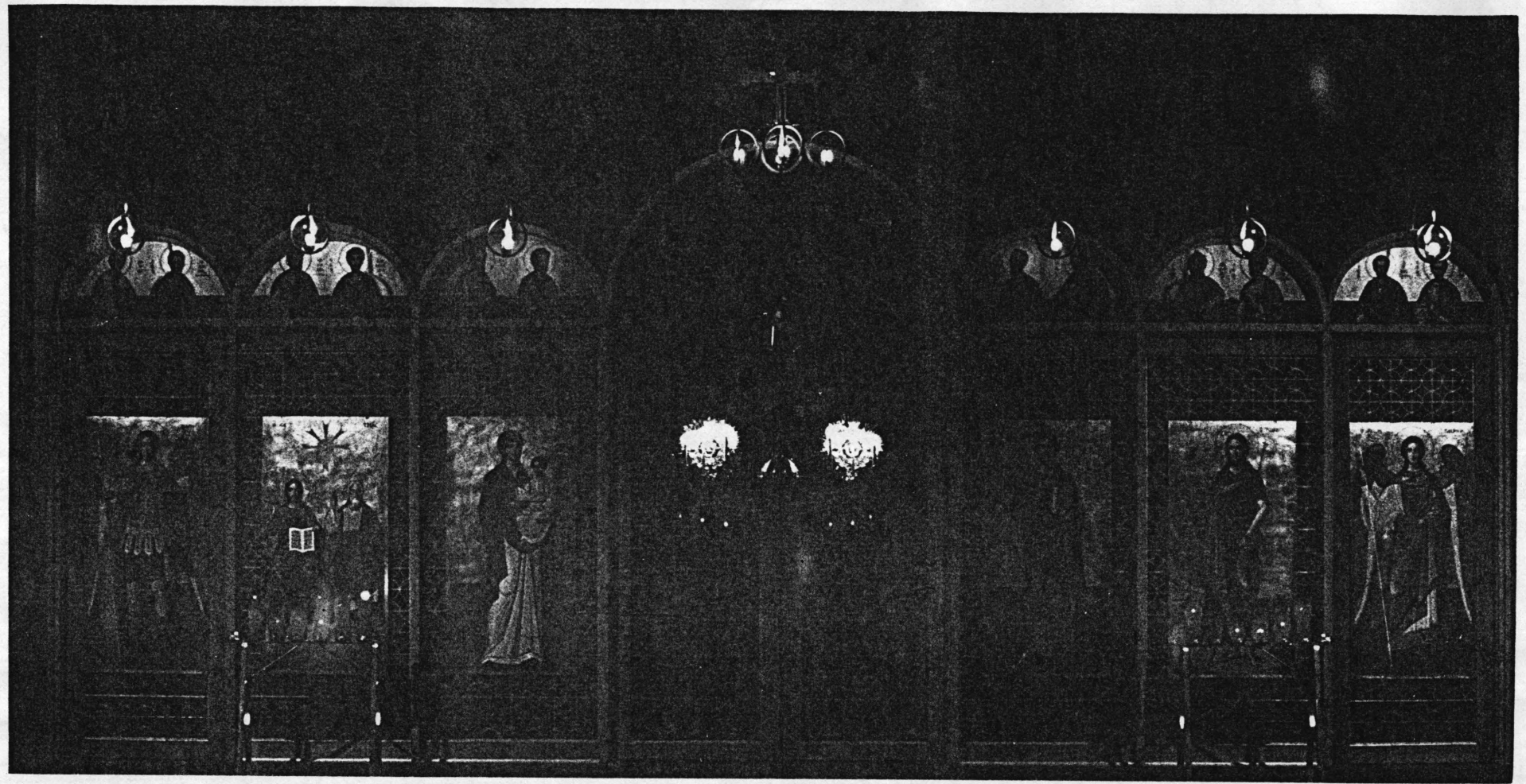
HOLY SEPULCHRE, ROTUNDA OF THE ANASTASIS.



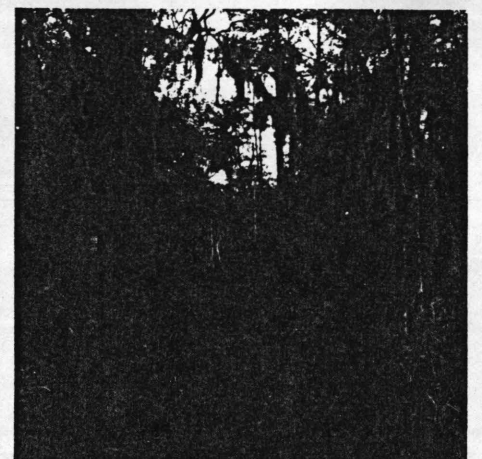
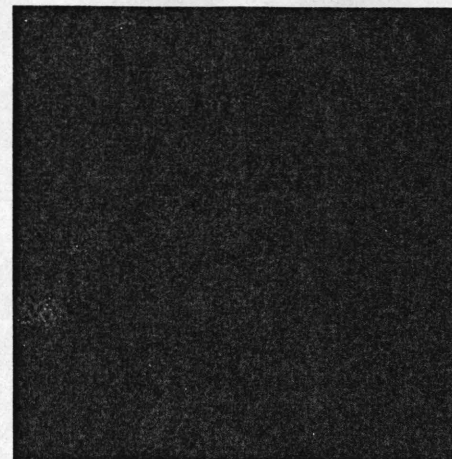
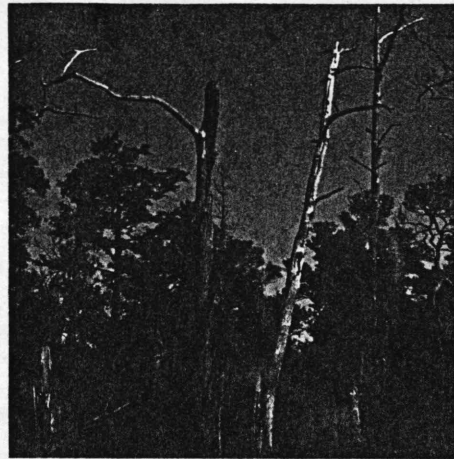


THE EARLY BYZANTINE SERVICE HAD TWO PARTS: THE LITURGY OF THE CATECHUMENS AND THE LITURGY OF THE FAITHFUL. THE LITURGY OF THE CATECHUMENS CONSISTED OF THE FIRST ENTRANCE, THE BLESSING OF THE PEOPLE, THE READINGS, AND THE SERMON. THE FIRST ENTRANCE PROCESSION STARTED IN THE ATRIUM WHERE THE PEOPLE GATHERED TO WAIT THE ARRIVAL OF CLERGY AND OTHER DIGNATARIES. FIRST WAS THE DEACON CARRYING THE GOSPEL, FOLLOWED BY THE BISHOP, LESSER CLERGY AND THE CONGREGATION. AS THE CLERGY HEADED FOR THE SANCTUARY, THE PEOPLE TOOK THEIR PLACES IN TIME FOR THE GOSPEL TO BE PLACED ON THE ALTAR, AND FOR THE BISHOP TO ASCEND HIS THRONE ON THE SYNTHRONON AND INVOKE THE BLESSING. THE CHOICE OF THE BASILICA WITH ITS STRONG LONGITUDINAL FEATURES HAD A STRONG CONNECTION WITH THE LONGITUDINAL LINES OF THE ENTRANCE. AFTER THE BLESSING, THE READINGS TOOK PLACE: THE PROPHETS FROM THE OLD TESTAMENT, THE EPISTLE FROM THE ACTS, AND THE GOSPEL. THE READINGS WERE SPOKEN BY THE DEACON AT THE AMBO AND WERE FOLLOWED BY THE BISHOP'S SERMON FROM HIS PLACE IN THE SANCTUARY. IN EARLY CONSTANTINOPOLITAN CHURCHES, THE SOLEA CONNECTED THE AMBO TO THE SANCTUARY. THE ENTRANCE PROCESSION USED THIS EN ROUTE TO THE ALTAR AREA. IN EARLY GREEK CHURCHES, THE SOLEA WAS OMITTED AND THE AMBO WAS MOVED TO ONE SIDE. THE CHANCEL BARRIER SEPARATED THE SANCTUARY FROM THE NAVE AND TOOK ON MANY SHAPES. SOME WERE π -SHAPED WITH ENTRANCES ON EITHER SIDE, OTHERS WENT STRAIGHT ACROSS. THE STRAIGHT VERSION BECAME THE STANDARD IN MIDDLE BYZANTINE ARCHITECTURE AND OVER TIME EVOLVED INTO THE ICONOSTASIS. SOME BARRIERS WERE HIGH WITH COLONNETTES AND AN ARCHITRAVE, OTHERS WERE A SIMPLE RAILING. THE LITURGY OF THE CATECHUMENS ENDED WITH THE EXPULSION OF THE CATECHUMENS AND OTHERS WHO WERE "UNWORTHY OF VIEWING THE SACRED MYSTERIES" (PREPARATION OF COMMUNION).

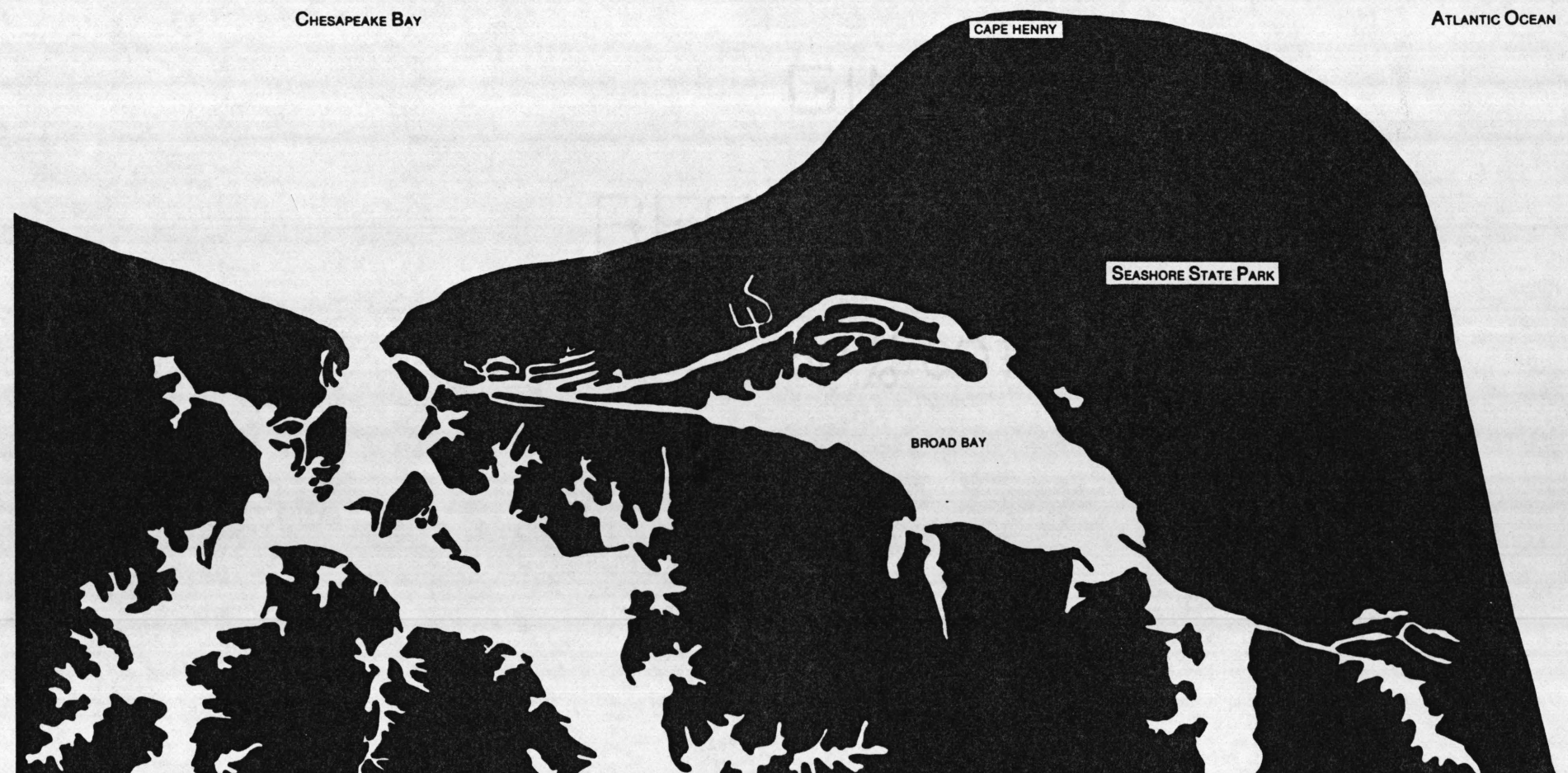
WITH THE CLOSING OF THE DOORS, AND COMMUNICATION SECURELY PREVENTED BETWEEN INSIDE AND OUT, THE LITURGY OF THE FAITHFUL COMMENCED WITH THE GREAT ENTRANCE. THIS SECOND PROCESSION STARTED IN THE SKEUOPHYLAKION—A SMALL BUILDING CONNECTED TO THE CHURCH JUST NORTH OF THE SANCTUARY, WHERE THE BREAD AND WINE WERE KEPT IN SACRED VESSELS UNTIL NEEDED FOR PREPARATION OF THE EUCHARIST. THE DEACON ALSO LED THE GREAT ENTRANCE PROCESSION VIA A SIDE ENTRANCE INTO THE CHURCH, WHILE THE BISHOP REMAINED IN THE SANCTUARY TO RECEIVE THE GIFTS OF THE EUCHARIST. AFTER PRESENTATION, THE FAITHFUL GREETED EACH OTHER WITH A KISS OF PEACE AND RECITED THE NICAEN CREED. THEY THEN RECEIVED HOLY COMMUNION AND WERE DISMISSED. IN A PROCESSION MUCH LIKE THE GREAT ENTRANCE, THE SACRED VESSELS WERE RETURNED TO THE SKEUOPHYLAKION, AND THE CELEBRANTS AND FAITHFUL EXITED THE CHURCH ENDING THE ENTIRE SERVICE.

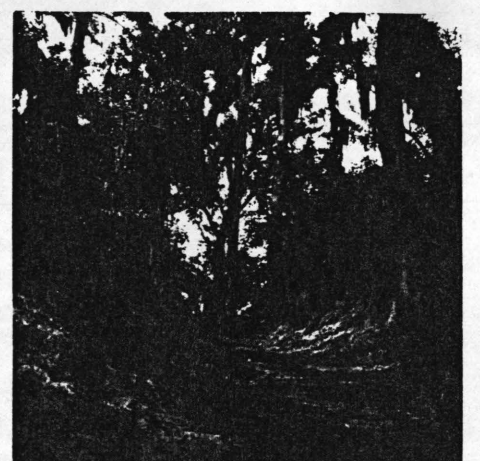
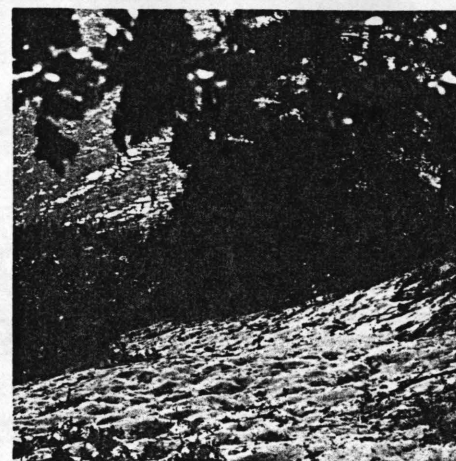
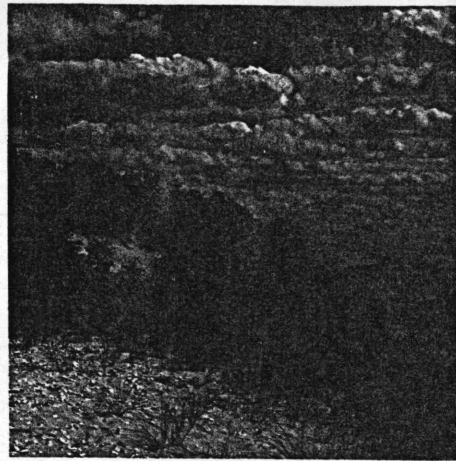


THE LITURGY OF TODAY IS A MODIFIED VERSION OF THE EARLY SERVICE. THE CHANCEL BARRIER HAS EVOLVED INTO THE ICONOSTASIS, AND THE SOLEA IS AN ELEVATED AREA WHERE THE MAJORITY OF THE WORSHIP SERVICE OUTSIDE THE SANCTUARY TAKES PLACE. THE AMBO HAS EVOLVED INTO THE PULPIT AND INTO THE CHANTERS' STATION, NEITHER BEING CONNECTED TO THE ICONOSTASIS. TRADITIONALLY, RIGHT AND LEFT CHANTERS' STATIONS EXIST ON THE SOLEA FOR READINGS AND ANTIPHONAL RESPONDING. THE BISHOP'S THRONE IS RELOCATED ON THE SOLEA, AND THE SYNTHRONON, IF IT EXISTS AT ALL, IS USUALLY JUST A SEAT IN BACK OF THE ALTAR. THE ICONOSTASIS SYMBOLIZES THE DIVISION BETWEEN THE SPIRITUAL AND EARTHLY WORLDS, REPRESENTED BY THE SANCTUARY AND NAVE, RESPECTIVELY. THE SANCTUARY IS RESERVED FOR ORDAINED CLERGY, THE NAVE FOR BAPTIZED FAITHFUL, AND THE NARTHEX FOR THE CATECHUMENS. BEING THAT THERE IS NO LONGER AN ACTIVE CATECHUMENICAL ORDER, NO ONE IS ASKED TO LEAVE DURING THE SERVICE, ALTHOUGH WORDS TO THAT EFFECT STILL EXIST. THE ENTRANCE PROCESSIONS HAVE BEEN REDUCED TO AN APPEARANCE AND SHORT WALK FROM BEHIND THE ICONOSTASIS, ON THE SOLEA, THEN BACK INTO THE ALTAR. THE SMALL AND GREAT "ENTRANCES" ARE NOW A MODE OF TRANSPORTING THE GOSPEL AND GIFTS OF THE EUCHARIST, ALTHOUGH SYMBOLICALLY THEY STILL REPRESENT THE BIRTH AND RESURRECTION OF CHRIST. THE NICAEN CREED AND LORD'S PRAYER ARE RECITED, HOLY COMMUNION IS OFFERED AND THE CONGREGATION IS DISMISSED. ON CERTAIN HOLIDAYS, THE PROCESSION WILL DEPART THE SOLEA AND FOLLOW A PATH AROUND THE INSIDE OF THE CHURCH, AND ON OTHERS, SUCH AS THE CONSECRATION, THE PROCESSION WILL CIRCLE THE BUILDING ITSELF. THE STRUCTURE OF THE ORTHODOX CHURCH AND THE BASIS FOR ITS ARCHITECTURE HAVE CHANGED VERY LITTLE SINCE ORIGINALLY CONCEIVED.

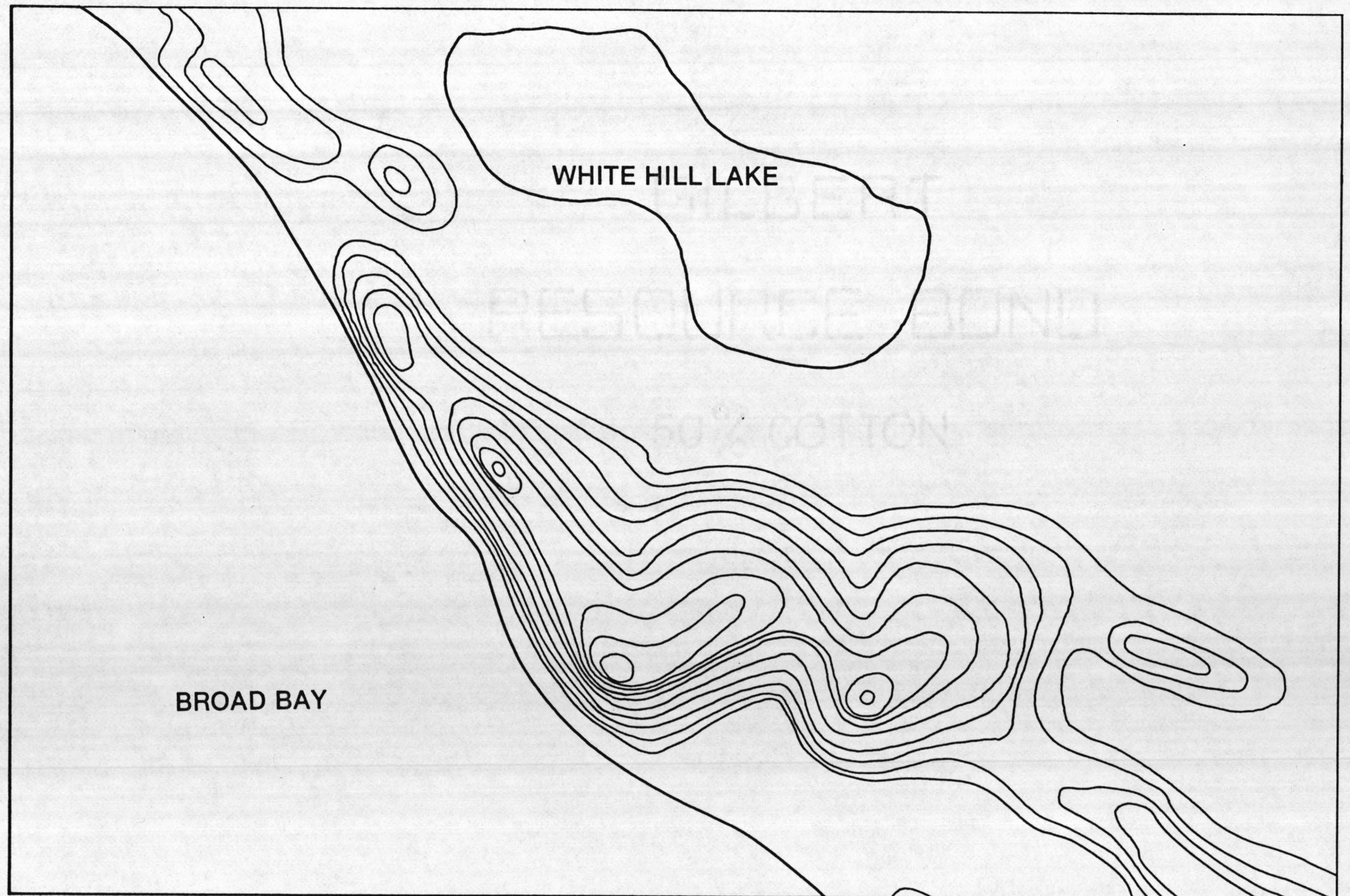


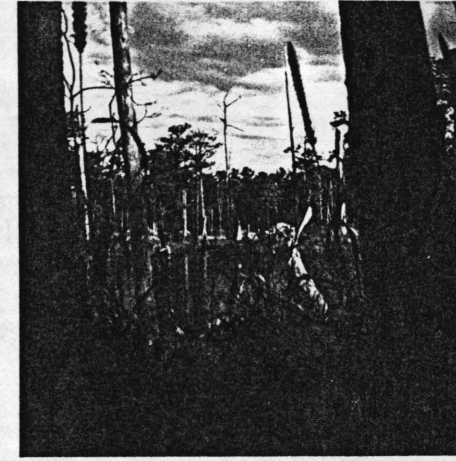
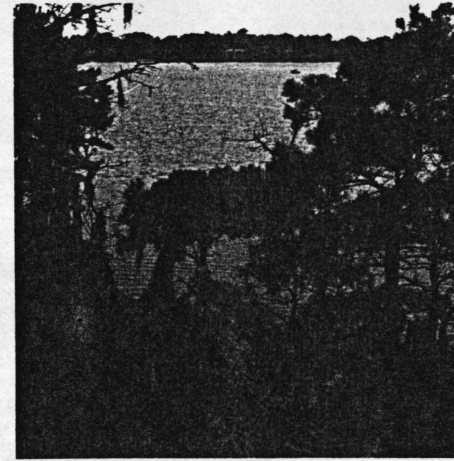
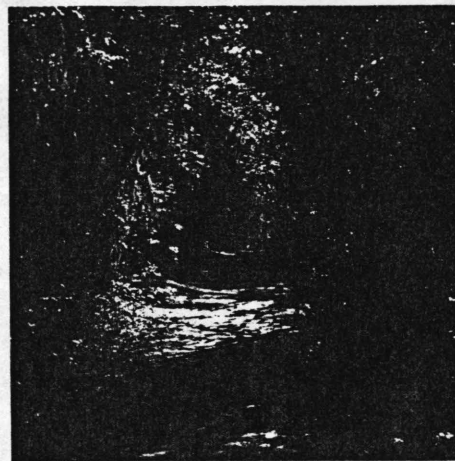
THE LOCATION OF THE SITE IS SEASHORE STATE PARK—A NATIONAL LANDMARK ON CAPE HENRY AT THE MOUTH OF THE CHESAPEAKE BAY. THE PARK IS APPROXIMATELY 2770 ACRES OF WOODLAND AND SWAMP, AND HAS AN EXTENSIVE DUNE REGION. VEGETATION INCLUDES BALD CYPRESS, PINE, OAK, HOLLY, BEECH, CHESTNUT, HICKORY, MAPLE AND BLACK TUPELO, AS WELL AS MUCH LOW LYING FOLIAGE. IT IS ALSO ONE OF THE NORTHERN MOST AREAS TO SUPPORT SO EXTENSIVELY THE GROWTH OF SPANISH MOSS.



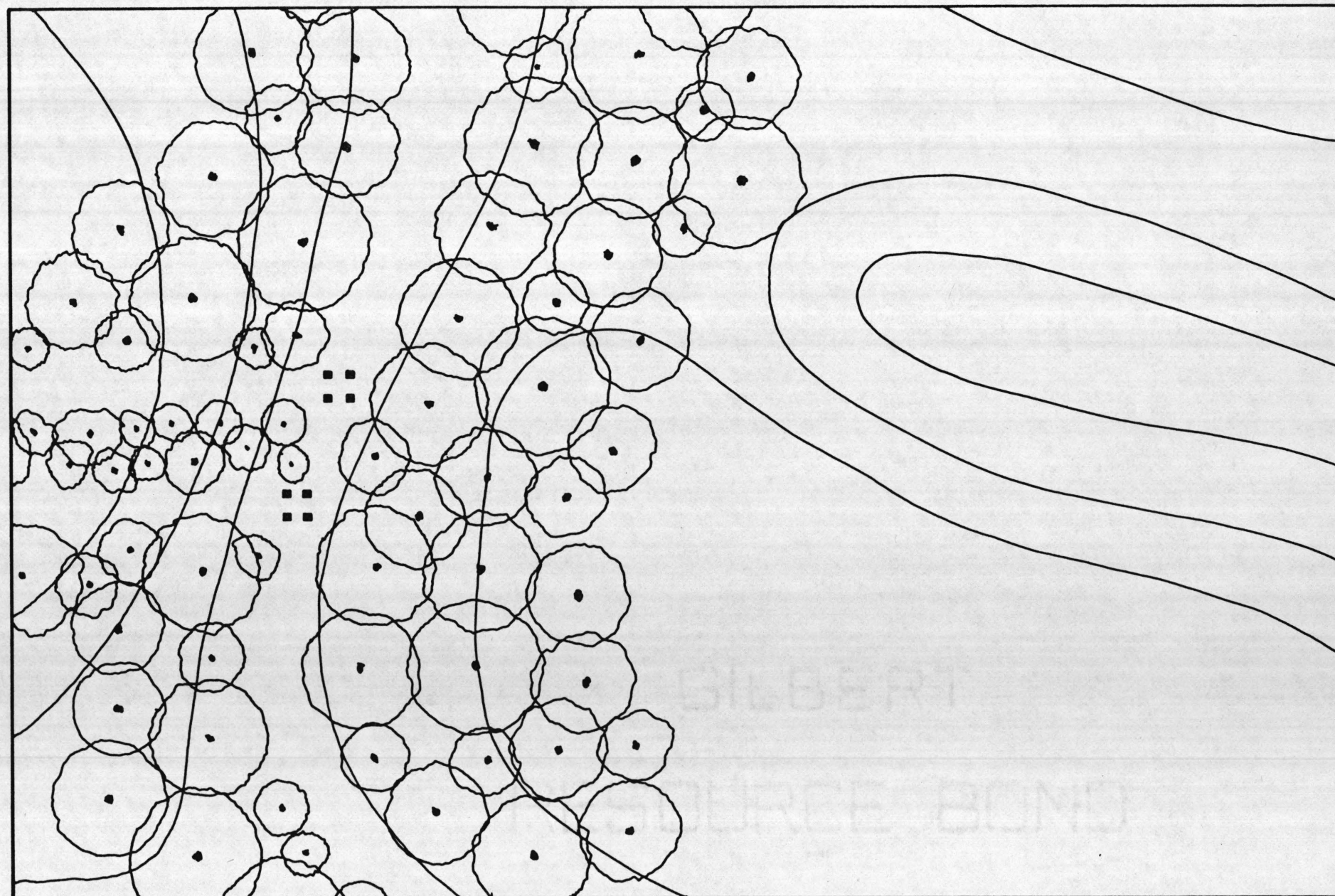


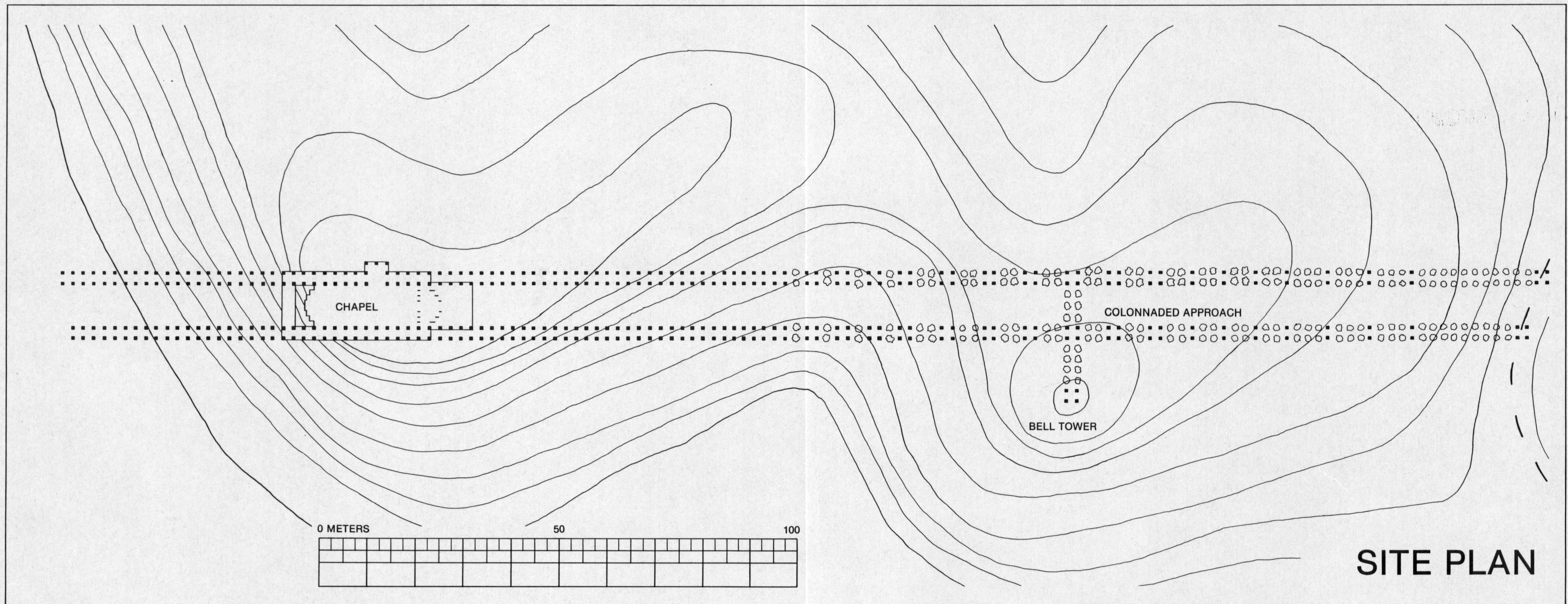
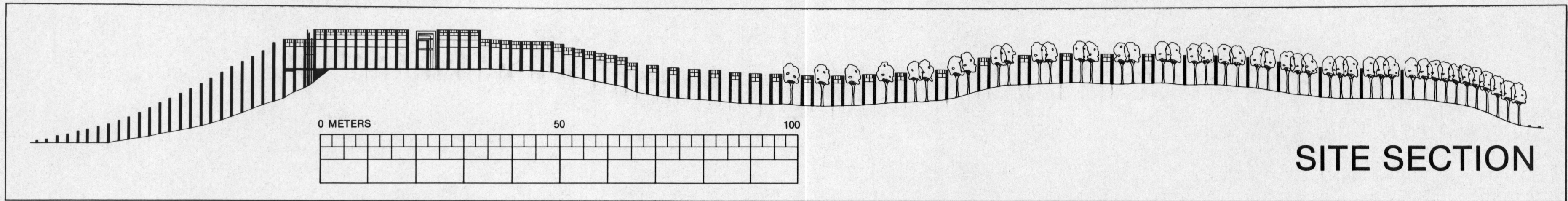
THE SITE IS CENTRALIZED ON A WOODED DUNE BETWEEN BROAD BAY AND WHITE HILL LAKE. THE HIGH POINT IS 60 FEET ABOVE SEA LEVEL.

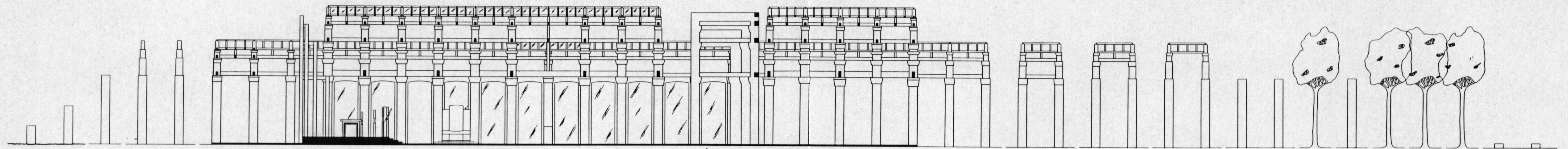




AFTER A SHORT WALK ALONG ONE OF THE EXISTING NATURE TRAILS, ONE ENCOUNTERS THE CHAPEL.

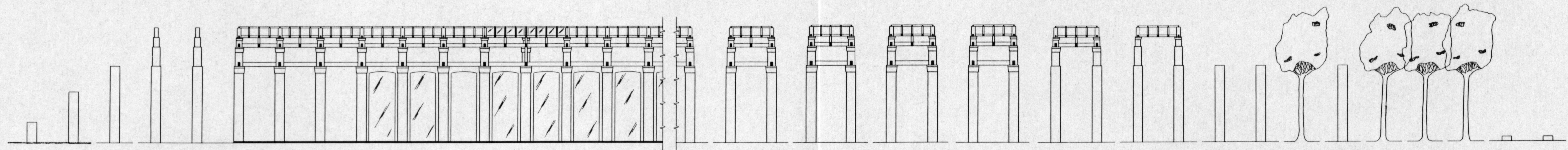






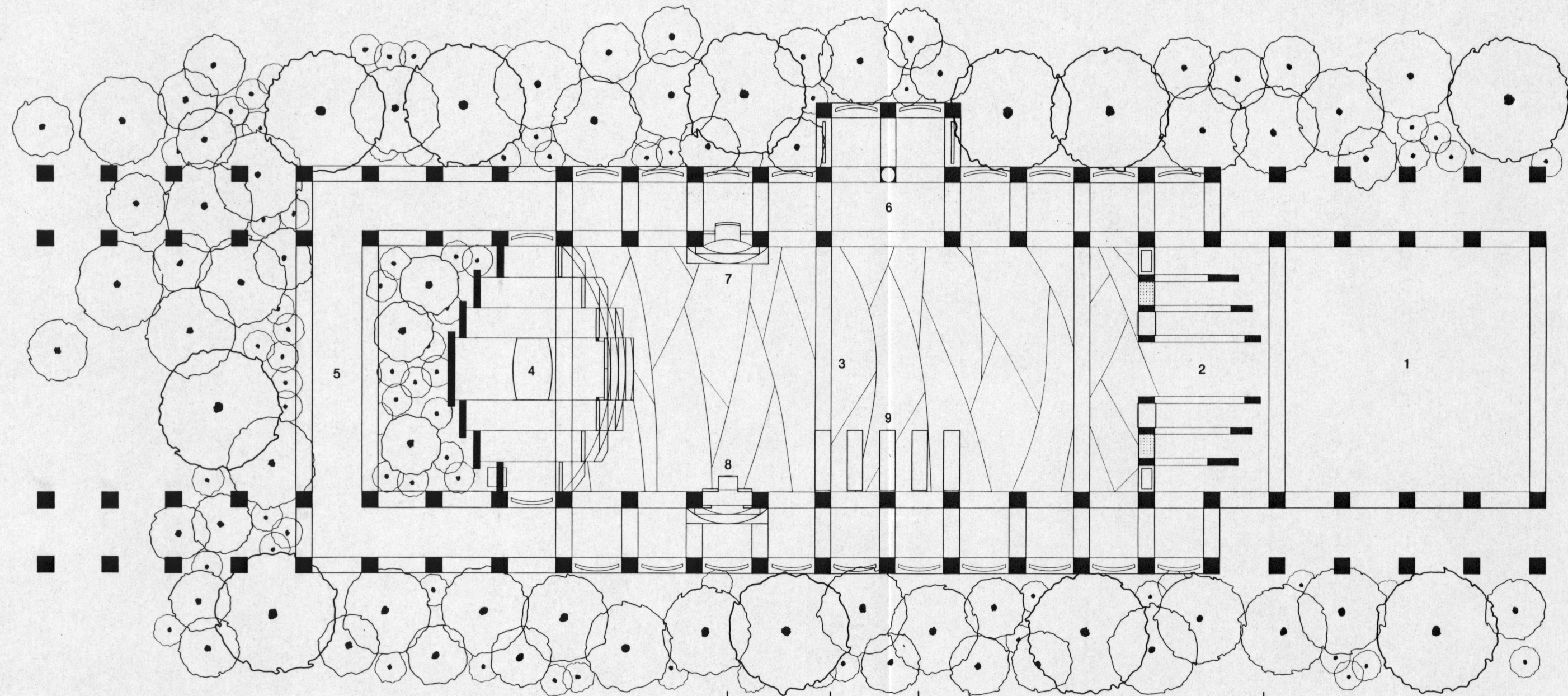
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SECTION A

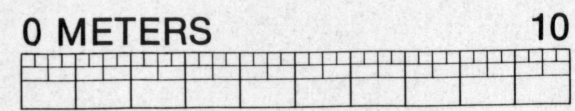


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SECTION B



- 1 ATRIUM
- 2 NARTHEX
- 3 NAVE
- 4 ALTAR
- 5 AMBULATORY
- 6 BAPTISTRY
- 7 BISHOP'S THRONE
- 8 PULPIT
- 9 SEATING



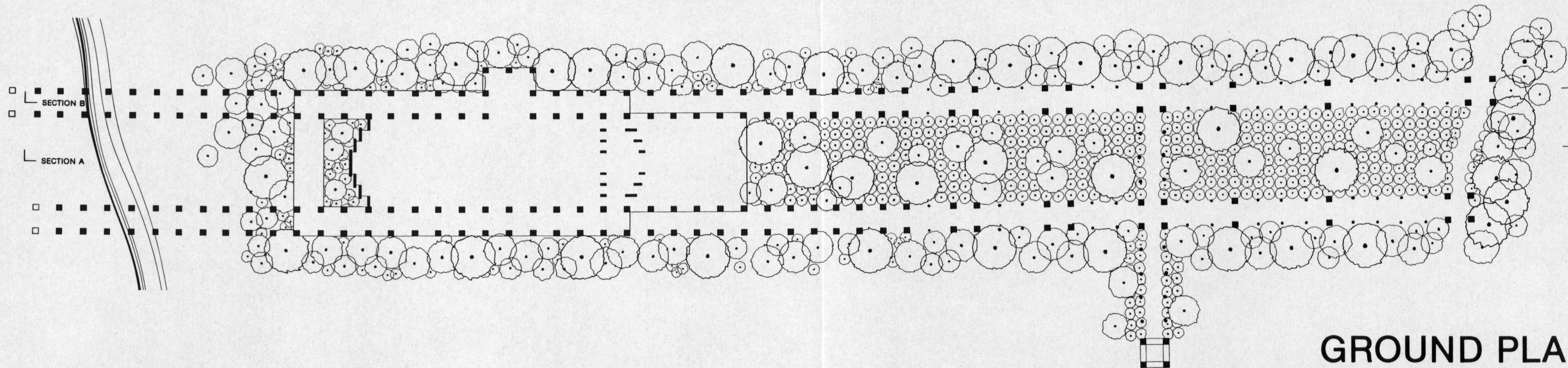
SECTION C

SECTION D

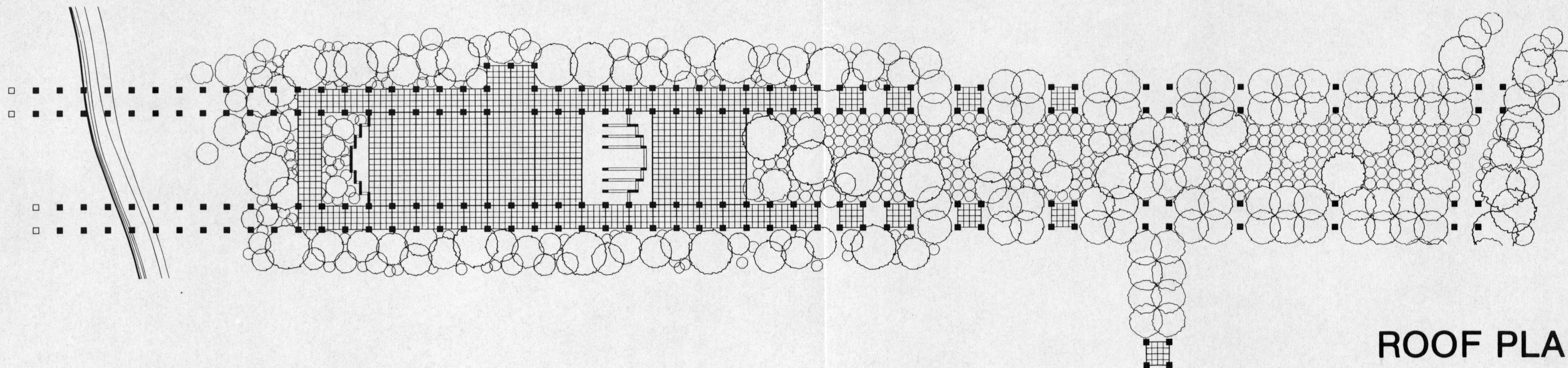
SECTION E

SECTION F

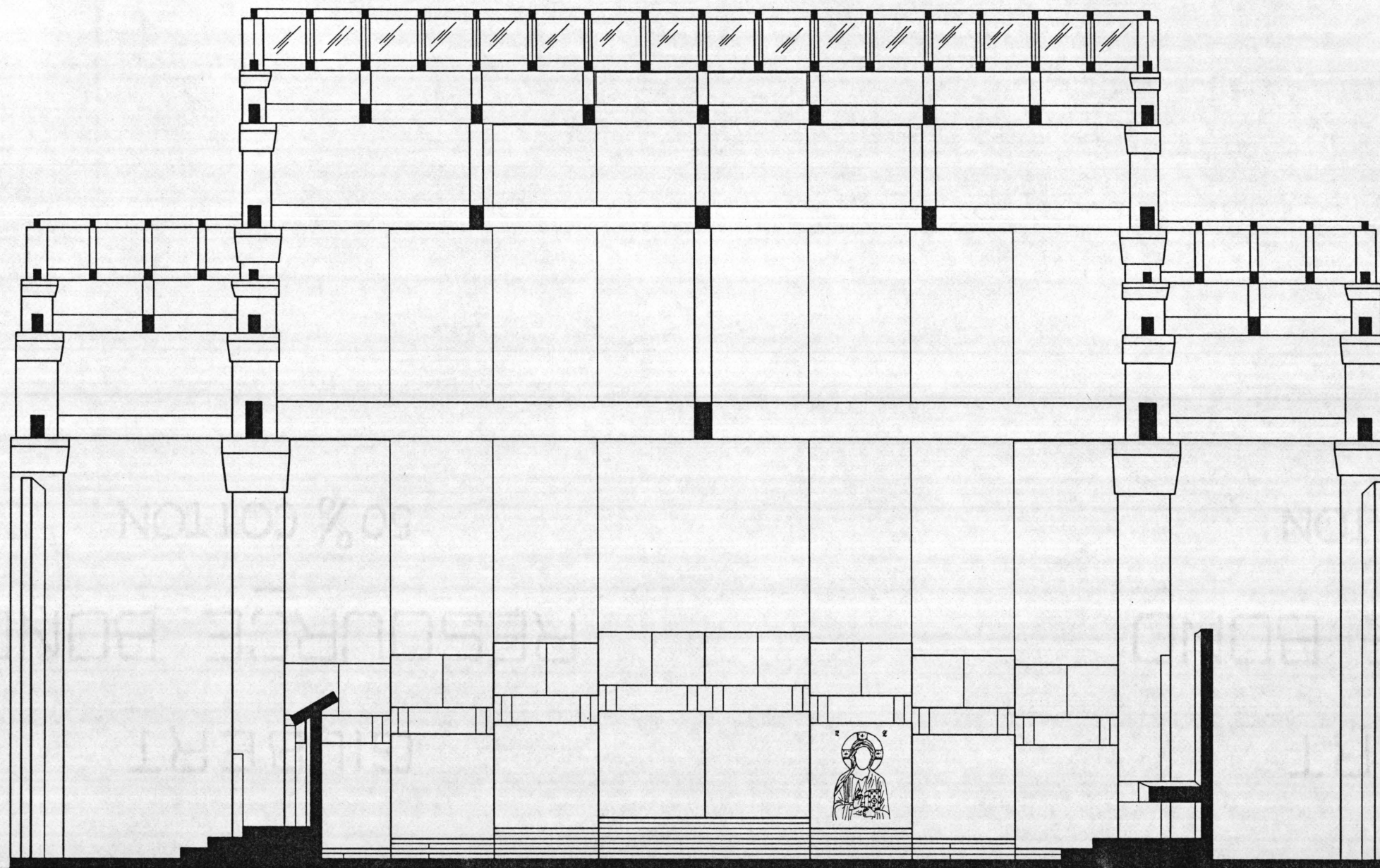
CHAPEL PLAN



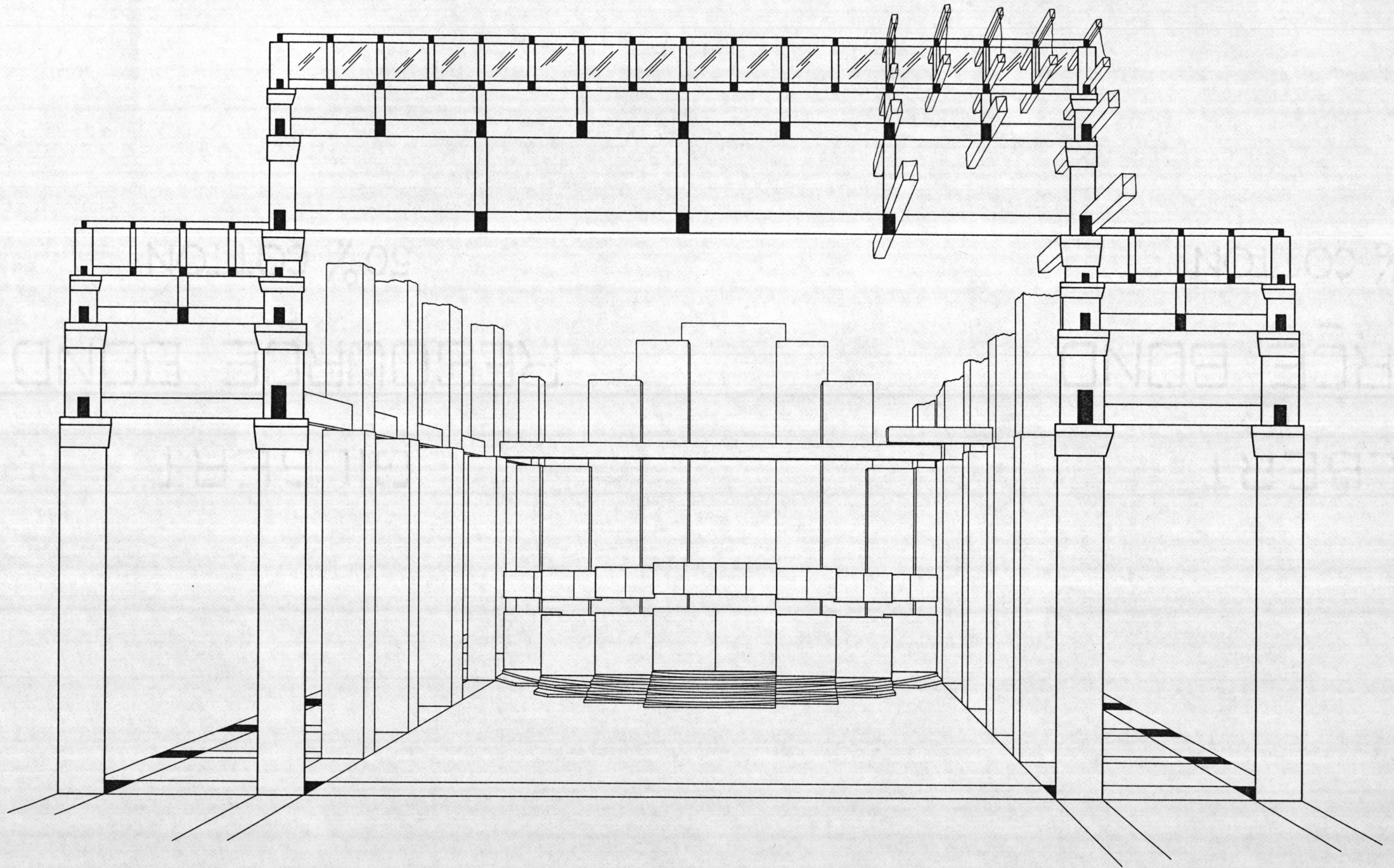
GROUND PLAN



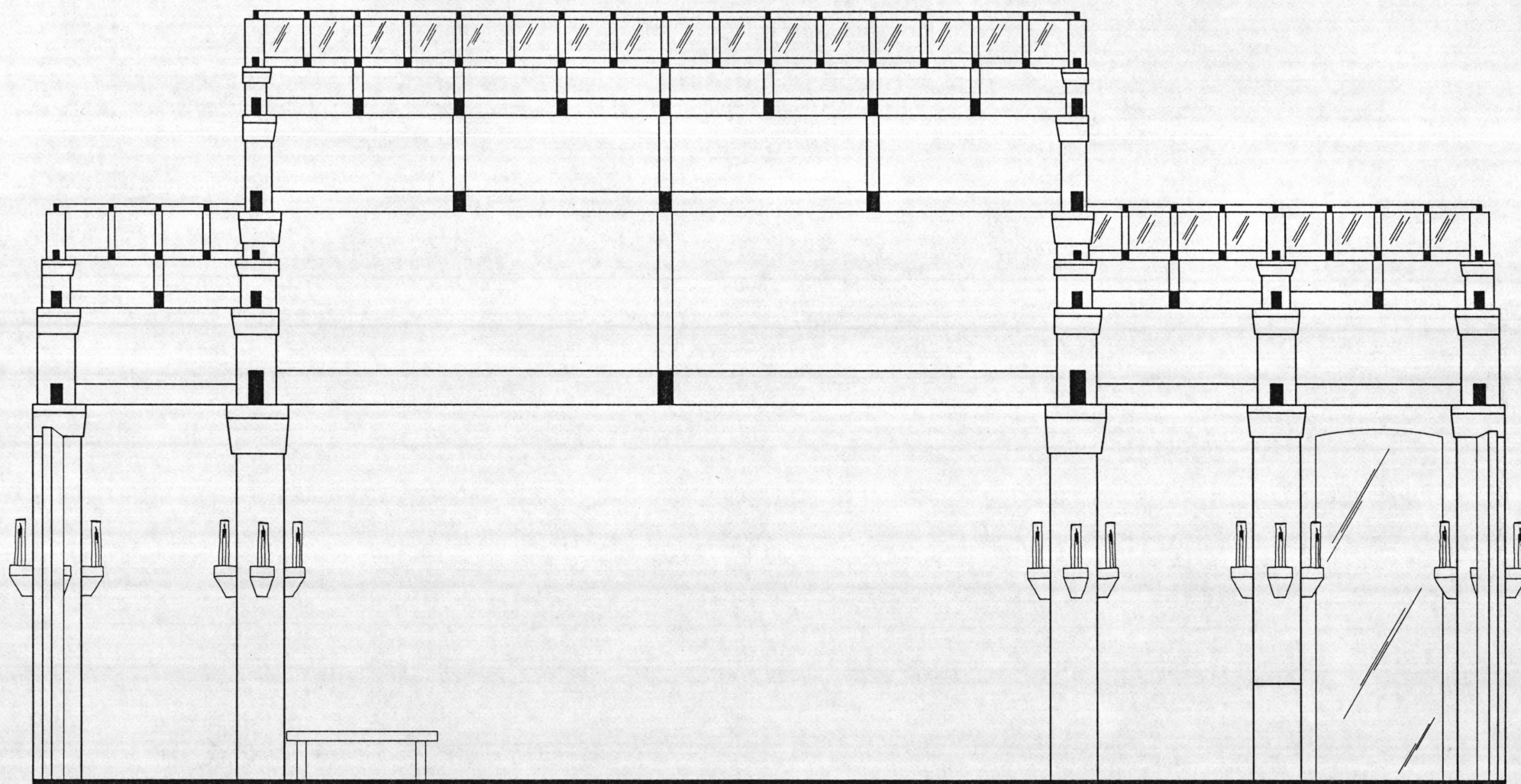
ROOF PLAN



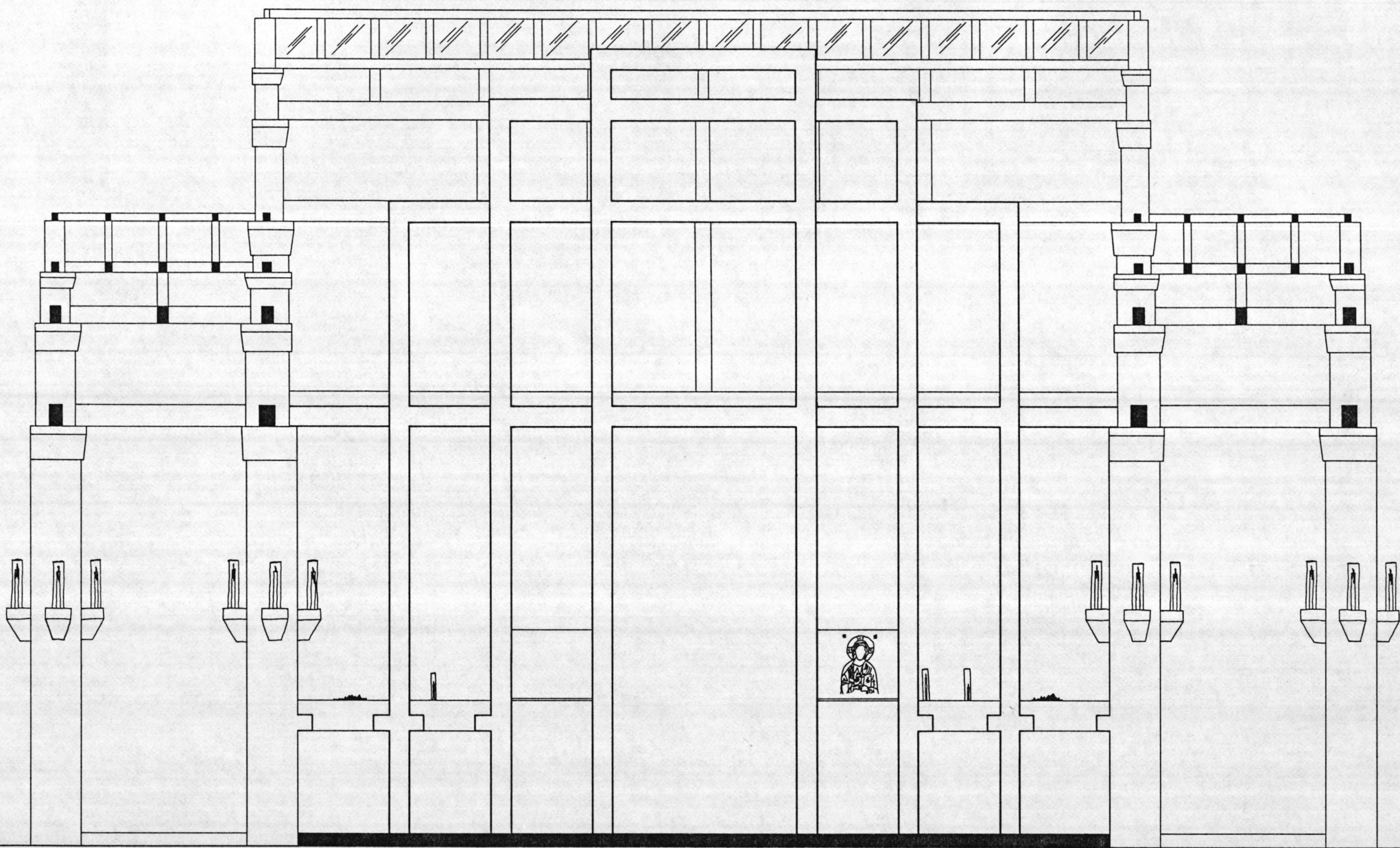
SECTION C



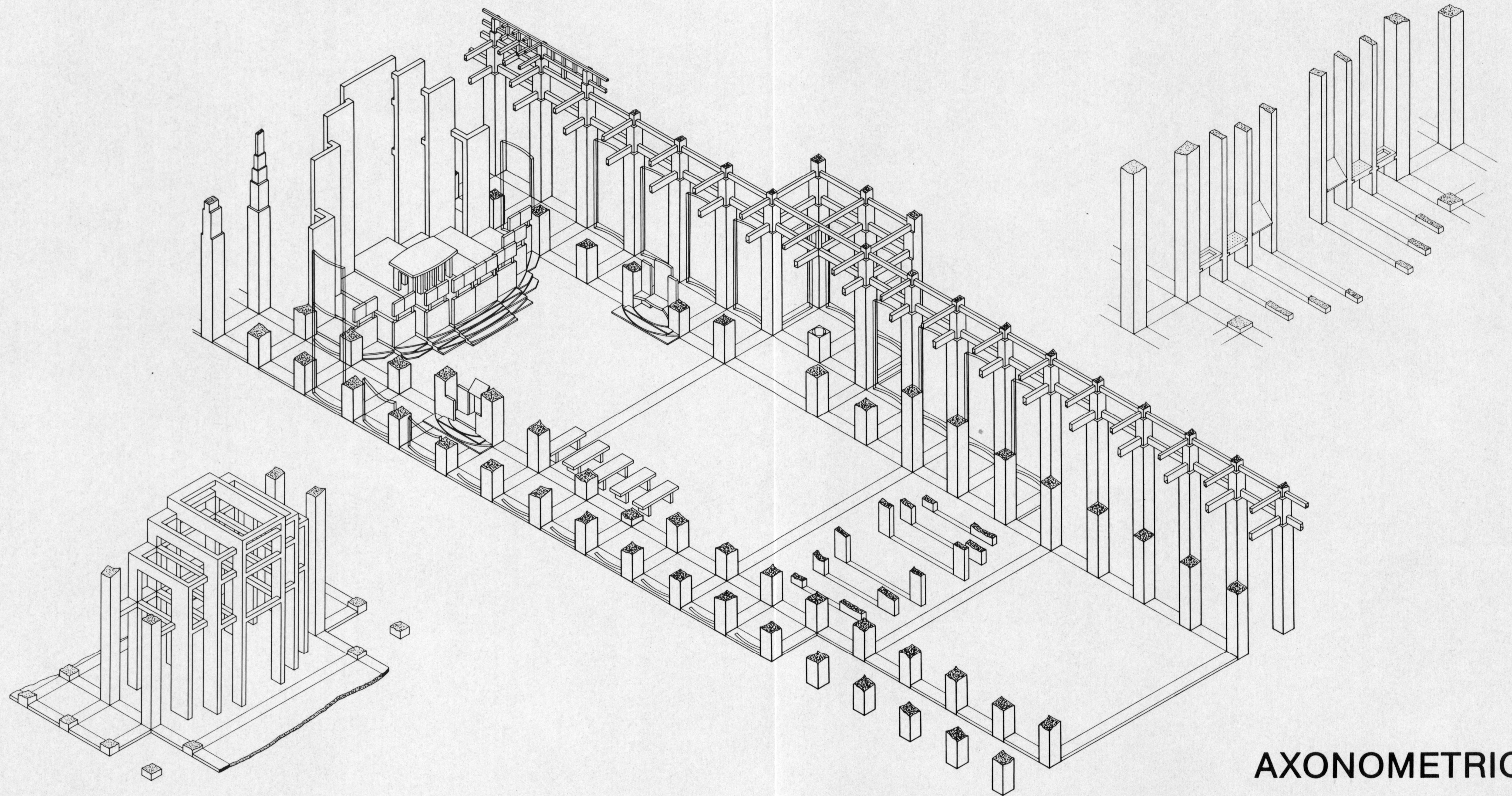
SECTION D/PERSPECTIVE



SECTION E



SECTION F/ELEVATION

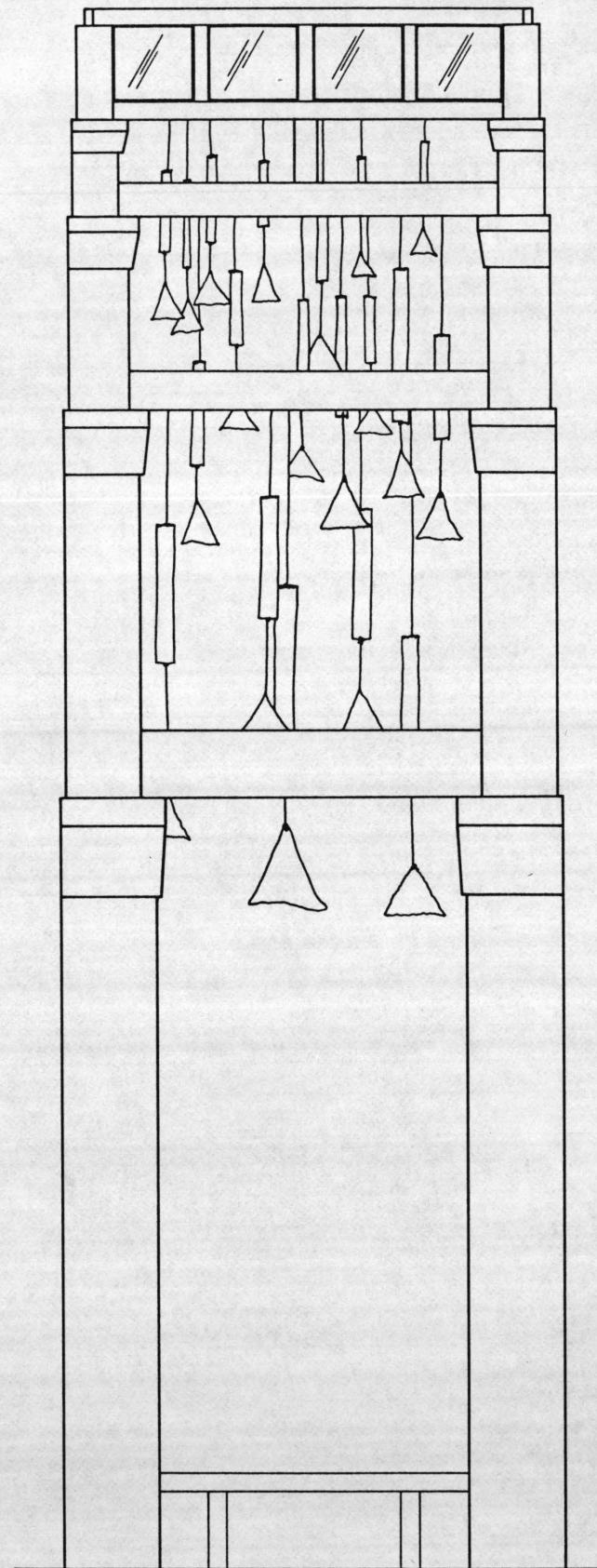


AXONOMETRIC

THE CHAPEL AND THE IMAGES AND SYMBOLS IN IT CREATE AN ENVIRONMENT WHERE THE LITURGY CAN BE REALIZED IN ALL ITS DEPTH.

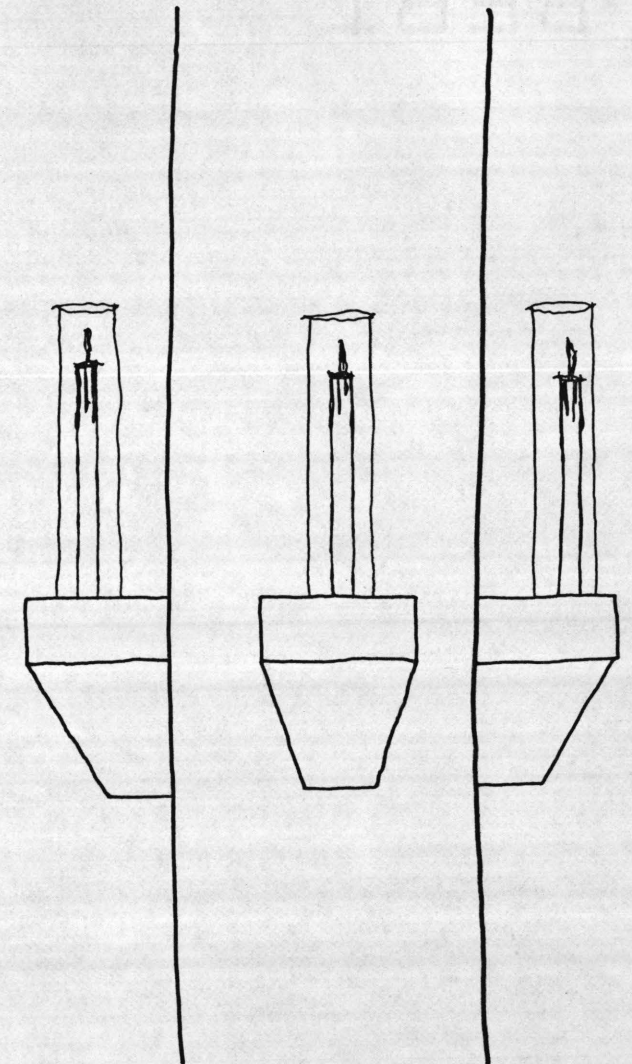
IMAGES ETCHED ON SLABS OF CURVED GLASS BETWEEN THE OUTER COLUMNS PROVIDE FOR ICONOGRAPHY WITHIN THE CHAPEL, AND A FEELING OF ENCLOSURE.

ON THE ICONOSTASIS AND WITHIN THE ALTAR, ICONS ARE COMPOSED OF TINTED SAND ON THE CONCRETE.

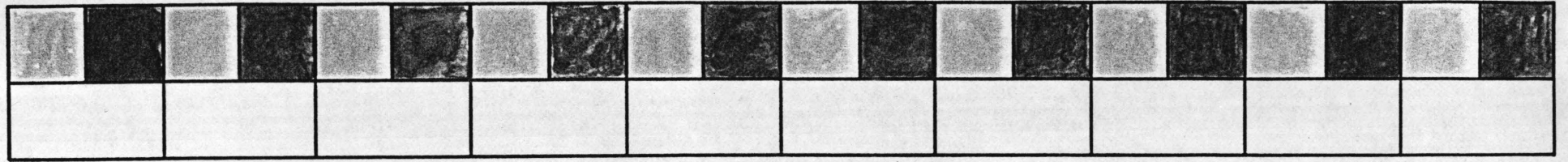


DIFFERENT SIZE TUBULAR BELLS HANG FROM THE VARIOUS LEVELS OF THE BELL TOWER CREATING MORE SOUND AS THE WIND INCREASES.

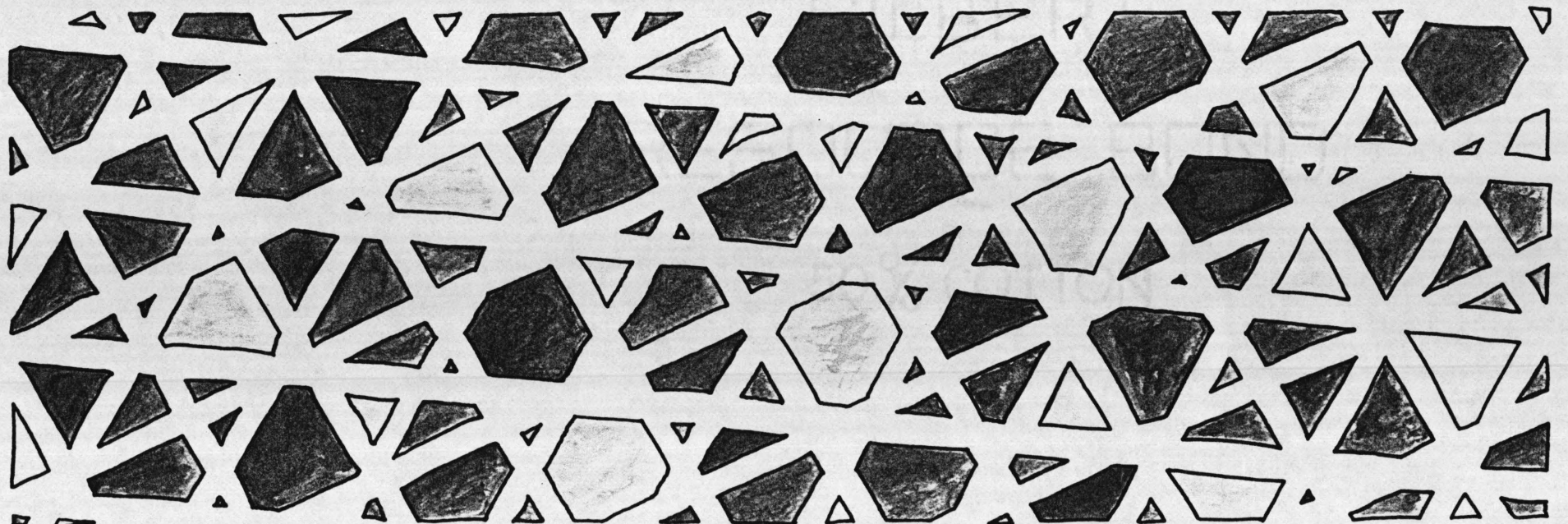
CANDLES PROTECTED IN GLASS CYLINDERS LINE THE FOUR SIDES OF EACH COLUMN PROVIDING ILLUMINATION FOR THE CHAPEL AT NIGHT.

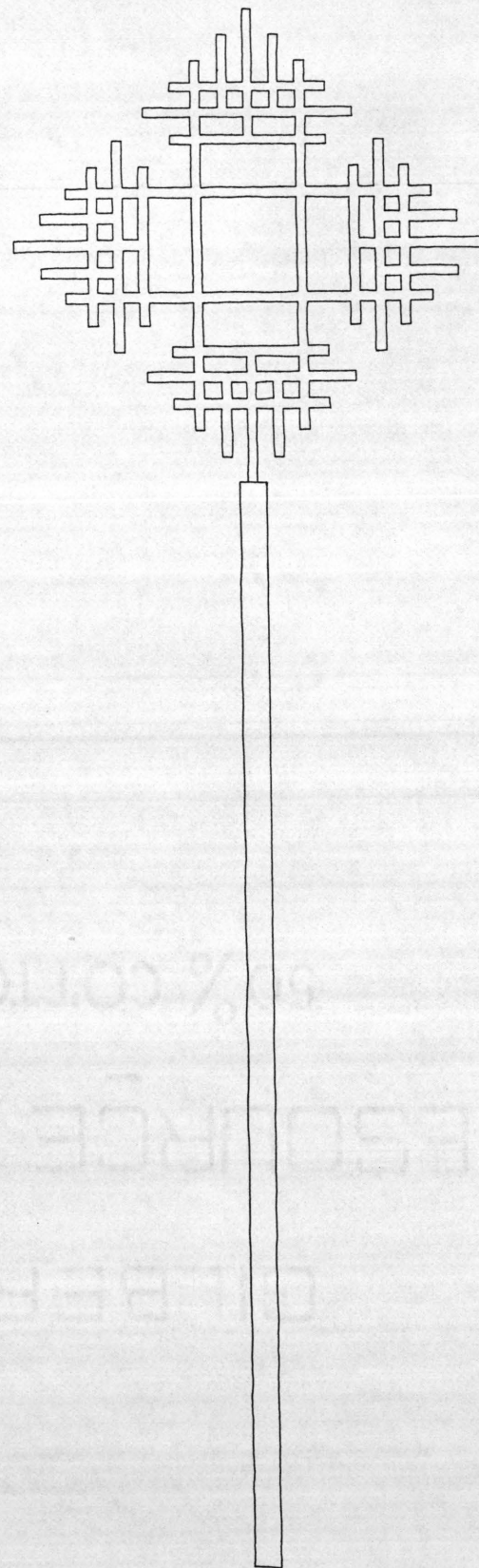


THE CHAPEL FACES WEST SO THE RISING SUN ILLUMINATES THE SURFACES VIEWED FROM THE CONGREGATION, AND SO THE SETTING SUN PROVIDES LIGHT FROM BEHIND THE STAGGERED WALL OF THE APSE.

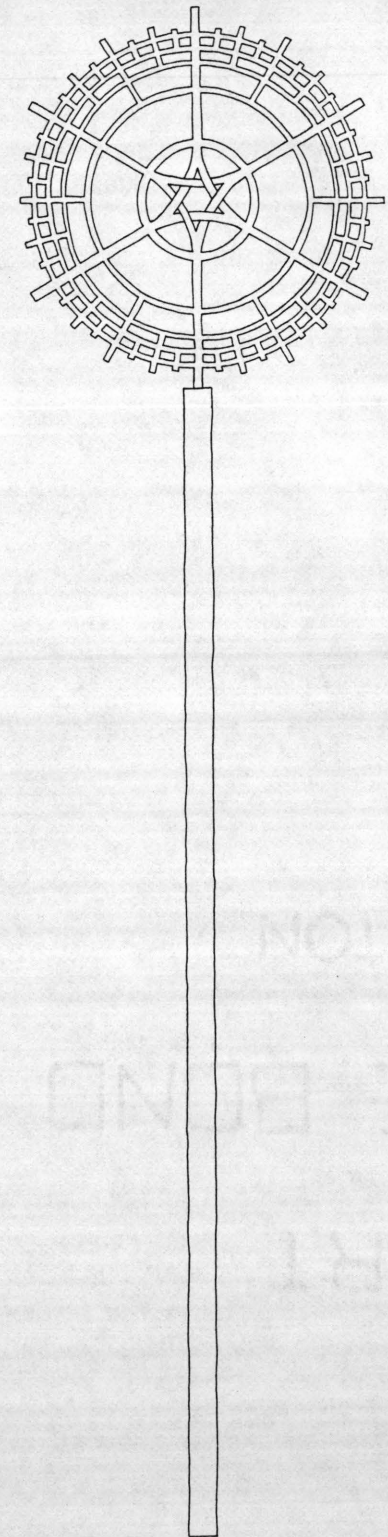
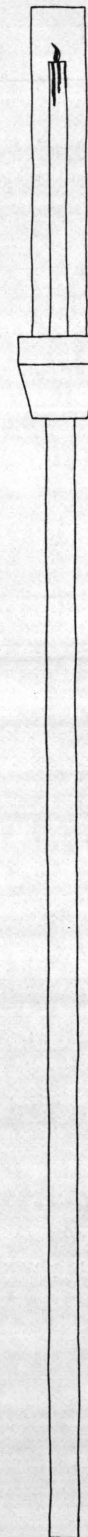


ALTERNATING PANES OF BLUE AND YELLOW
GLASS FILL THE SQUARE VOIDS OF THE STRUCTURE AT
ITS HIGHEST LEVEL CASTING PATTERNS OF BLUE
YELLOW AND GREEN TO SURFACES BELOW.

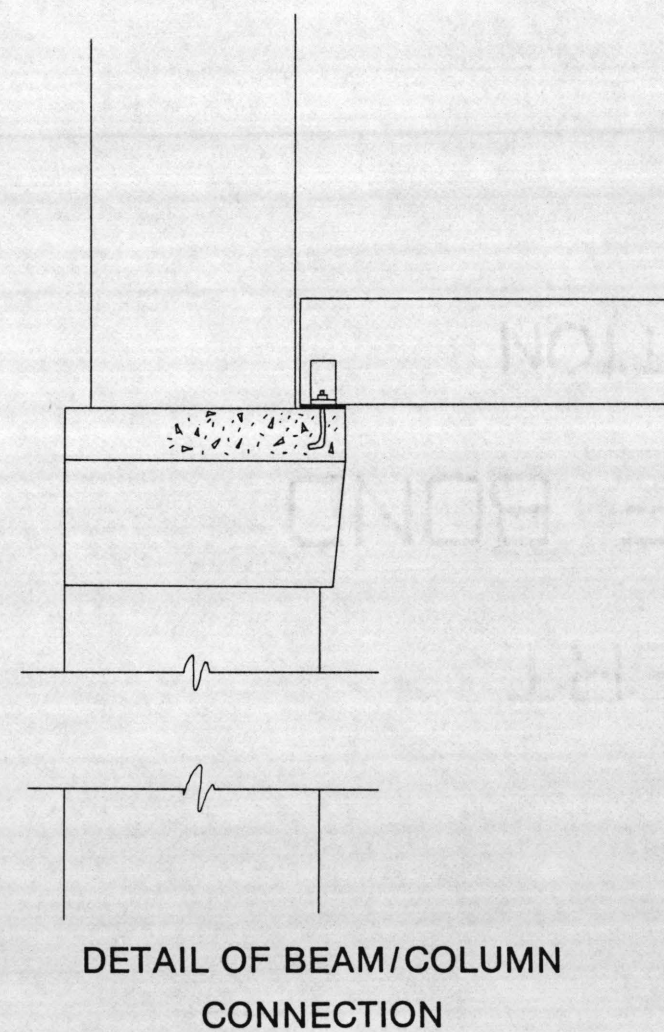
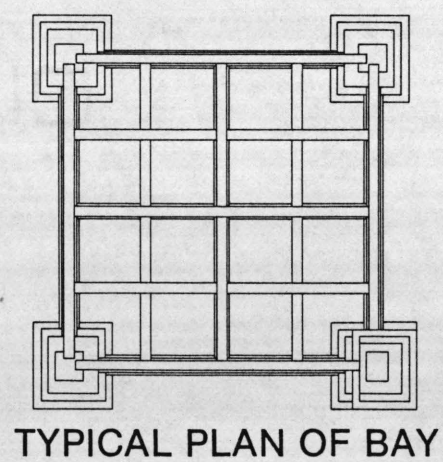
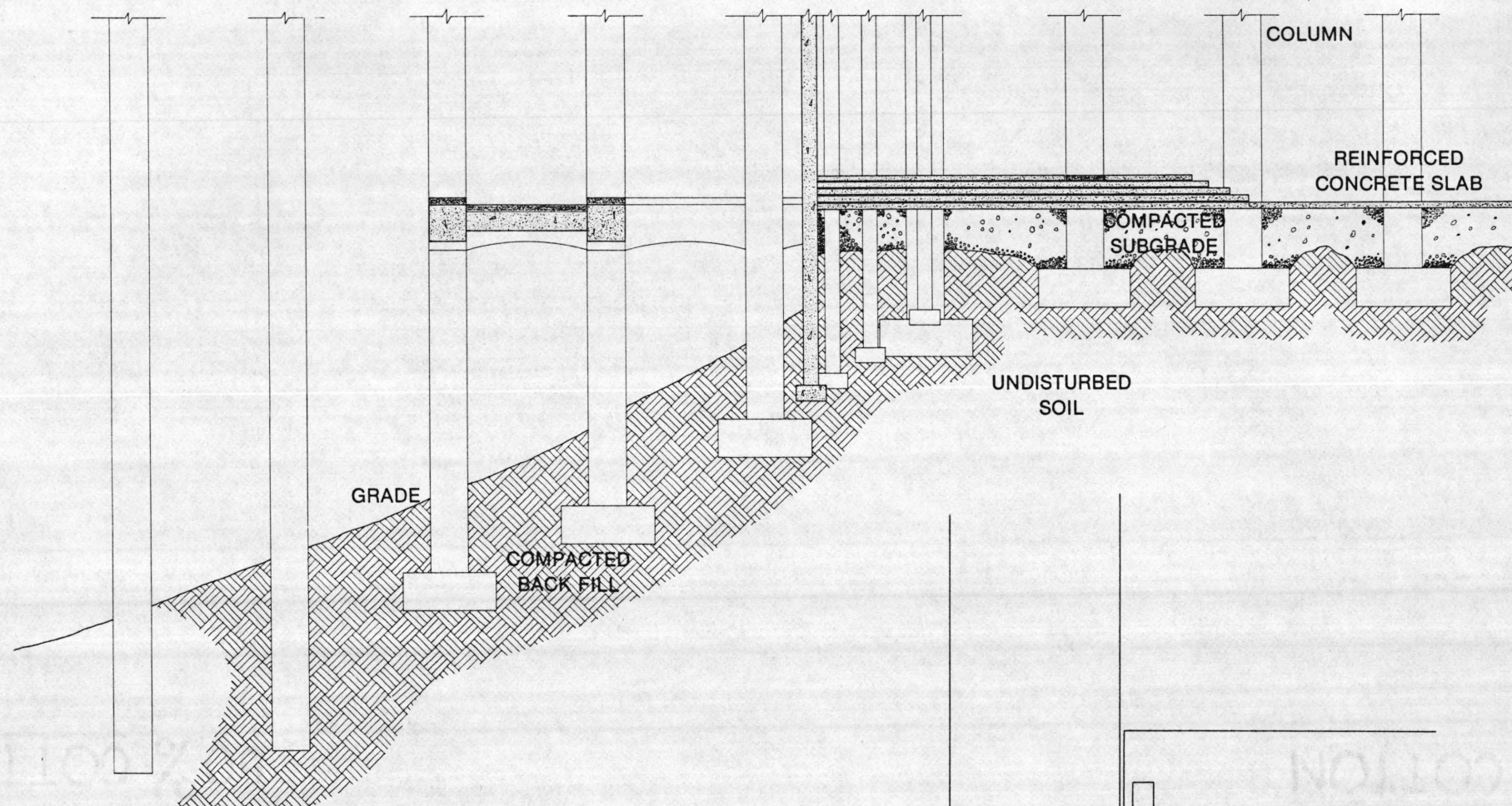




THE PROCESSIONAL CROSS, FANS, AND CANDLES ARE CARRIED BY ALTAR BOYS AT THE ENTRANCES AND DURING PROCESSIONS.



THE PROCESSIONAL FANS DERIVE THEIR NAME FROM THOSE USED IN ANCIENT ALTARS TO DRIVE AWAY FLIES. THEY NOW SERVE AS REMINDERS OF THE SIX-WINGED SERAPHIM PERPETUALLY WORSHIPING GOD.



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