

technical drawings



- 01__vehicular entrance
- 02__chiller plant
- 03__water storage tank
- 04__service core
- 05__lift lobby
- 06__fire stair
- 07__fire stair

_level -01: basement





01

02

04

03

05



17

- 01__entrance foyer
- 02__toilets
- 03__exhibition space
- 04__outside seating deck
- 05__event space
- 06__coffee bar
- 07__internet cafe
- 08__print shop
- 09__fire stairs
- 10__outside seating deck
- 11__book shop
- 12__service and delivery yard
- 13__the aula
- 14__the amfi-theatre
- 15__the musaion
- 16__micro-electronic faculty
- 17__engineer warehouse

16

C-C

B-B

A-A

D-D

_level 00: ground floor

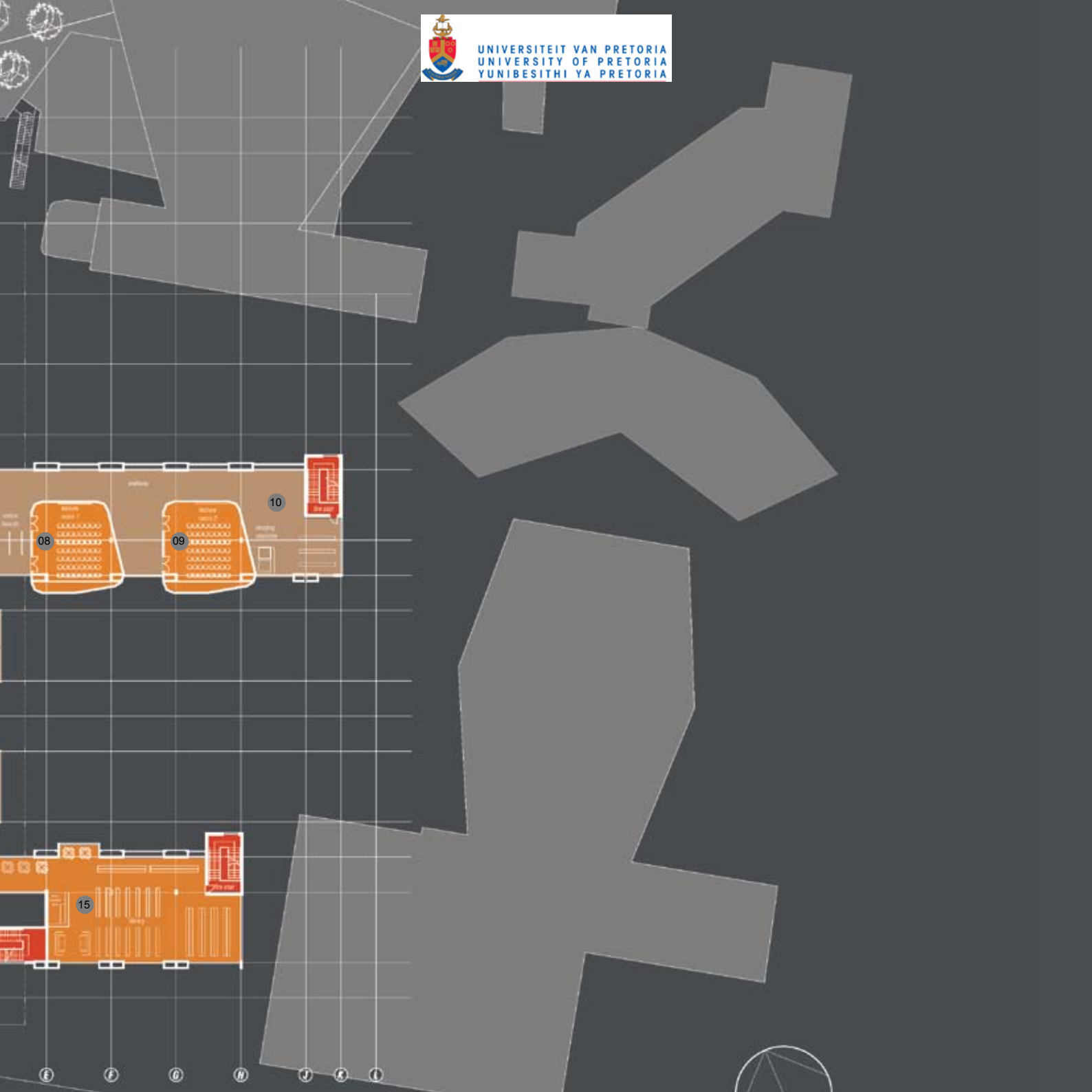




- 01__entrance foyer
- 02__toilets
- 03__lounge area
- 04__pause area
- 05__auditorium
- 06__event space
- 07__toilets
- 08__lecture room
- 09__lecture room
- 10__event space
- 11__digital lab
- 12__seating
- 13__restaurant
- 14__outside seating deck
- 15__library

_level 01: first floor



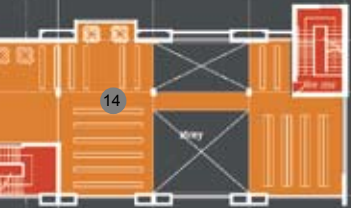




- 01__snack bar
- 02__toilets
- 03__auditorium lobby
- 04__pause area
- 05__auditorium
- 06__event space
- 07__toilets
- 08__laboratory
- 09__workshop
- 10__event space
- 11__digital lab
- 12__seating
- 13__restaurant outside seating
- 14__library

_level 02: second floor





E F G H J K L





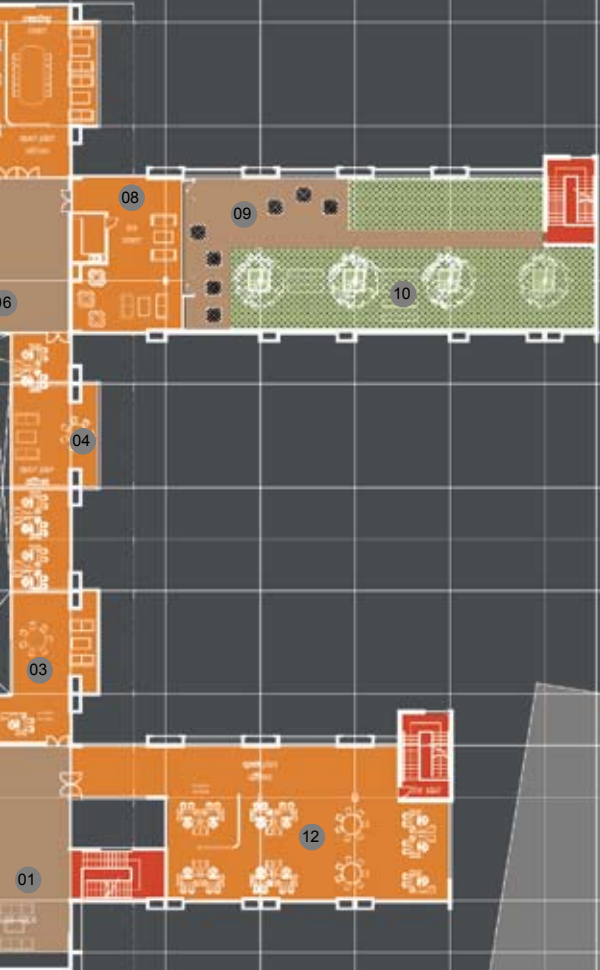
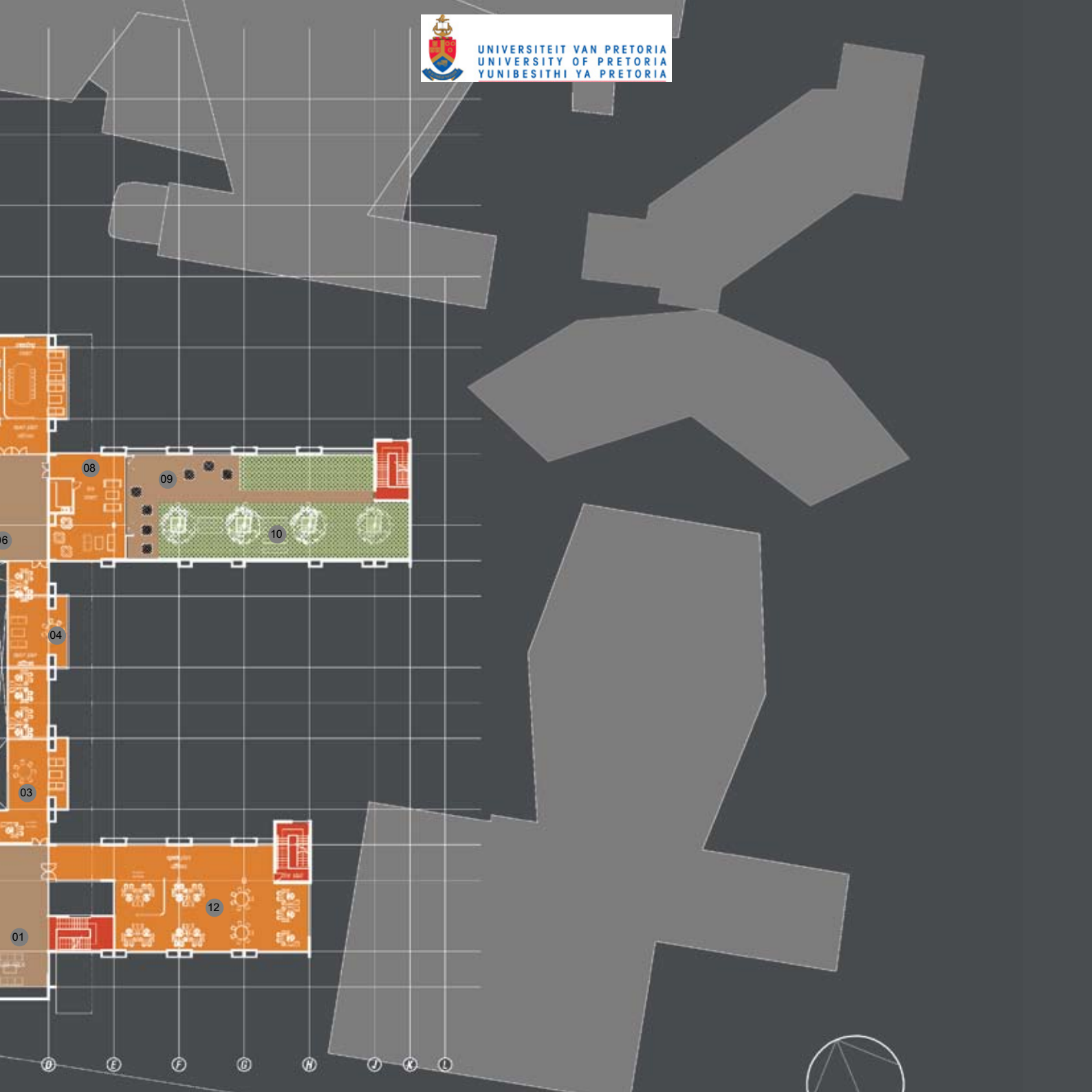
- 01__pause area
- 02__toilets
- 03__offices
- 04__meeting room
- 05__auditorium
- 06__lobby area
- 07__toilets
- 08__tea room
- 09__outside seating
- 10__roof garden
- 11__offices
- 12__offices

_level 03: third floor





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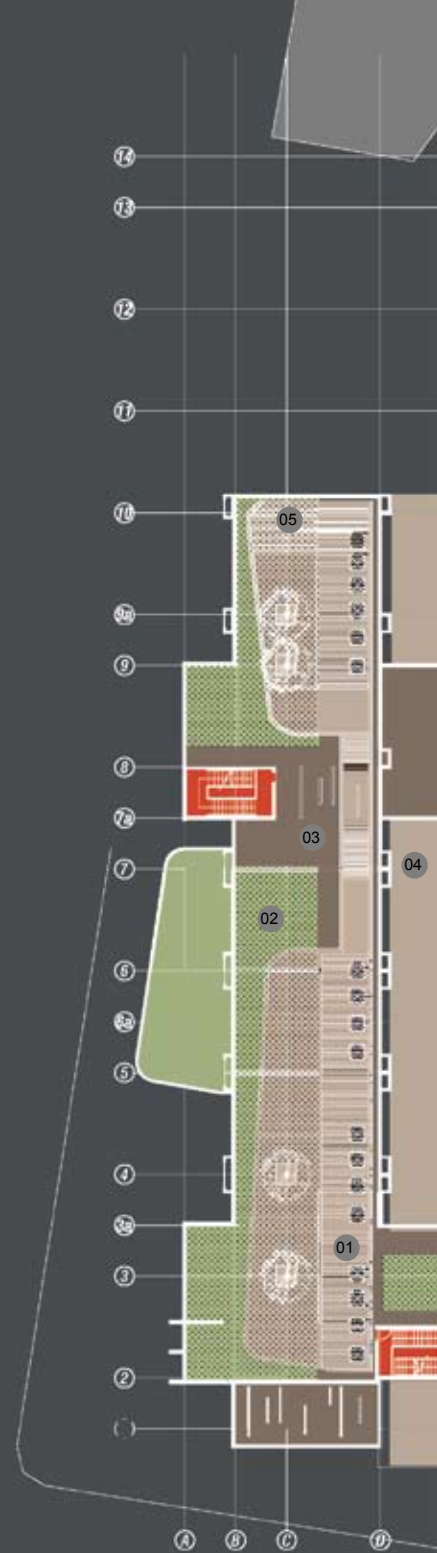
D E F G H J K L





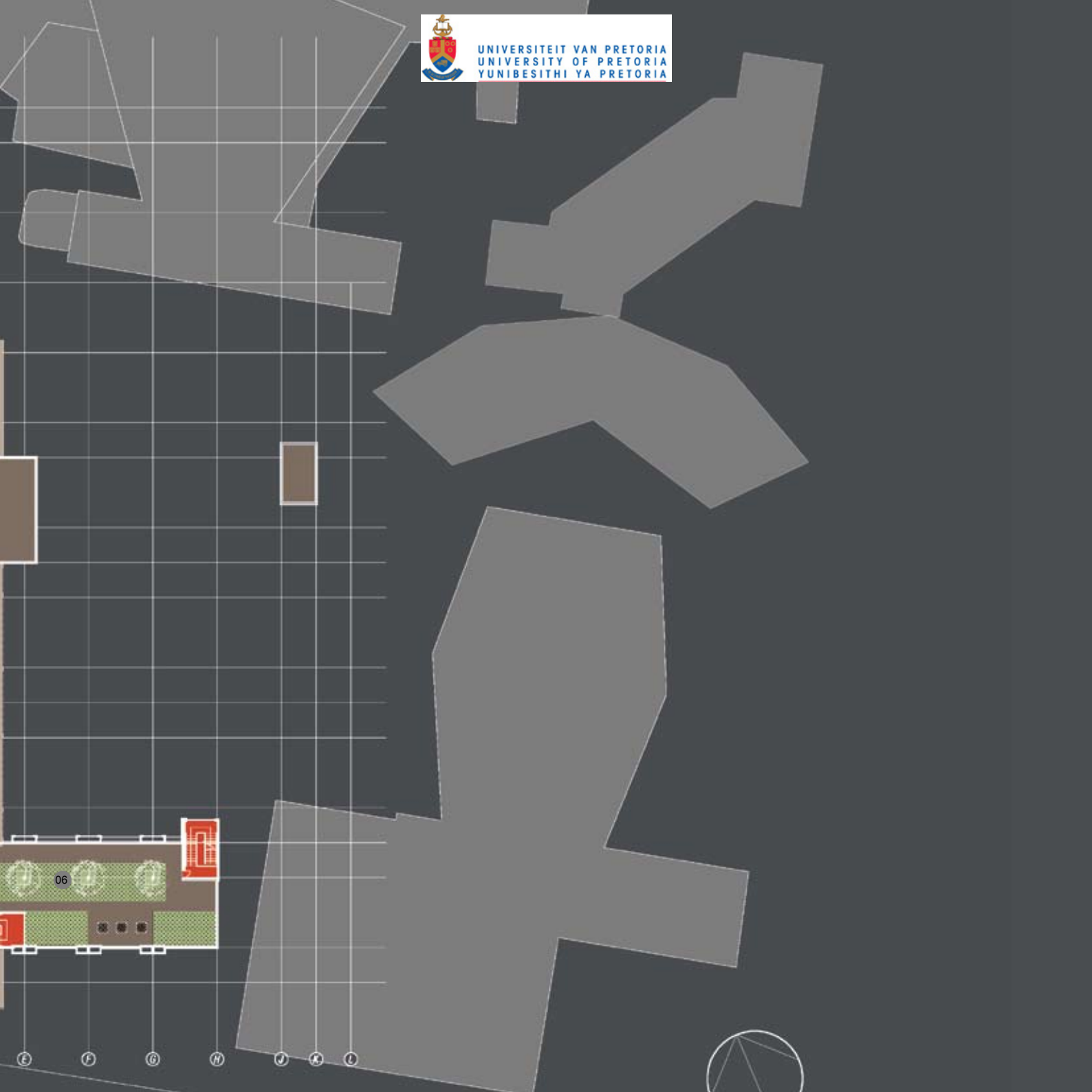
- 01___solar panels
- 02___green roof
- 03___skylights
- 04___external walkway roof
- 05___solar panels
- 06___green roof

_level 04: roof





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06

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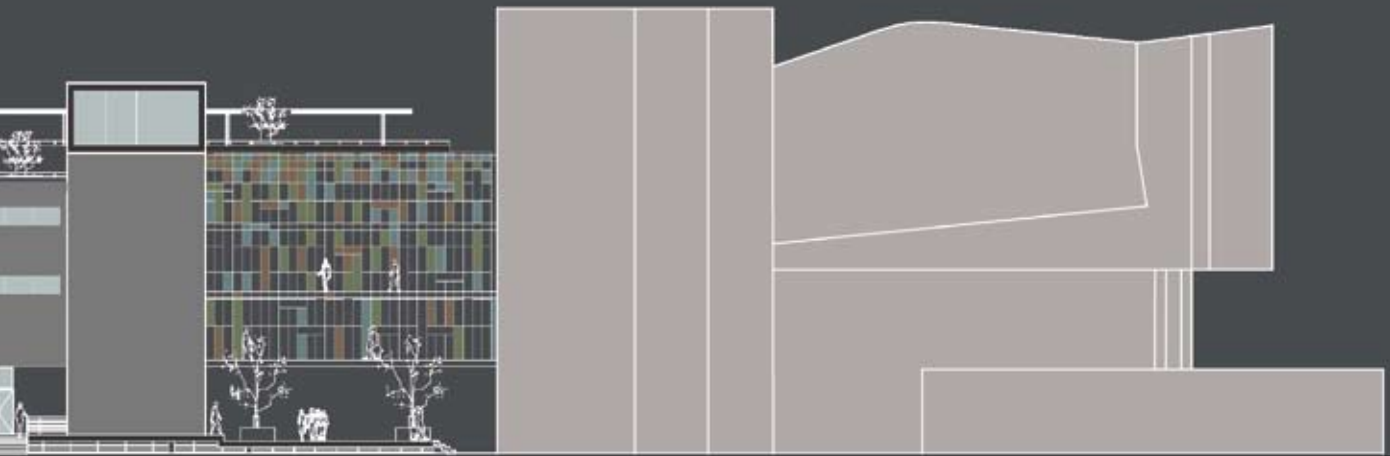
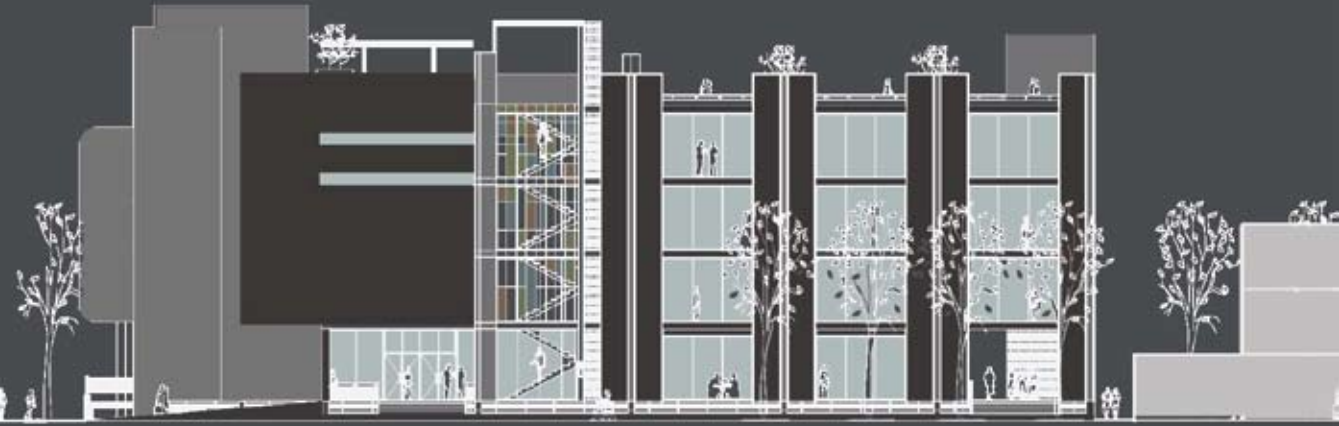




_south elevation



_east elevation



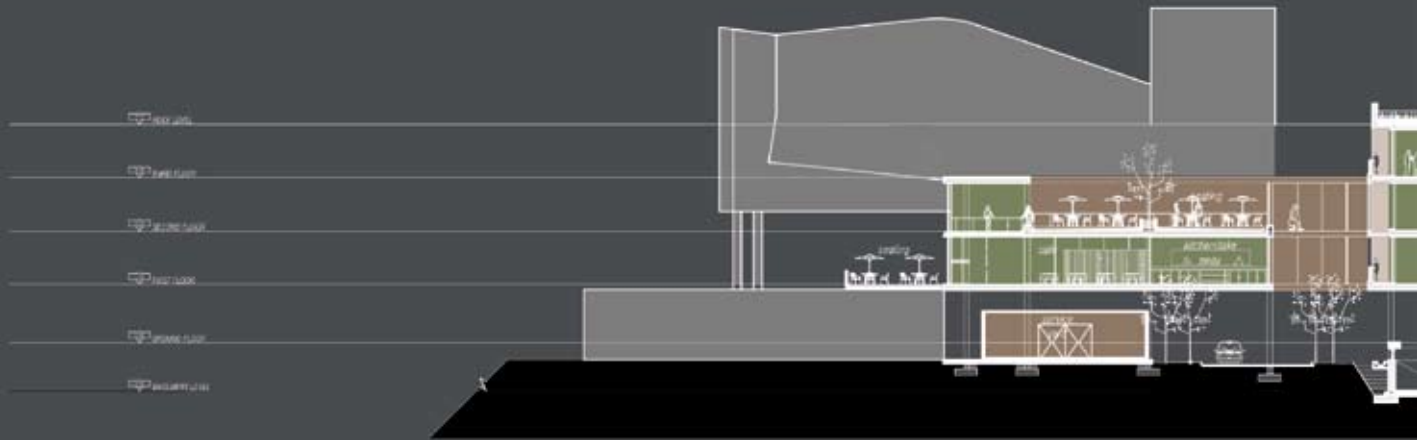


_west elevation



_north elevation

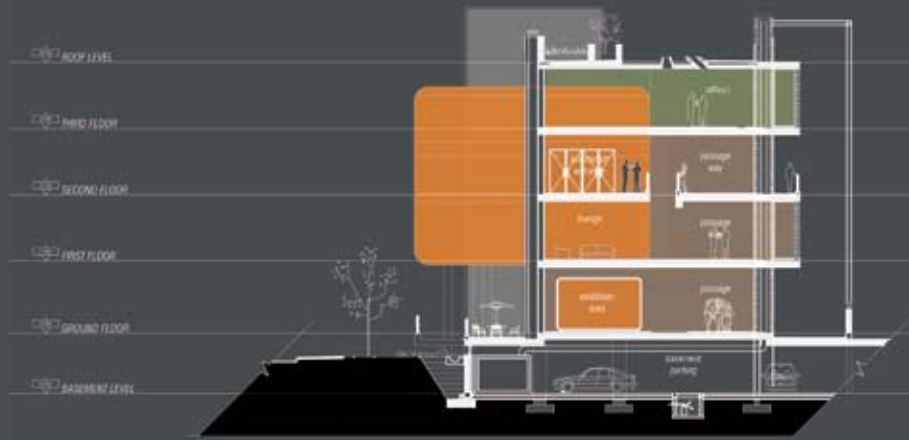
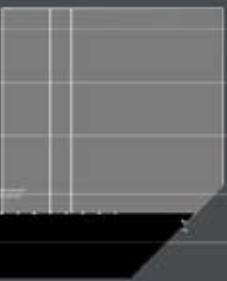
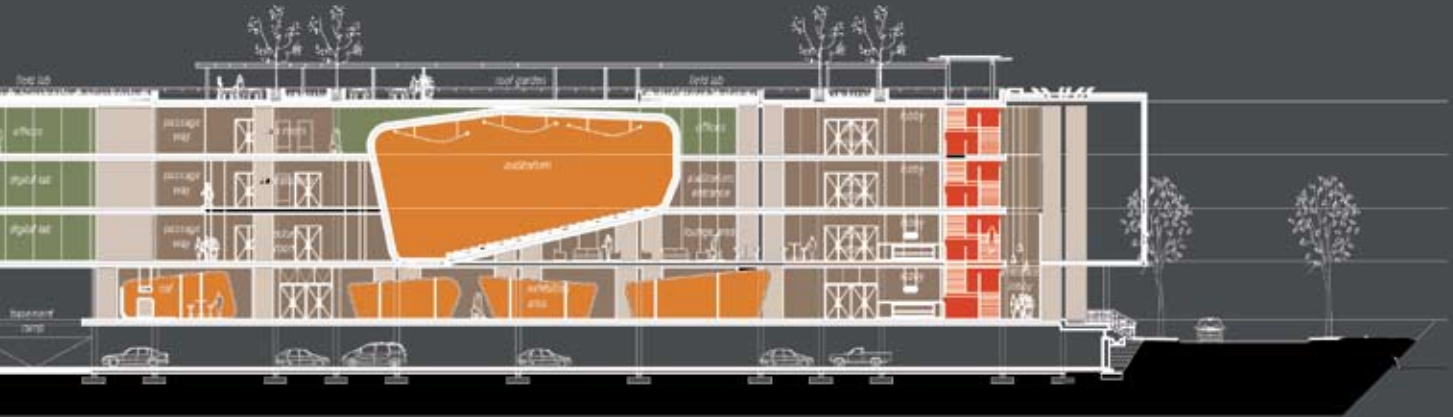




SECTION
C-C



SECTION
C-C





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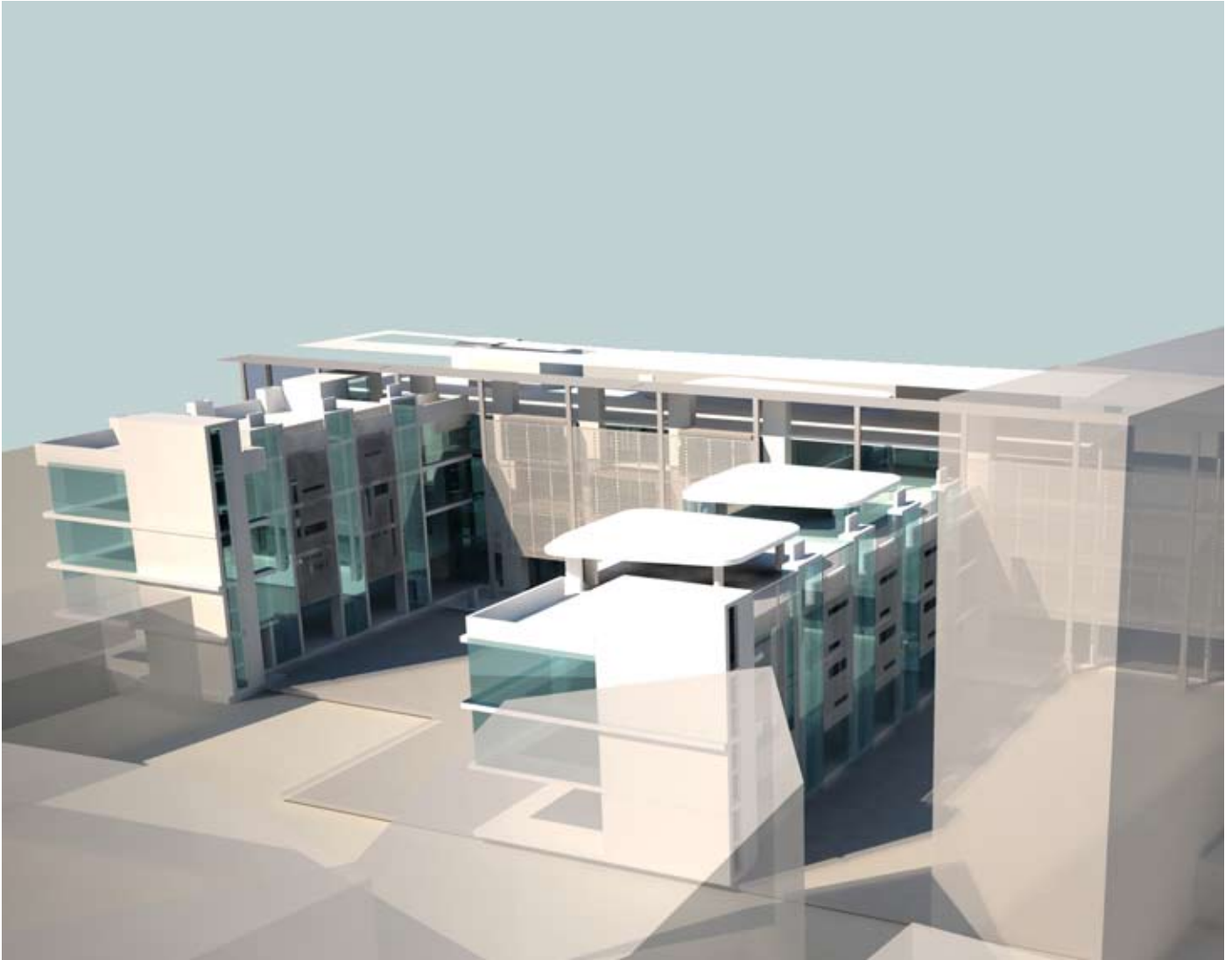
_western entrance



_west facade



_south-eastern facade



_north-eastern facade



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_southern facade





150mm THICK STONE CURB ON ONE LAYER MASONRY ON APPROVED
TERRAZZO WATERPROOFING BY SPECIALIST ON SLOPED 1:40 FALL
TO FULFILL OUTLETS

1000x1000x100mm MILD STEEL GRID FRAMED LEADED CHANNEL TOP RAIL
BRACKETED TO TOP OF STONE CURB WITH APPROVED PATENTED RUBBER
BRIDGEWALL SEAL OR SIMILAR ACCEPTED PROFILED SEALS @ 300mm SPACING
WITH STAINLESS STEEL ROUND HEAD BOLT TO UPHOLD AT 300mm TYPICAL
BOLT HEAD TO FACE WITH 10mm MIN AND FLAT WASHER UNDER TREATED
WITH MARINE VARNISH TO SPEC.

STAINLESS STEEL BASE PLATE
AS PER SPECIALIST RELATED TO CONCRETE

PERFORATED CONCRETE ACCESS FLOOR PANEL
TO SPECIFIED FLOOR SYSTEM AND INSTALLATION

UNDERFLOOR SERVICE DRAINWAY ACCOMMODATING
ALL DATA NETWORK AND ELECTRICAL CABLES
TO LOCAL DISTRIBUTION BOXES AND DESIGNATED
OUTLETS

HVAC FRESH AIR DUCT TO MECHANICAL ENG. DESIGN
AND SPECIFICATION. DRAINAGE SYSTEM PROVIDED THROUGH
FLOOR DRAINAGE TO REVERSE FLOOR SYSTEM.
NO AIR LEAKAGE TO STAIRWAYS. EXHAUST
NO AIR LEAKAGE TO STAIRWAYS. EXHAUST
TO BAGWELL PLANT ROOM

PASSAGE-
WAY

PASSAGE-
WAY

PASSAGE-
WAY

CONCRETE BASE AS PER
ENGINEERS SPECIFICATIONS

PHOTOVOLTAIC CELLS AND HOT WATER PANELS

1000 SUPPLIED AIR OUTSIDE DUCTS

100mm THICK "CONCRETE" AS PER ENGINEER BY SPECIALIST
TO FORM ISOLATION JOINT

PERFORATED CORRUGATED GALV. COIL FORM GALVANIZED STEEL STOPWATER COVER
FIELD IN PLACE ON SUPPORTING WALL. IN STEEL. INVERT TO FACE OF ACCESS

100mm THICK "CONCRETE" AS PER ENGINEER BY SPECIALIST
TO FORM ISOLATION JOINT

COMMON CLAY BRICKWORK IN STRETCHED BOND TO DETAIL SET
IN CLASS II MORTAR WITH THROUGH AND VERTICAL TOILED
JOINTS AND PLASTER KEYS TO ACCOMMODATE 12-20mm THICK
EXTENSIBLE QUALITY MOULDED POLYESTER GLASS FIBRE REINFORCED
PLASTER. ALL DETAILS TO BE APPROVED BY ARCHITECTS
APPROVAL TO ACCOMMODATE FINAL PAINT FINISH

MILD STEEL VERTICAL BALUSTRADE POST TO MANUFACTURER'S DETAIL
FIXED TO REINFORCED CONCRETE SLAB WITH COUNTERSUNK BOLT TO
MANUFACTURER'S DETAIL

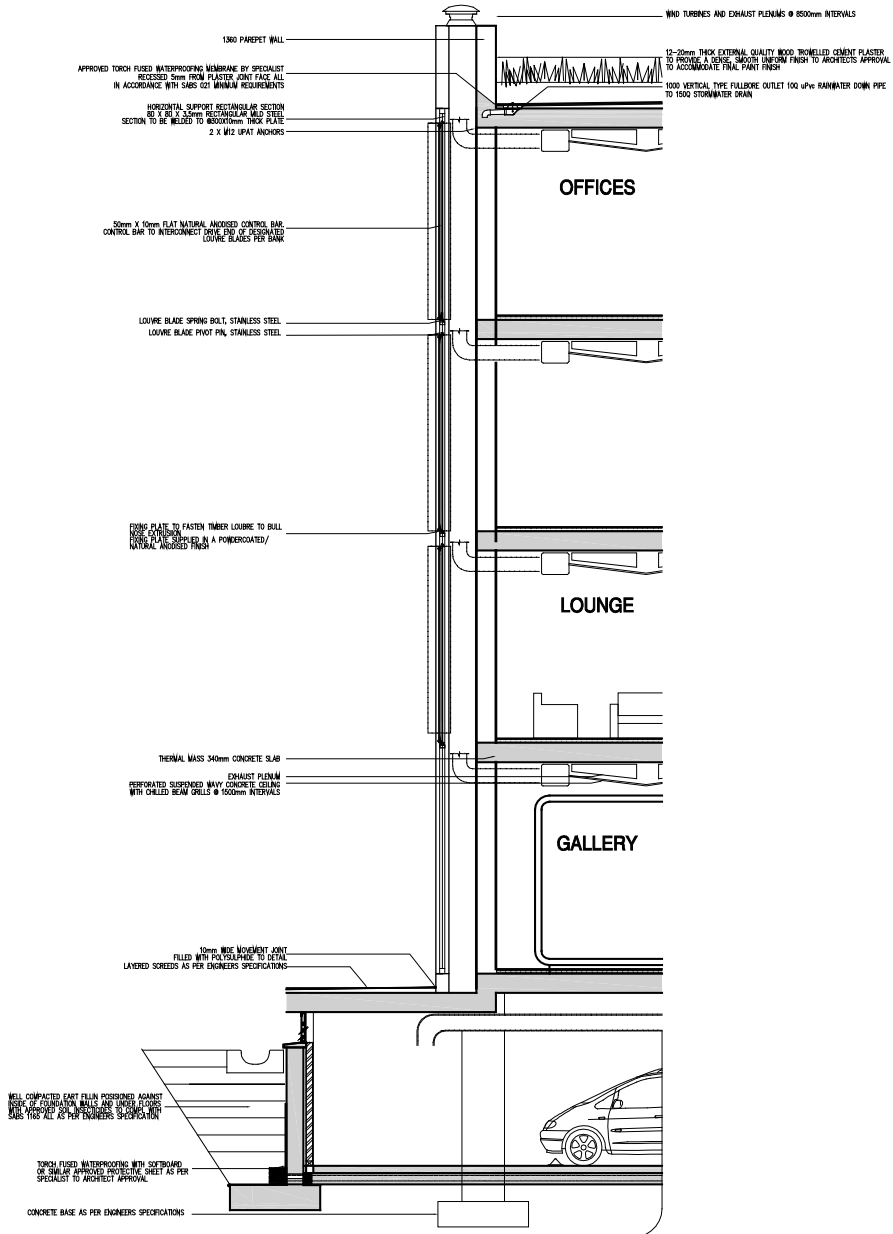
STRUCTURAL SCREED TO FALL. CAST ON SLIP SHEETS ON
30mm THICK POLYETHYLENE MEMBRANE. WALLS TO LEAN HEIGHT
WITH BRICKWORK COATING WITH LIGHT SAND FRESH AND GLETTIX
WATERPROOFING TO BE TRACK UP SIDE PARAPET WALL

100mm WIDE POLYISOPRENE OR SIMILAR
SPRETTED SEALANT TO JUNCTION BETWEEN
SHEED AND SLAB

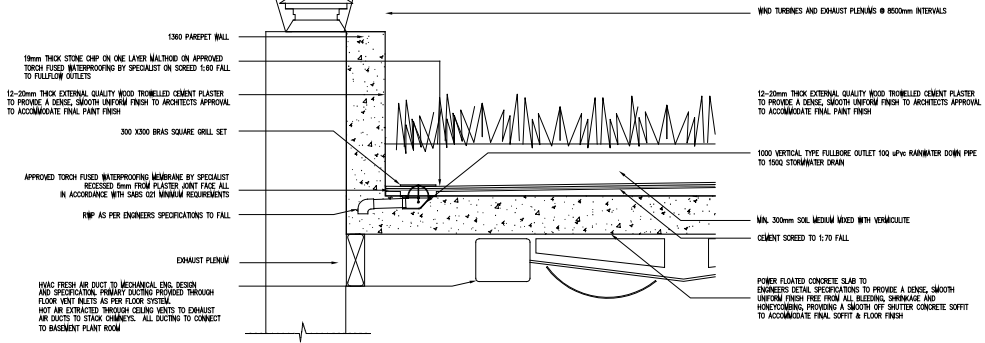
POWER FLAUGHT CONCRETE SLAB TO
ENGINEERS DETAIL SPECIFICATIONS TO PROVIDE A DENSE, SMOOTH
SURFACE FINISH FREE FROM ALL BUILDING SPRINGS AND
CONCRETE PROTRUSIONS. A THICKNESS OF SHUTTER CONCRETE SOFFIT
CANTILEVER CONCRETE SLAB TO ENG. DESIGN

APPROVED 375mm DIA DPC SANDWICHED
BETWEEN BET MORTAR AND LAPS SEALED
IN ACCORDANCE WITH SABS 021 REQUIREMENTS

STOPWATER CHANNEL



_western facade detail



_roof detail

80 x 80 x 3.5 RECTANGULAR STEEL SECTION WELDED TO 330 X 280 FIXING PLATE, BOLTED TO CONCRETE WITH M16 CHEMICAL ANCHOR BOLTS

M16 CHEMICAL ANCHOR BOLTS

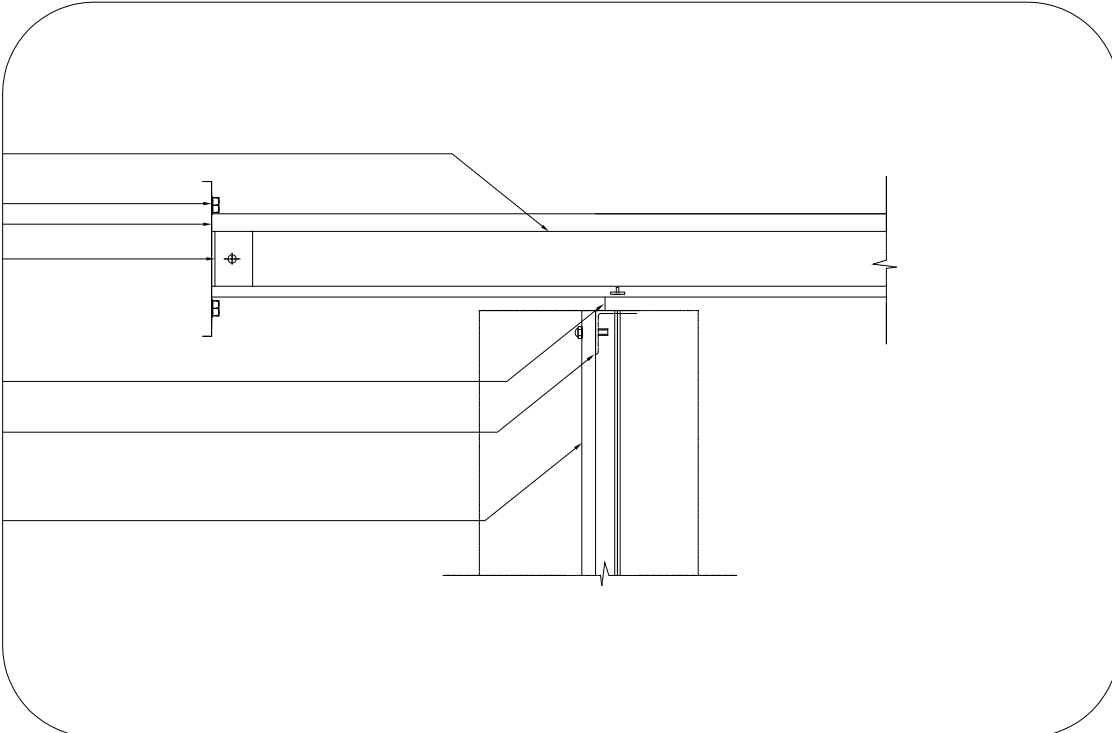
330 X 280 FIXING PLATE, BOLTED TO CONCRETE

80 X 80 X 6 ANGLE CLEAT TO BE WELDED ONTO RECTANGULAR STEEL SECTION

TIMBER LOUVER FIXED TO BULL NOSE EXTRUSION WITH LOUVER BLADE PIVOT PIN, STAINLESS STEEL WELDED TO MILD STEEL ROD. PIVOT MOTOR OPERATED BY PHOTOVOLTAIC ENERGY SYSTEM ACCORDING TO INPUT RECEIVED VIA MOVEMENT DETECTION SENSORS

TIMBER LOUVER FIXED TO STAINLESS STEEL SUBFRAME AND SUBFRAME FIXED TO 80 X 80 X 6 ANGLE CLEAT

100 X 25 TIMBER SLATS, CHAMFERED EDGES, FIXED TO 80 X 80 ANGLE BRACKET WITH M10 BOLTS



_louvre detail



POWER FLOATED CONCRETE SLAB TO ENGINEERS DETAIL SPECIFICATIONS TO PROVIDE A DENSE, SMOOTH UNIFORM FINISH FREE FROM ALL BLEEDING, SHRINKAGE AND HONEYCOMBING, PROVIDING A SMOOTH OFF SHUTTER CONCRETE SOFFIT TO ACCOMMODATE FINAL SOFFIT & FLOOR FINISH

VENTILATION GRILLS

STORMWATER GUTTER

WELL COMPACTED EARTH FILLIN POSITIONED AGAINST INSIDE OF FOUNDATION WALLS AND UNDER FLOORS WITH APPROVED SOIL INSPECTORES TO COMPL WITH SABS 1165 ALL AS PER ENGINEERS SPECIFICATION

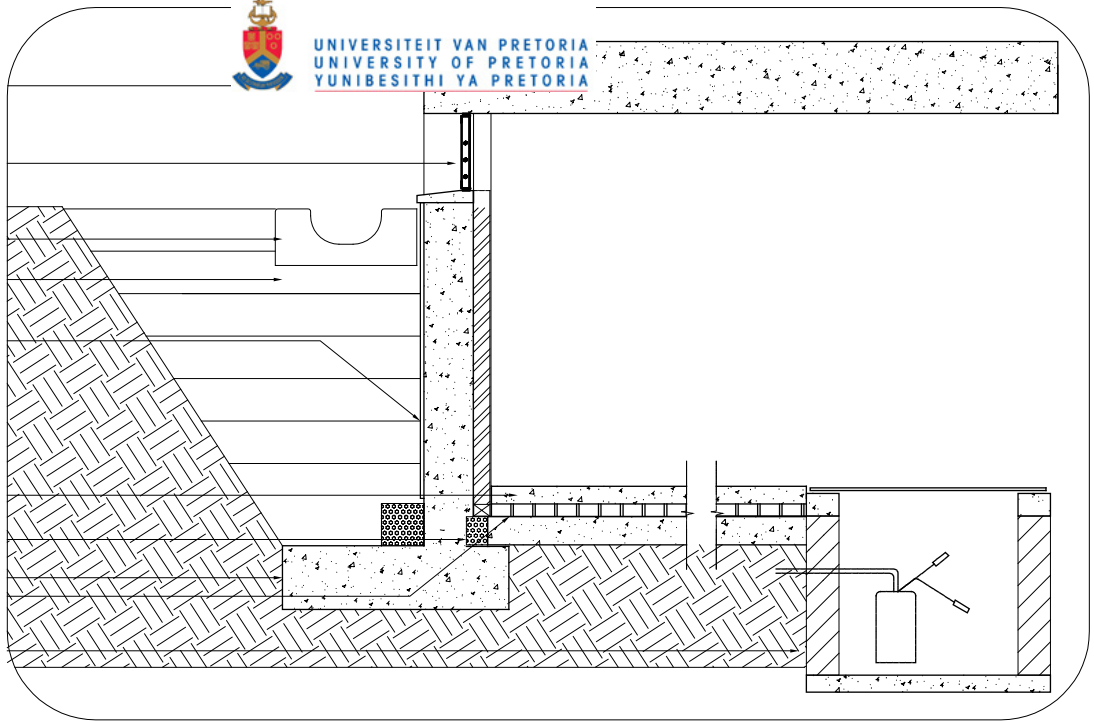
TORCH FUSED WATERPROOFING WITH SOTBOARD OR SIMILAR APPROVED PROTECTIVE SHEET AS PER SPECIALIST TO ARCHITECT APPROVAL

MIN 150 mm THICK MESH REINFORCED STRUCTURAL CONCRETE SLAB WITH MIN FALL 1:70 TOWARDS CATCH-PIT ON 0.45 POLYOLEFIN MEMBRANE

200 NO FINES CAST IN SITU CONCRETE SLAB WITH MIN FALL OF 1:70 TO SUMP

1600 X 450 CAST IN SITU REINFORCED CONCRETE FOOTING
290 X 140 X 80 CONCRETE BRICKS WITH 20 mm GAPS AND NO MORTAR JOINTS TO FACILITATE WATER DRAINAGE ON TOP OF NO FINES CAST IN SITU CONCRETE SLAB

SUMP @ 1400mm INTERVALS



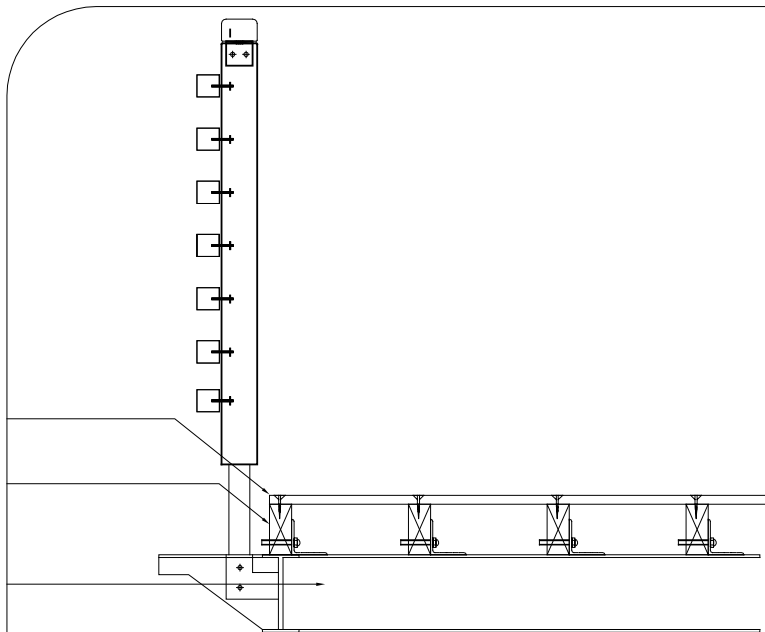
_basement detail

80 X 100 TIMBER EDGE

25 X 75 E. SALVANA TIMBER FLOOR SLATS ATTACHED TO BEAMS WITH ON NO. 9 X 75 SOLID BRAS COUNTERSINK WOOD SCREWS ON EACH SLAT. 10 mm OPENINGS BETWEEN SLATS

114 X 50 TIMBER SECONDARY BEAMS @ 312mm CENTRES, CONNECTED TO 65X60X6 UNEQUAL ANGLE WITH M8X60 HEXAGON GALVANISED BOLT, WASHER AND NUT, ANGLE IS WELDED TO A 100X5 I-SECTION PRIMARY BEAM

160X60 STEEL I-SECTION PRIMARY BEAM BOLTED TO THE CONCRETE COLUMN WITH 110X75 STEEL BRACKET, WITH 4 X WITH M10X100 HIGH TENSILE STEEL BOLT AND WASHER



_timber deck detail



100X50X20X2,0mm MILD STEEL COLD FRAMED LIPPED CHANNEL TOP RAIL
WELDED TO STEEL CLADDING FRAME WITH 80X40X40mm HARDWOOD TIMBER
RHODESIAN TEAK OR SIMILAR ACCEPTED PROFILED SLATS @ 130cc FIXED
WITH STAINLESS STEEL ROUND HEAD BOLT TO UPRIGHTS AT 600cc
BOLT HELD IN PLACE WITH ss NUT AND FLAT WASHER. TIMBER TREATED
WITH MARINE VARNISH TO SPEC.

38 X 38 RHODESIAN TEAK (AFROMOSIA ELATA) TIMBER BATTENS
FIXED TO 50 X 50 X 3,0 MILD STEEL COLD FORMED EQUAL ANGLE
WITH STAINLESS STEEL COUNTERSUNK SELF TAPPING SCREWS

STAINLESS STEEL BASE PLATE
AS PER SPECIALIST BOLTED TO CONCRETE

WATER RUN OFF GUTTER COVERED WITH 19mm GRAVEL

3mm TORCHON WATERPROOFING MEMBRANE WITH
SBS MODIFIED BITUMEN COATING WITH LIGHT SAND
FINISH AND GEOTEXTILE PROTECTIVE LAYER

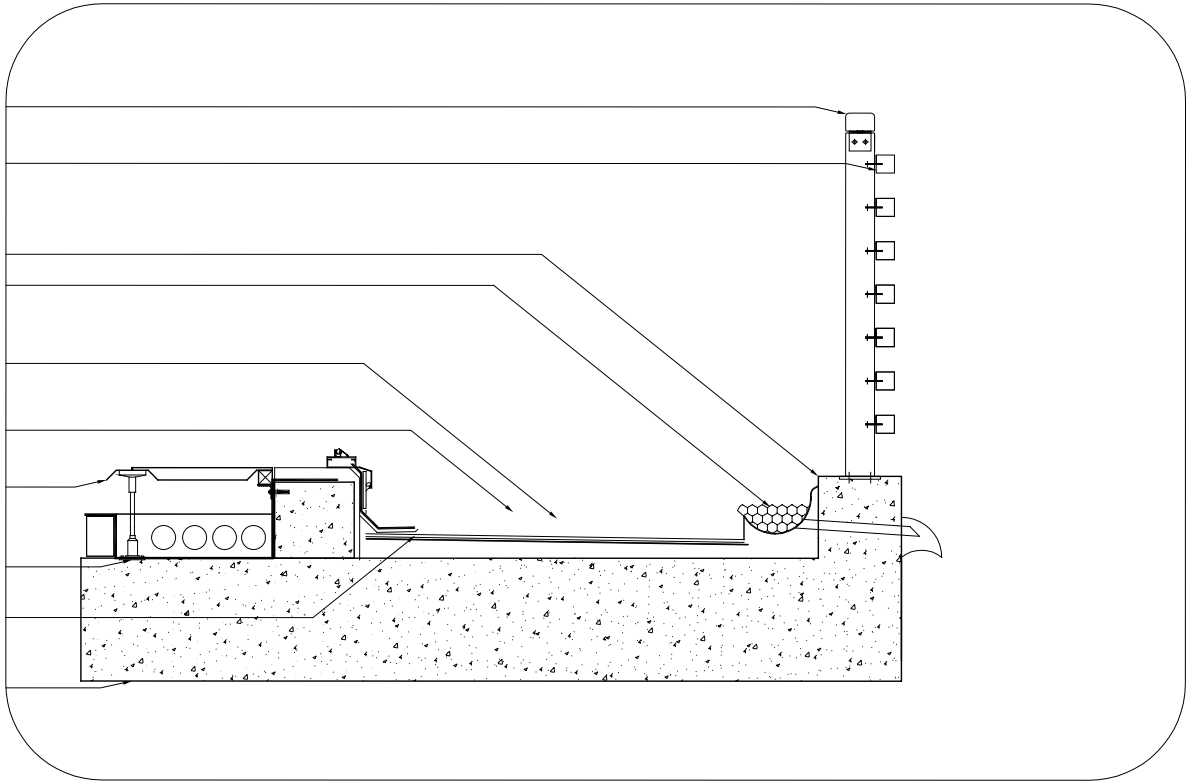
TILES TO FINISH SCHEDULE ON SCREED
WITH FALL ON WATERPROOFING TO DESIGN,
SUPPLY AND FIXING SPECIALIST SPECIFICATIONS

PERFORATED CONCRETE ACCESS FLOOR PANEL
TO SPECIFIED FLOOR SYSTEM AND INSTALLATION

UNDERFLOOR SERVICE PATHWAY ACCOMMODATING
ALL DATA, NETWORK AND ELECTRICAL CABLES
TO LOCAL DISTRIBUTION BOXES AND DESIGNATED
OUTLETS

SAND CEMENT SCREED MIN 40 THICK WITH 1:60
FALL TO WATER CHANNEL COVERED WITH 19mm
LAYER GRAVEL

340 POWER FLOATED CONCRETE SLAB TO ENGINEERS
DETAIL SPECIFICATIONS TO PROVIDE A DENSE, SMOOTH
UNIFORM FINISH FREE FROM ALL BLEEDING, SHRINKAGE
AND HONEYCOMING, PROVIDING A SMOOTH OFF SHOOTER
CONCRETE SOFFIT TO ACCOMMODATE FINAL SOFFIT
AND FLOOR FINISH



_balcony detail

POWER FLOATED CONCRETE SLAB TO ENGINEERS DETAIL SPECIFICATIONS TO PROVIDE A DENSE, SMOOTH UNIFORM FINISH FREE FROM ALL BLEEDING, SHRINKAGE AND HONEYCOMBING, PROVIDING A SMOOTH OFF SHUTTER CONCRETE SOFFIT TO ACCOMMODATE FINAL SOFFIT & FLOOR FINISH

CELTIS AFRICANA [WHITE STINK WOOD]

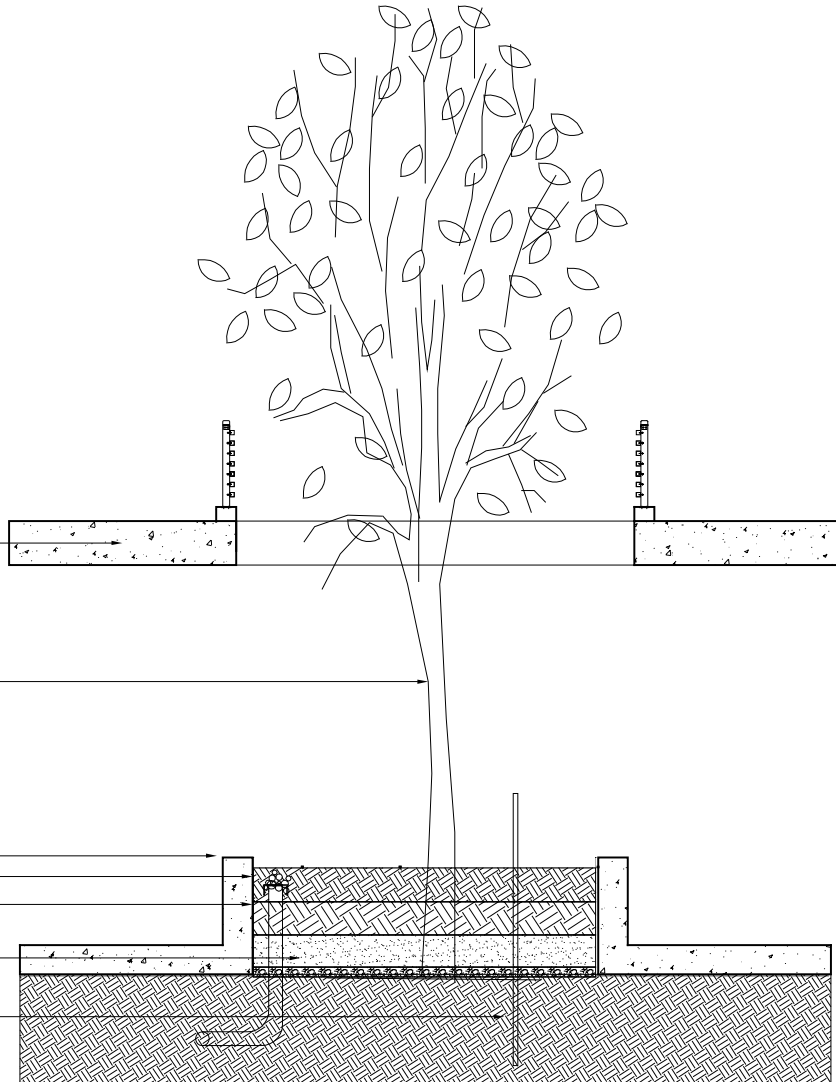
300 CAST IN SITU REINFORCED CONCRETE PLANTER

DERBIGUM CGS WATERPROOFING LAYER

GEOTEXTILE MEMBRANE [BIDUM U14 OR SIMILAR]

STONE DRAINAGE LAYER

VENT PIPE WITH GRAVEL DRAINAGE LAYER



_basement tree detail