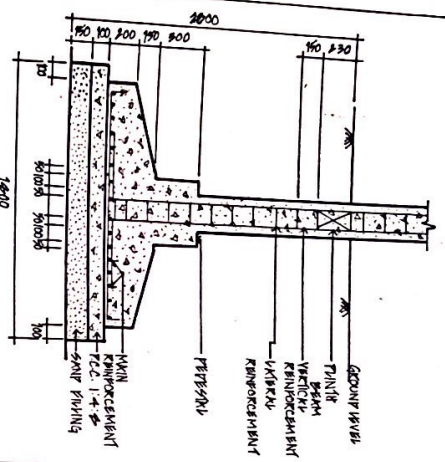
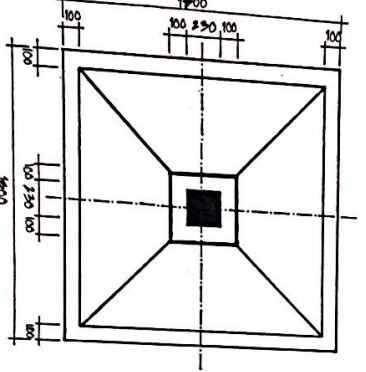


# R.C.C - TYPES OF FOUNDATION

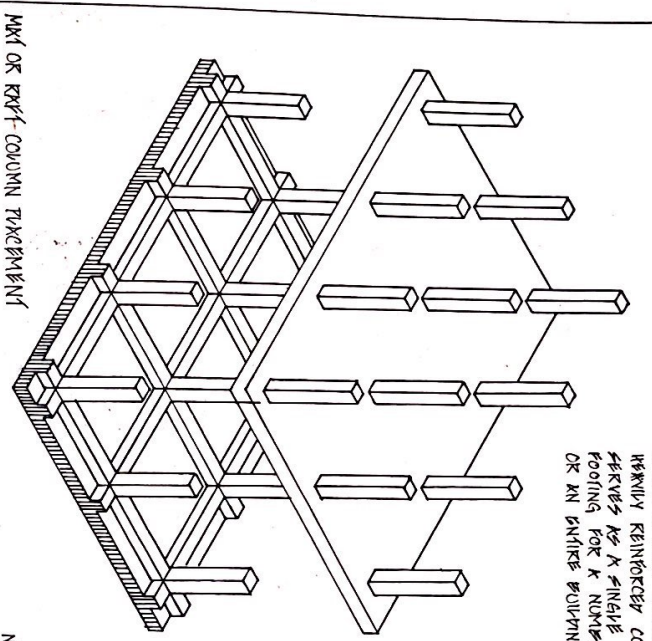


ISOLATED FOOTING SECTION



ISOLATED FOOTING PLAN

SCALE - 1:25

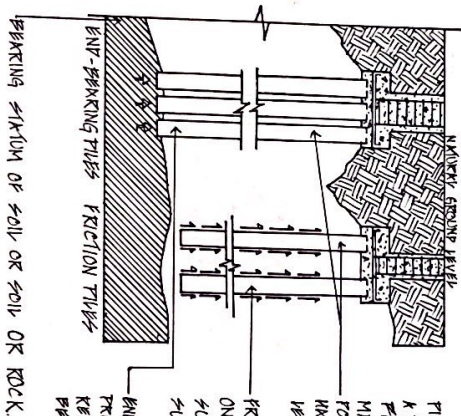


MAT OR RAFT COLUMN PLACEMENT

NOT TO SCALE

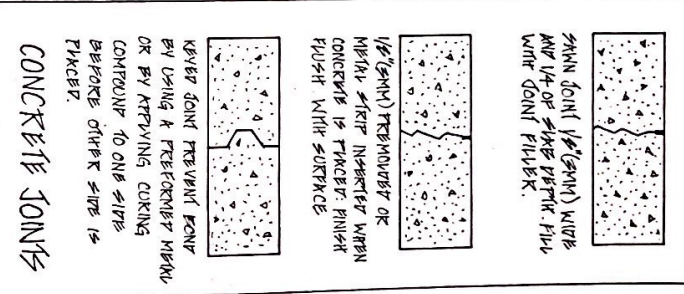
A MAT OR RAFT FOUNDATION IS A THICK, HEAVILY REINFORCED CONCRETE SLAB THAT SERVES AS A SINGLE MONOLITHIC FOOTING FOR A NUMBER OF COLUMNS OR AN ENTIRE BUILDING.

MAT FOUNDATIONS ARE USED WHEN THE AVAILABLE BREAKING CAPACITY OF A FOUNDATION SOIL IS LOW RELATIVE TO ROLLING LOADS AND INTERIOR COLUMN FOOTING BECOMES SO LARGE THAT IT BECOMES MORE ECONOMICALLY TO WORK WITHIN INTO A SINGLE SLAB MAT FOUNDATIONS MAY BE DIFFERENT BY A GRID OF RISE, BEAMS OR WALLS



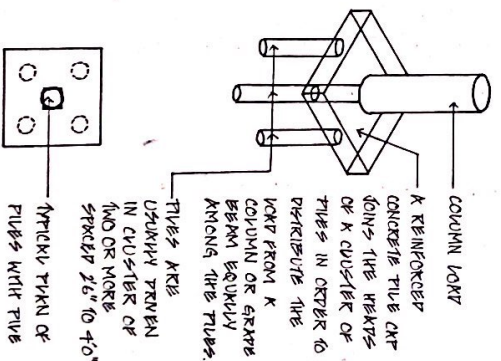
PILE DRIVING

NOT TO SCALE

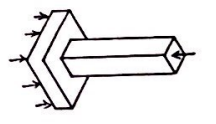


CONCRETE JOINTS

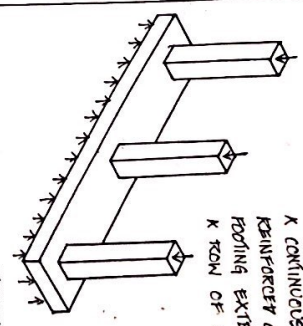
PILE CAP DETAILING



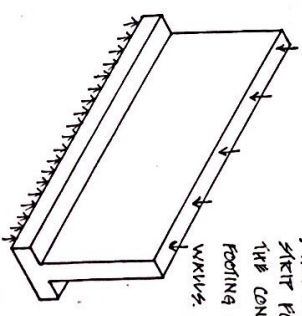
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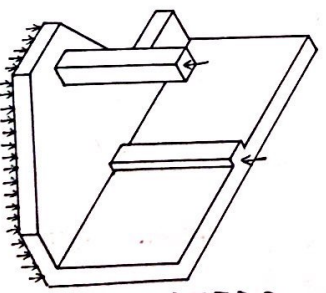
ISOLATED FOOTINGS ARE INDIVIDUAL SUPPORTS FOR FOUNDATIONS AND FREE STANDING COLUMNS AND PILES.



CONTINUOUS FOOTING IS A CONTINUOUS CONCRETE REINFORCED CONCRETE FOOTING EXTENDED TO SUPPORT A ROW OF COLUMNS.



STRIP FOOTINGS ARE THE CONTINUOUS STRIPS OF FOUNDATION WALLS.



COMBINED FOOTING IS A REINFORCED CONCRETE FOOTING FOR TRIPLE FOUNDATION OR COLUMN EXTENDED TO SUPPORT AN INTERIOR COLUMN.

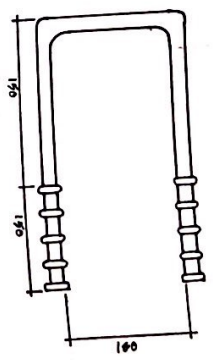
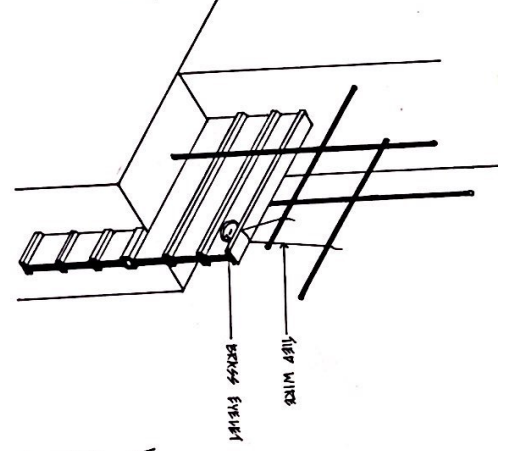
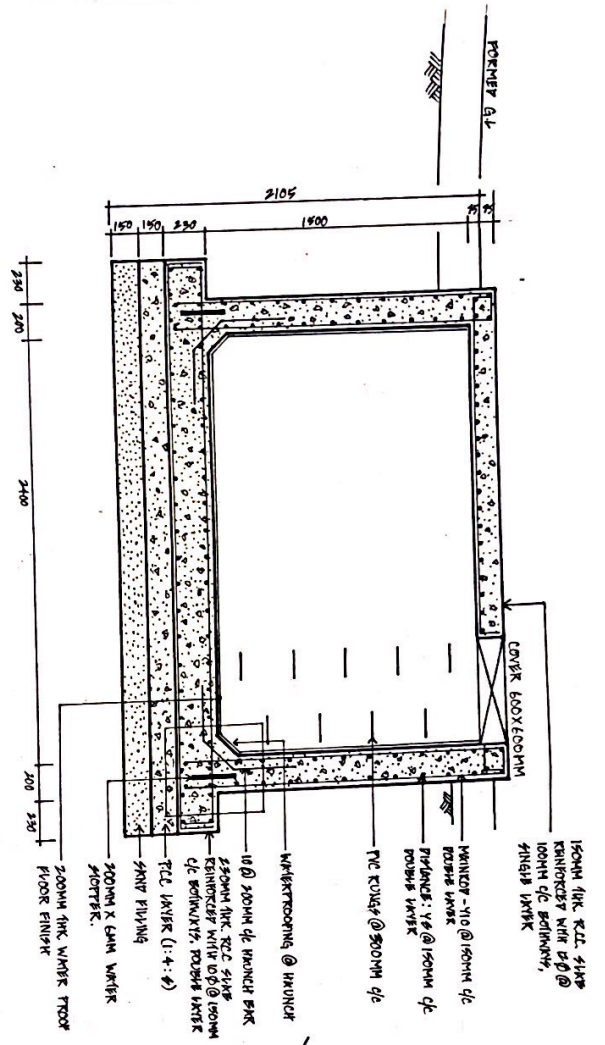
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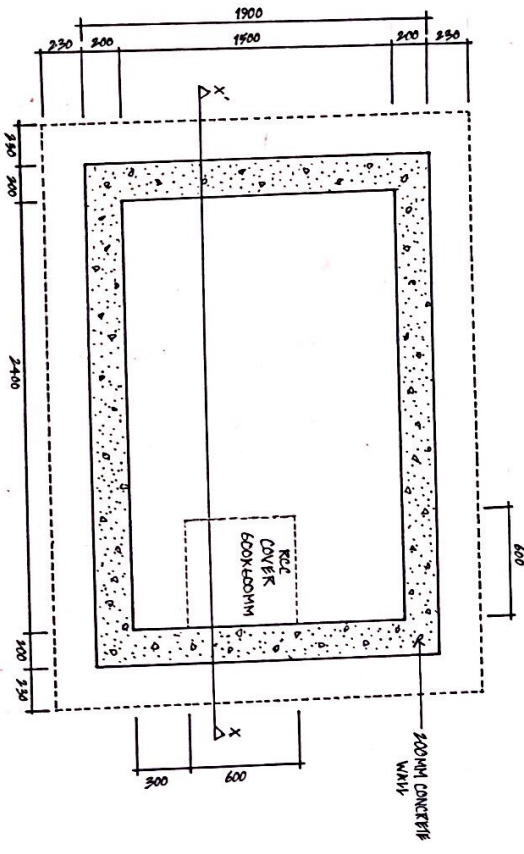
FACULTY OF ARCHITECTURE  
TR. MGR. EDUCATIONAL  
AND RESEARCH INSTITUTION



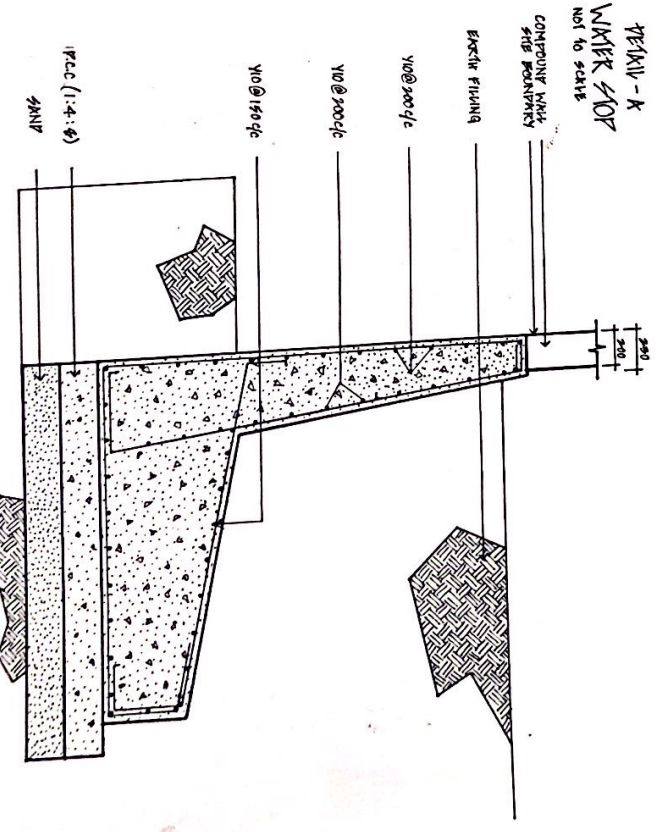
ENGIN KEZIAN EWIN  
REG NO: 14101101013  
II YEAR III SEM B.ARC



WHY IS A WATERSTOP?  
 PVC WATERSTOP IS A CONVENTIONAL WATERSTOP THAT CAN BE USED IN A VARIETY OF APPLICATIONS. THE MAIN USAGE IS TO PREVENT THE PASSAGE OF LIQUIDS IN CONCRETE JOINTS IN MANY DIFFERENT PRODUCTS SUCH AS TRANS, GUNNERS, WATER AND WATERPROOF TREATMENT TRANS, AND OTHER LIQUID RETAINING STRUCTURES.

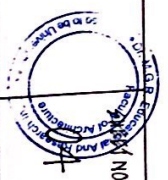


UNDERGROUND SUMP - PLAN  
 SCALE 1:20



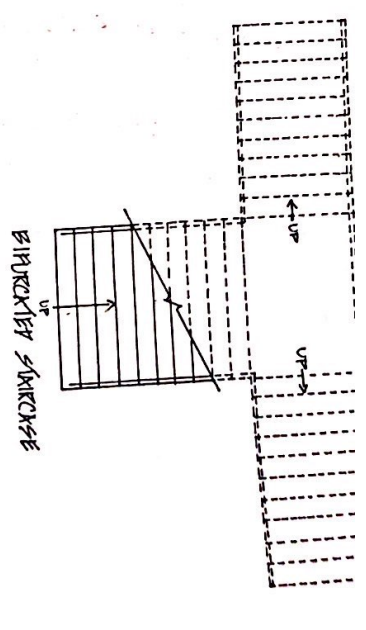
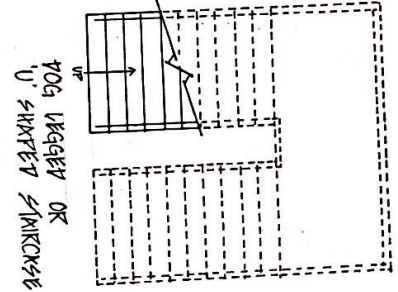
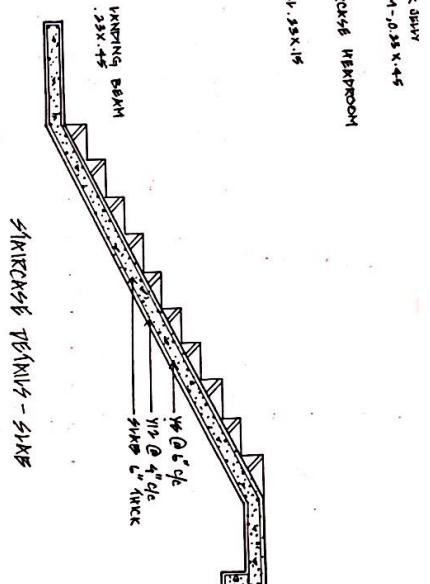
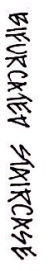
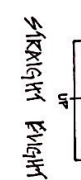
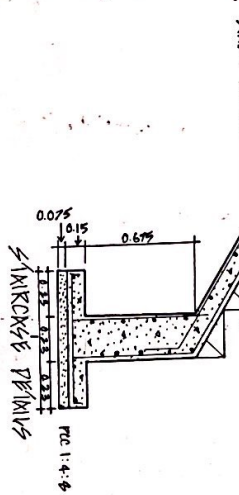
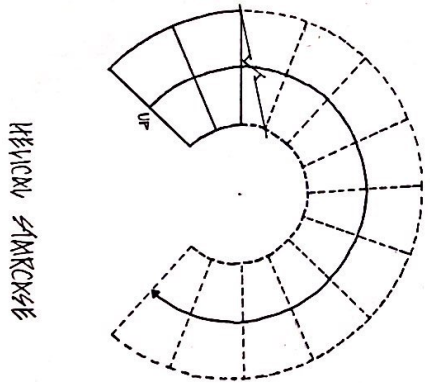
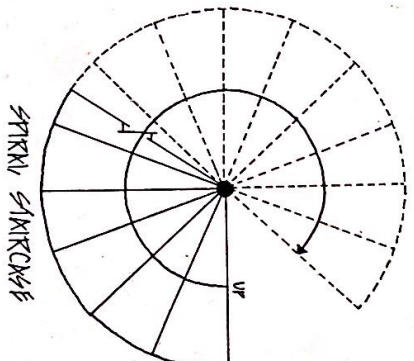
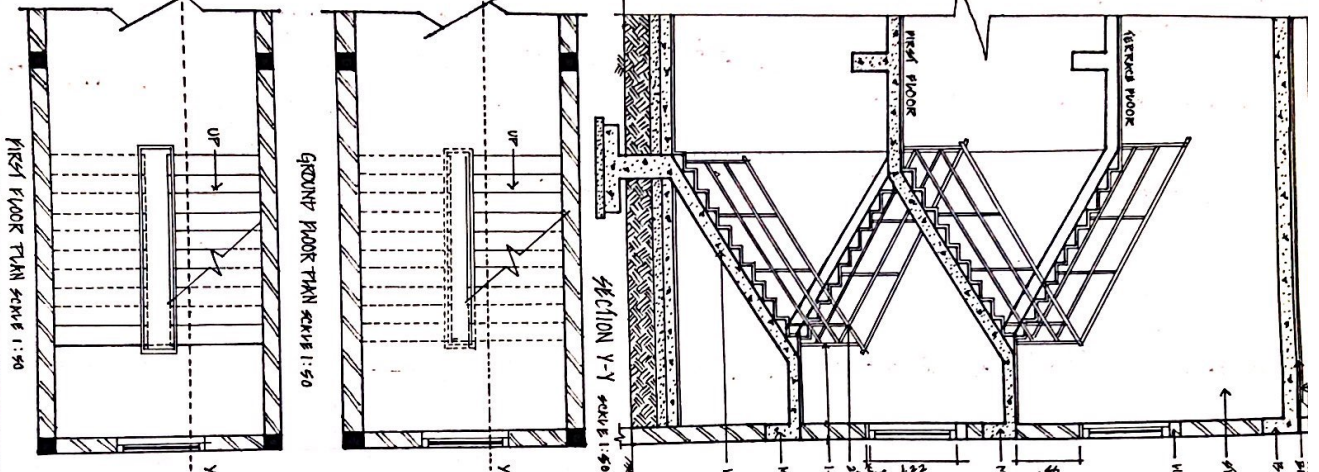
TYPICAL SECTION OF RETAINING WALL - SCALE 1:20

UNDERGROUND SUMP AND RETAINING WALL DETAILS  
 BUILDING CONSTRUCTION - II  
 2023



NO. 1000  
 FACULTY OF ARCHITECTURE  
 AND PLANNING  
 ASSIUT UNIVERSITY  
 ASSIUT, EGYPT  
 REG. NO: 121011101013

STAIRCASE AND TYPES  
 LIFTING CONSTRUCTION - II  
 APR 2014 - 2023



REG. NO. 17  
 FACULTY OF ARCHITECTURE  
 TRIMURGHU EDUCATIONAL AND  
 RESEARCH INSTITUTE  
 ENGLAND KAZIYAR ERM  
 BAKCHIL IJK III SEM  
 REG. NO: 121011101013

# PURPOSE OF THE VISIT:

IS TO KNOW ABOUT MIVAN TECHNOLOGY.  
 LOCATION: SRIRANGAM VILLAGES KOVEMBRA  
 PROJECT: CTRP HOUSING PROJECT BY TAMILNADU HOUSING BOARD.  
 CONTRACTOR: BYR CONSTRUCTION

ACRUMBER: SHANKAR MATHESH, METAPHOR.  
 NO. OF FLOOR: 19  
 NO. OF UNITS: 119  
 EACH UNIT IS DESIGNED BY 4 BHK OF 1200 SQ.FT



# MIVAN FORMWORK:

MIVAN ALUMINIUM TECHNOLOGY IS A REVOLUTIONARY ALUMINIUM FORMWORK CONSTRUCTION SYSTEM, WHICH HAS BEEN SUCCESSFULLY USED AND DEVELOPED SINCE MANY YEARS, FOR FORMING CAST IN PLACE REINFORCED CONCRETE BUILDINGS STRUCTURE USING THIS UNIQUE FORMWORK. IN WORKS, FLOOR SLABS, COLUMN, BEAM, STAIRS, BAYDOWN, TOGETHER WITH DOOR AND WINDOW OPENINGS ARE CAST IN PLACE IN A SINGLE SITE EXIST OPERATION.



THE RESULTING BUILDING STRUCTURE IS VERY STRONG, ACCURATE IN DIMENSIONS AND TOLERANCES, WITH A HIGH QUANTITY OF FINISHED CONCRETE SURFACE AND YES AT THE SAME TIME THE MIVAN FORMWORK IS FAST, ADAPTABLE AND VERY COST EFFICIENT AND COST EFFECTIVE.

CHARACTERISTICS OF MIVAN TECHNOLOGY OF ALUMINIUM FORMWORK IS THAT IT MAKES USE OF CONCRETE AS THE PRINCIPAL BUILDING MATERIAL FOR THE TRIMM REASONS OF COST AND ACCESSIBILITY. CEMENT, SAND AND STONE ARE RELATIVELY AVAILABLE IN MOST COUNTRIES. CONCRETE ALSO BRINGS ADDITIONAL BENEFITS IN TERMS OF ITS BUILDING QUALITY AND STRENGTH. ITS RESISTANCE TO FIRE, ROT AND VERMIN ATTACK: ITS LOW NOISE TRANSMISSION WITH GOOD THERMAL CAPACITY AND ITS PROVEN DURABILITY, GIVING LONG LIFE, WITH LITTLE MAINTENANCE.



# ADVANTAGES:

IT GIVES SMOOTH FORMWORK. THE MAINTENANCE COST IS NEGLIGIBLE AS THE WALLS AND CEILING ARE MADE UP OF HIGH QUANTITY CONCRETE WHICH DO NOT REQUIRE FREQUENT REPAIR WORK. LESS LABOR IS REQUIRED. FORMWORK CAN BE REUSED UP TO 200 TIMES AND ALSO CAN BE RECYCLED.



# DISADVANTAGES:

NO CUSTOMIZATION CAN BE DONE AFTER COMPLETION OF THE CONSTRUCTION. THE FORMWORK CAN BE COST EFFECTIVE ONLY IF IT IS USED IN SYMMETRICAL TYPE OF STRUCTURES. ITS INITIAL SETUP TAKES TIME. SKILLED LABOR IS REQUIRED FOR ALIGNMENT MAINTENANCE HOLES CAUSED BY WIND SHOULD BE AVOIDED PROPERLY WITH GIZ ELSE THERE WILL BE PROBLEM OF WARRAGE IN COLUMN.

# BAR BENDING:



# SITE REPORT

## BUILDING CONSTRUCTION - III

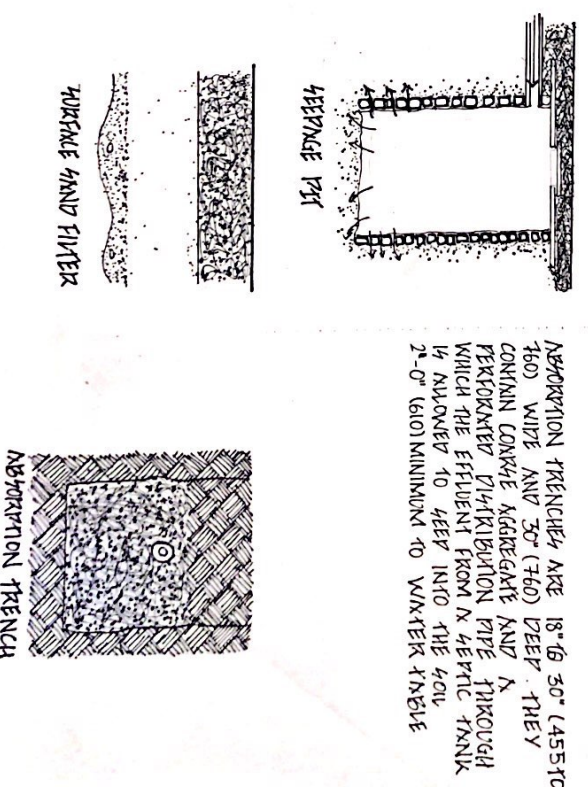
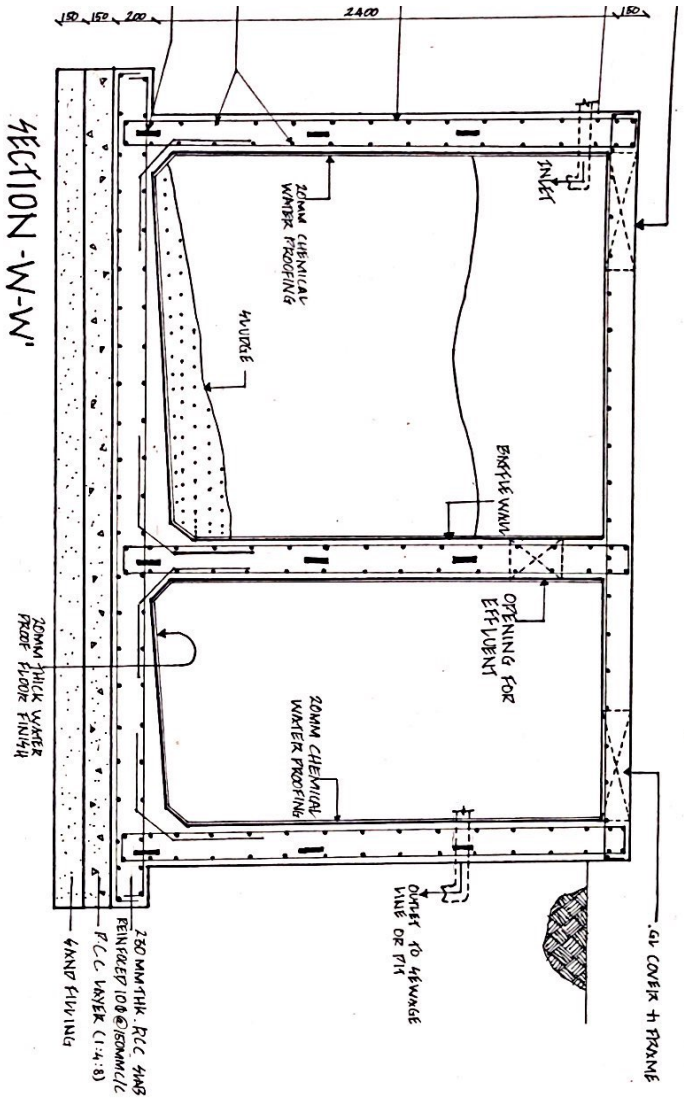
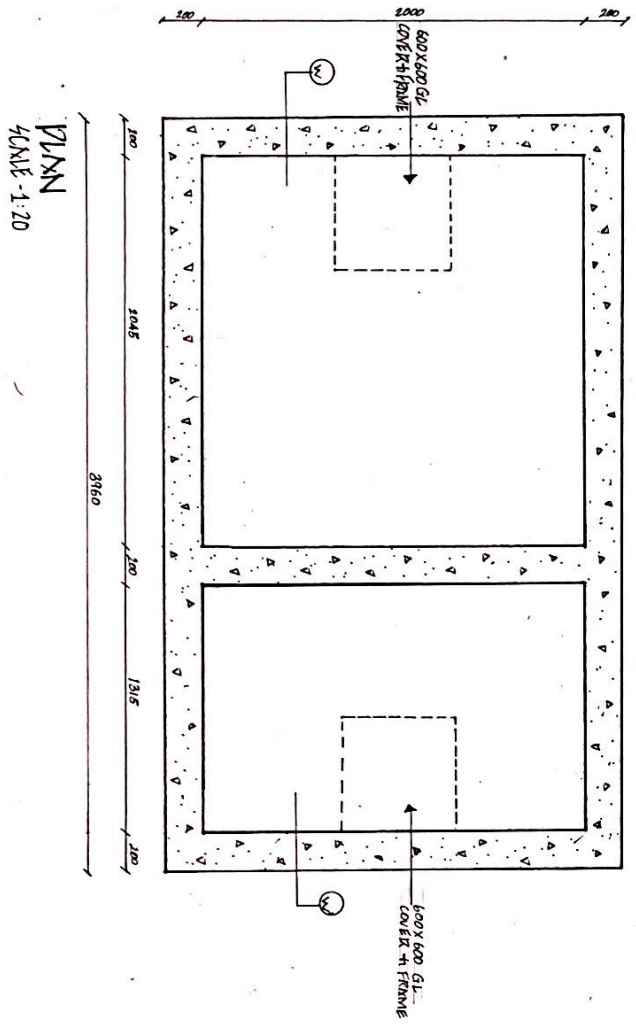
BRICH 2019-2022

SRINIVAS

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PROPERTY OF ARCHITECTURE DEPT ARE EDUCATIONAL AND RESEARCH INSTITUTE

SRIJAYINI KESAVAN SRINIVAS P. ARJUNAN IYER II SEM REG. NO: 1910110101015



THE LIQUID EFFLUENT, WHICH IS ABOUT 70% PURIFIED, MAY FLOW INTO ONE OF THE FOLLOWING SYSTEMS

A DRAINFIELD IS AN OPEN AREA CONTAINING AN ARRANGEMENT OF ABSORPTION TRENCHES THROUGH WHICH EFFLUENT FROM A SEPTIC TANK MAY SEEP OR LEAK INTO THE SURROUNDING SOIL

A SEWAGE FIT LINED WITH A PERFORATED MANHOLE OR CONCRETE MANHOLE IS SOMETIMES USED AS A SUBSTITUTE FOR A DRAINFIELD WHEN THE SOIL IS ADEQUATE AND THE HIGHER LEVEL OF WATER TABLE IS NOT LEANT AT (B) BELOW THE BOTTOM OF THE FIT

A SUBSURFACE SAND FILTER CONSISTS OF DISTRIBUTION PIPES SURROUNDED BY GRADED GRANUL, AN INTERMEDIATE LAYER OF DIRM. CORSE SAND AND A SYSTEM OF UNDERDRAINS TO CARRY OFF THE FILTERED EFFLUENT. SAND FILTERS ARE USED ONLY WHERE OTHER SYSTEMS ARE NOT FEASIBLE

GRANULAR MEDIA TO THE WASTEWATER, WHICH CAN BE USED, SHOWERS AND STAINWASHERS, WHICH CAN BE TREATED AND REUSED FOR SUCH USES AS TOILET FLUSHING AND DUSTING. TO MAKE FEW COMMUNITIES HAVE ADAPTED COPE PROVISIONS ALLOWING THE REUSE OF GRANULAR MEDIA WATER SYSTEMS SHOULD BE USED IN CONJUNCTION WITH OTHER WATER CONSERVATION STRATEGIES. SUCH AS SPECIFYING WATER EFFICIENT FIXTURES AND CAPTURING RAINWATER AND SURFACE RUNOFF IN CISTERNS AND RESERVOIRS FOR USE IN LANDSCAPING

SEWAGE TRENCHES USUALLY CONVEY SEWAGE FROM PLUMBING FIXTURES TO A PUBLIC FACILITY FOR TREATMENT AND DISPOSAL. WHEN THIS IS NOT POSSIBLE A PRIVATE SEWAGE DISPOSAL SYSTEM IS REQUIRED. THE TYPE AND SIZE DEPEND ON THE NUMBER OF FIXTURES, SEWER AND THE PERMEABILITY OF THE SOIL AS DETERMINED BY A PERCOLATION TEST. SEWAGE DISPOSAL SYSTEMS ARE DESIGNED BY SANITARY ENGINEERS AND MUST BE APPROVED AND INSPECTED BY THE HEALTH DEPARTMENT BEFORE BEING PUT INTO USE. CONDUIT THE BUILDING AND HEALTH CODES FOR SPECIFIC REGULATION + REQUIREMENTS.

ABSORPTION TRENCHES ARE 18" TO 30" (455 TO 760) WIDE AND 30" (760) DEEP. THEY CONTAIN CONCRETE AGGREGATE AND A PERFORATED DISTRIBUTION PIPE THROUGH WHICH THE EFFLUENT FROM A SEPTIC TANK IS ALLOWED TO SEEP INTO THE SOIL. 2" OR (50MM) MINIMUM TO WATER TABLE