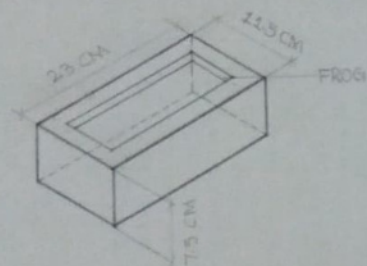
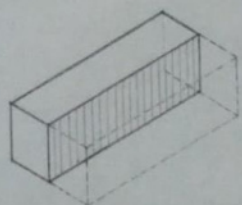


COMPLETE BRICK

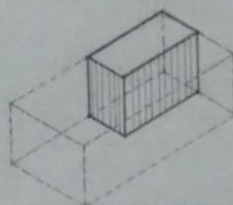


QUEEN CLOSER



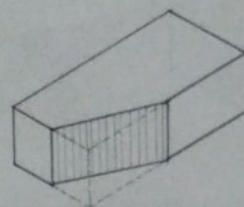
THIS IS LONGITUDINALLY CUT HALF-BRICK. THESE CUT BRICKS ARE OBTAINED BY CUTTING A FULL BRICK LONGITUDINALLY IN TWO EQUAL PARTS. THE QUEEN CLOSER IS USED TO BREAK THE VERTICAL JOINTS IN WALL COURSES.

QUEEN CLOSER QUARTER



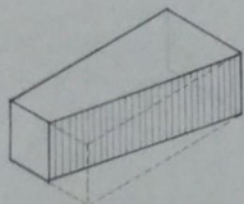
WHEN THE QUEEN CLOSER IS FURTHER DIVIDED INTO TWO EQUAL PARTS ALONG ITS WIDTH THEN IT IS CALLED QUARTER CLOSER.

KING CLOSER



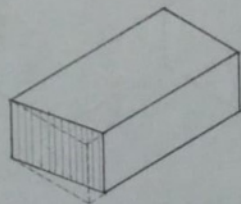
THIS PIECE OF BRICK IS OBTAINED BY CUTTING A TRIANGULAR PORTION OF THE BRICK ALONG THE MIDDLE POINTS OF THE LENGTH AND WIDTH OF THE BRICK. IT IS MOSTLY USED NEAR DOOR AND WINDOW OPENING TO GET A PROPER ARRANGEMENT OF THE MORTAR JOINTS.

BEVELED CLOSER



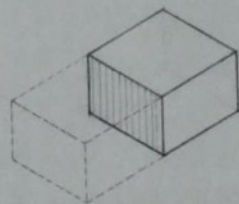
BEVELED CLOSER IS PREPARED BY CUTTING A TRIANGULAR PORTION OF THE BRICK IN SUCH A WAY THAT THE CUTTING PORTION IS STARTED FROM A CORNER OF THE BRICK AND ENDED AT THE MIDDLE PORTION OF THE OTHER HEADER FACE. IT IS USED FOR SLOPED BRICKWORK, AS IN CASE OF JAMBS OF DOORS AND WINDOWS.

MITRED CLOSER



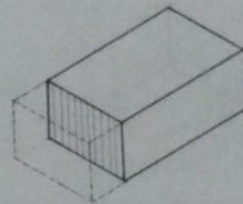
MITRED CLOSER IS OBTAINED BY CUTTING A TRIANGULAR PART OF THE BRICK IN SUCH A WAY THAT THE CUTTING FACE IS INCLINED AT 45 TO 60 DEGREES WITH A LONGER STRETCHER FACE OF BRICK. ONE LONGER FACE OF THIS CLOSER IS SMALLER THAN ITS ORIGINAL LENGTH, WHEREAS ANOTHER LONGER FACE IS INTACT.

HALF BAT



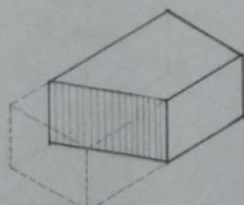
WHEN THE BRICK LENGTH IS HALF THEN IT IS CALLED HALF BAT.

THREE QUARTER BAT



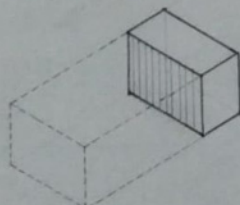
IF THE BAT IS THREE QUARTERS OF THE BRICK LENGTH ($\frac{3}{4}$) THEN IT IS CALLED A THREE QUARTER BAT.

BEVELED BAT



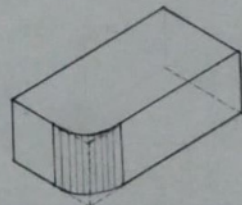
IF THE BAT IS PREPARED AS BEVELED IN SHAPE, THEN IT IS CALLED A BEVELED BAT.

QUARTER BAT



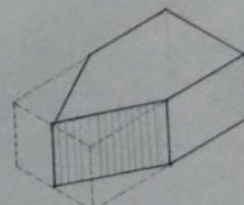
WHEN THE BRICK LENGTH IS QUARTER THEN IT IS CALLED QUARTER BAT.

BULLNOSE



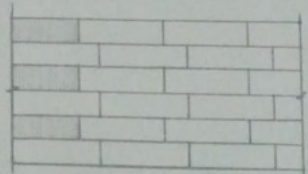
WHEN THE BRICK IS MOULDED OR CUT OR DRESSED WITH A ROUNDED ANGLE, IT IS CALLED BULLNOSE. IT IS USED IN FORM OF QUOIN. A BRICK WITH A DOUBLE BULLNOSE IS CALLED COWNOSE BRICK.

SQUINT QUOIN



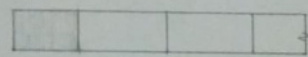
IT IS OBTAINED IN SUCH A WAY THAT IN-PLANE ANGLE RATHER THAN RIGHT ANGLE IS FORMED.

1/2 BRICK THK STRETCHER BOND

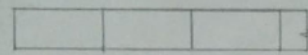


ELEVATION

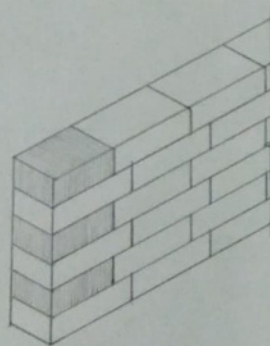
3/4 BAT



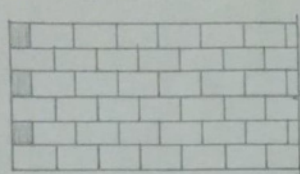
EVEN COURSE



ODD COURSE

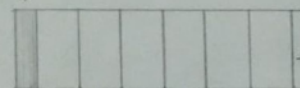


1 BRICK THK HEADER BOND

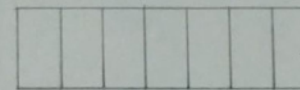


ELEVATION

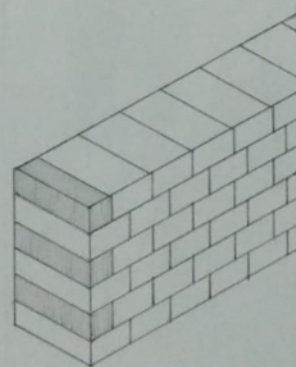
QC



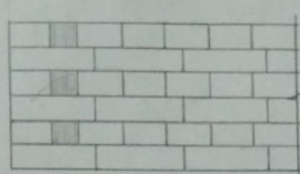
EVEN COURSE



ODD COURSE

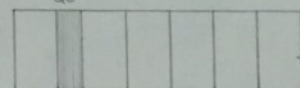


1 BRICK THK ENGLISH BOND

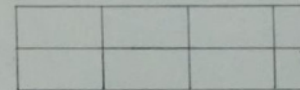


ELEVATION

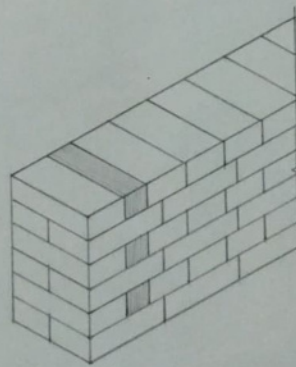
QC



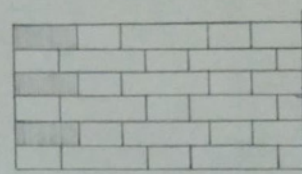
EVEN COURSE



ODD COURSE

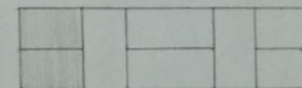


1 BRICK THK FLEMISH BOND

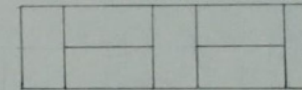


ELEVATION

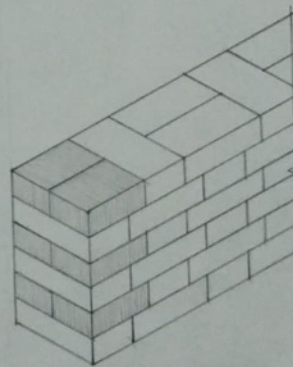
3/4 BAT



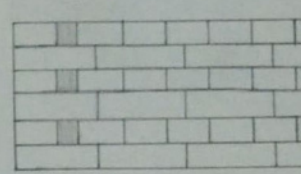
EVEN COURSE



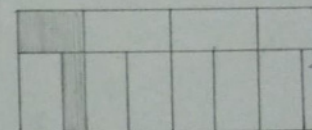
ODD COURSE



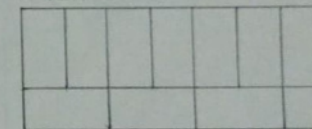
1-1/2 BRICK THK ENGLISH BOND



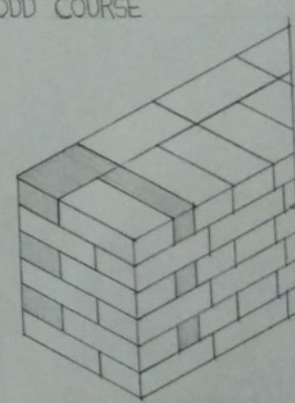
ELEVATION



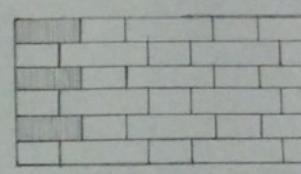
EVEN COURSE



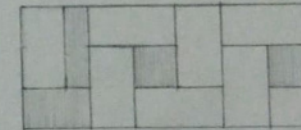
ODD COURSE



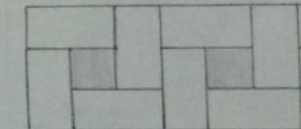
1-1/2 BRICK THK FLEMISH BOND



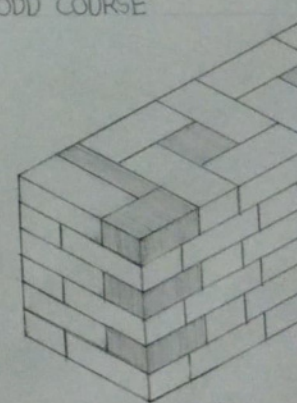
ELEVATION

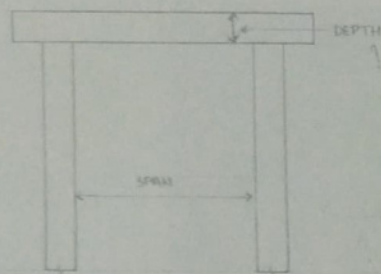


EVEN COURSE

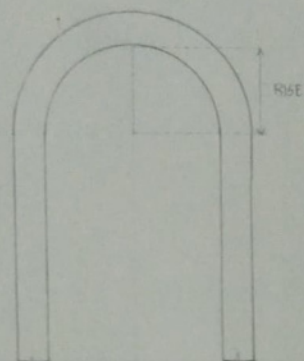


ODD COURSE

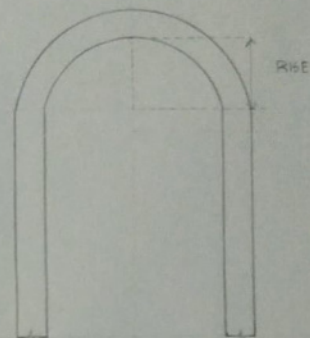




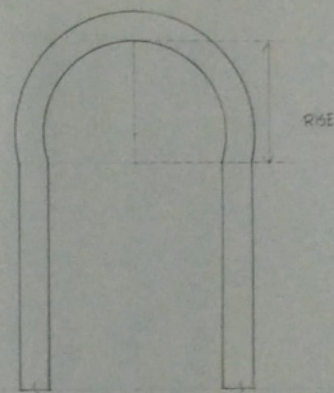
FLAT ARCH



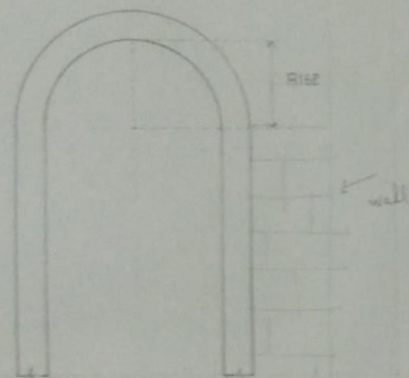
SEMICIRCULAR ARCH



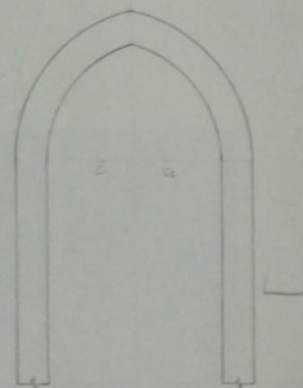
SEGMENTAL ARCH



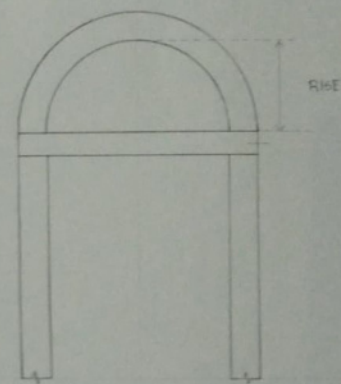
HORSE SHOE ARCH



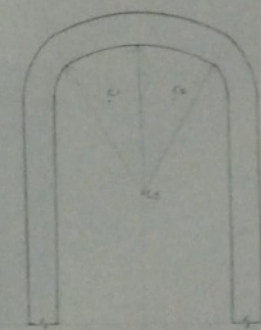
STILTED ARCH



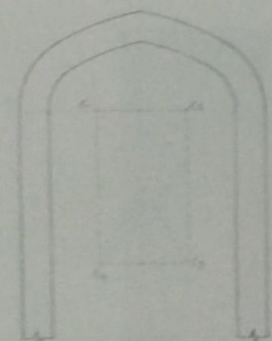
2 POINTED ARCH



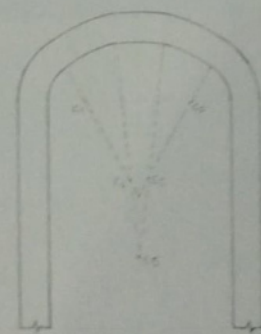
RELIEVING ARCH



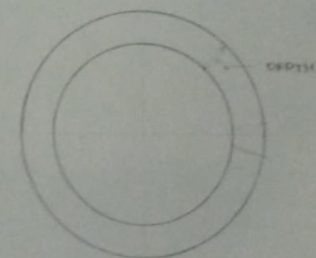
3 POINTED ARCH



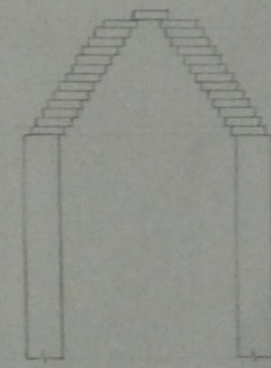
4 POINTED ARCH



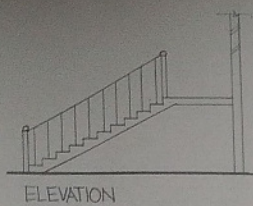
5 POINTED ARCH



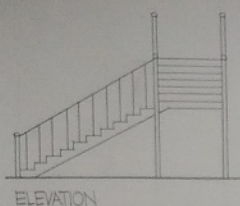
CIRCULAR ARCH



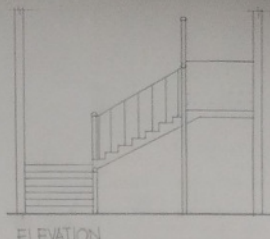
CORBELLED ARCH



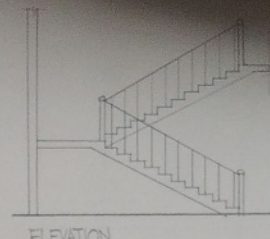
ELEVATION



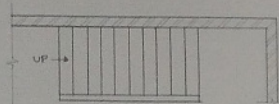
ELEVATION



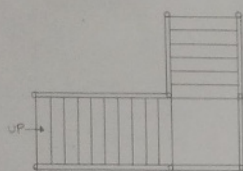
ELEVATION



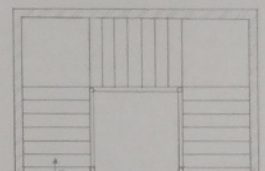
ELEVATION



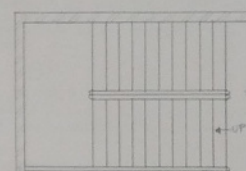
PLAN
STRAIGHT FLIGHT



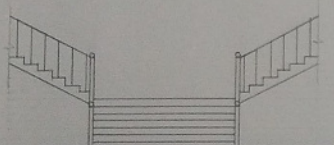
PLAN
QUARTER TURN



PLAN
OPEN WELL



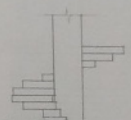
PLAN
DOG LEGGED



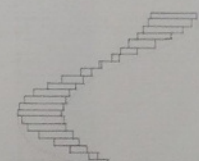
ELEVATION



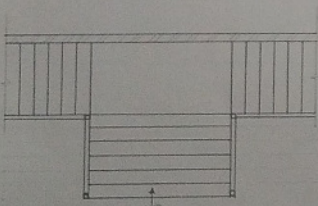
ELEVATION



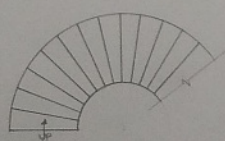
ELEVATION



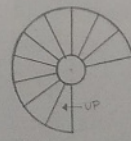
ELEVATION



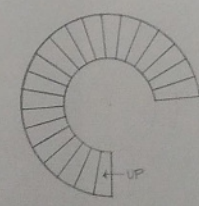
PLAN
BIFURCATED



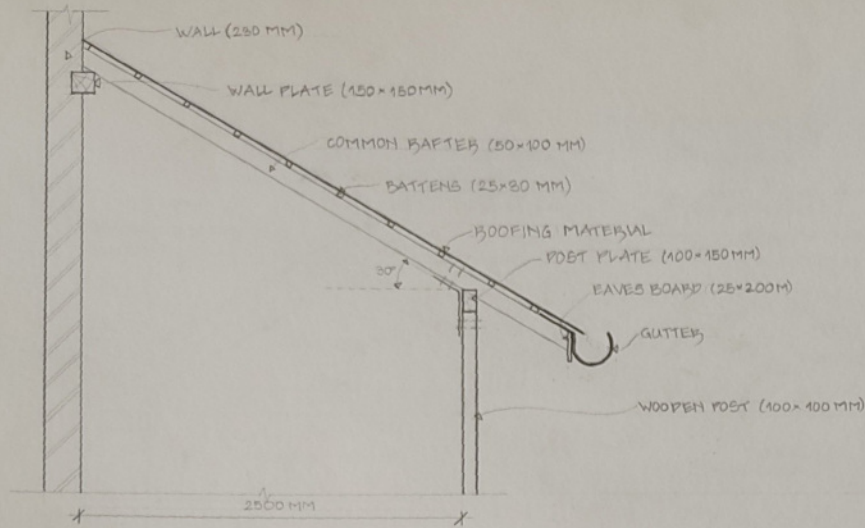
PLAN
GEOMETRICAL



PLAN
SPIRAL

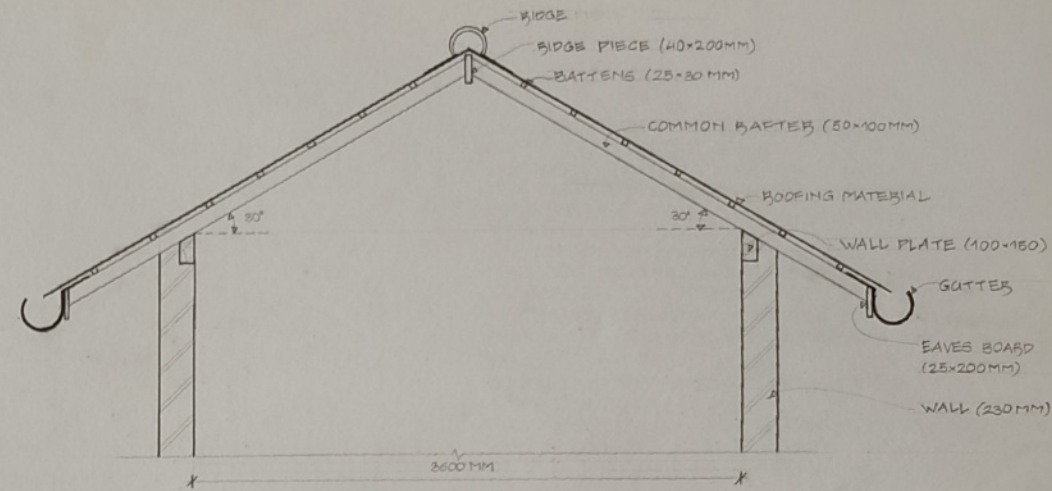


PLAN
CIRCULAR



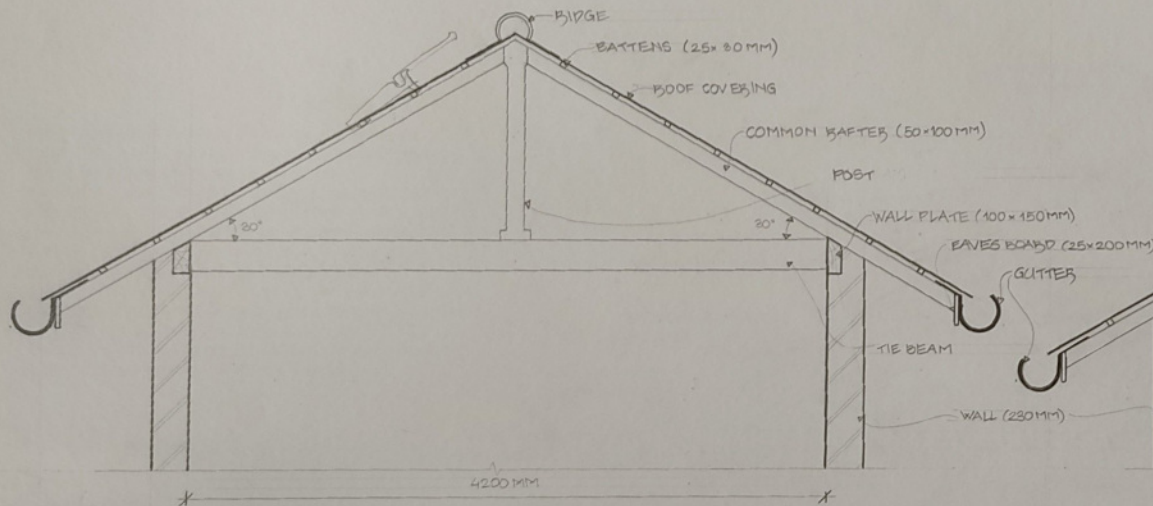
LEAN TO ROOF

THIS ROOF CONSISTS OF COMMON RAFTERS SUPPORTED ON POST PLATE ONE END AND ON WALL PLATE AT THE OTHER END. THE RAFTERS ARE KEPT INCLINED TO ONE SIDE ONLY. IT IS SPECIALLY USED FOR VERANDHAS OR SHEDS UP TO 2.5M WIDTH. TILES, SHEETS OR SLATES CAN BE USED AS ROOF COVERING MATERIAL.



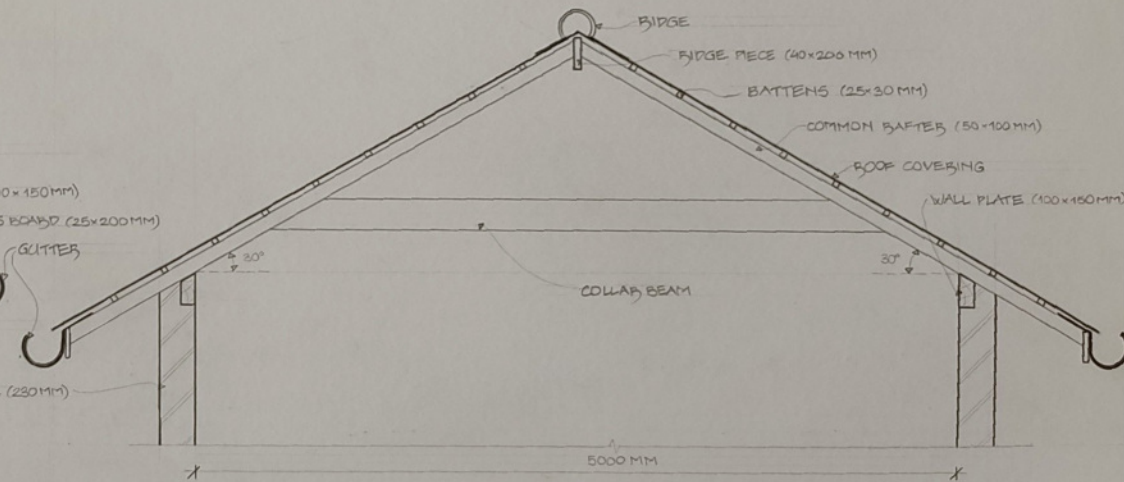
COUPLE ROOF

THE ROOF IS FORMED BY COUPLE OR PAIRS OF RAFTERS WHICH SLOPE TO BOTH THE SIDES OF THE RIDGE OF THE ROOF. THE UPPER ENDS OF EACH PAIR OF RAFTER IS NAILED TO A COMMON RIDGE PIECE AND THEIR LOWER ENDS ARE NOTCHED AND NAILED TO THE WOODEN WALL PLATES EMBEDDED IN THE MASONRY ON THE TOP OF OUTER WALLS. NOT VERY FAVOURABLE AS IT HAS THE TENDENCY TO SPREAD OUT AT THE FEET AND THRUST OUT THE WALLS SUPPORTING THE WALL PLATES. SUITABLE FOR SPANS UP TO 3.5-3.6 M.



COUPLE CLOSE ROOF

IT IS SIMILAR TO COUPLE ROOF EXCEPT THAT THE ENDS OF COUPLE CLOSE ROOF OF COMMON RAFTERS IS CONNECTED BY HORIZONTAL MEMBER CALLED TIE BEAM TO PREVENT THE RAFTERS FROM SPREADING OUT AND THRUSTING OUT OF THE WALL. TIE BEAM IS WOODEN OR STEEL. THE CONNECTION BETWEEN TIE AND FEET OF RAFTERS IS OBTAINED BY DOVE TAIL HALVED JOINT. SUITABLE FOR SPAN UP TO 4.2 M.

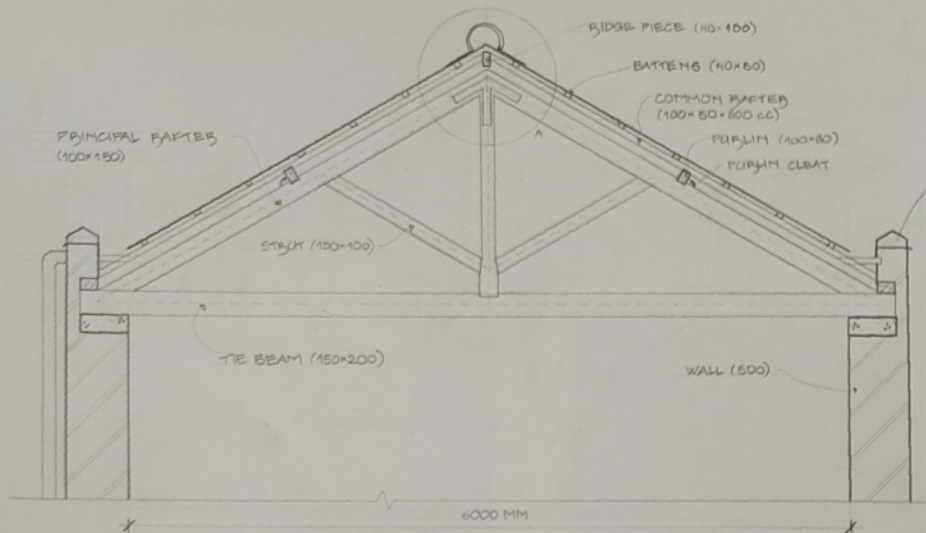


COLLAR BEAM ROOF

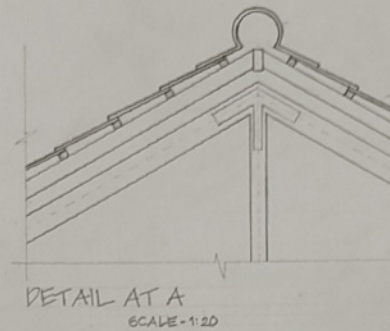
WHEN THE SPAN INCREASES OR WHEN THE LOAD IS MORE, THE RAFTERS OF THE COUPLE CLOSE ROOF HAVE THE TENDENCY TO BEND. THIS IS AVOIDED BY RAISING THE TIE BEAM AND FIXING IT AT 1/3 - 1/2 OF THE VERTICAL HEIGHT FROM WALL PLATE TO THE RIDGE. THIS RAISED BEAM IS KNOWN AS COLLAR BEAM. IT IS SUITABLE FOR SPAN UP TO 5 M.

ROOFS

SIGN AND STAMP	DATE-9-10-23	HARSHA VINOD KANSAPATI	ROLL NO.-
SCALE-1:20			
SHEET NO.-		B.T-III	05
	4	SSM'S CLG. OF ARCHITECTURE,	SEM-III
		SOLAPUR	YEAR-2023-24

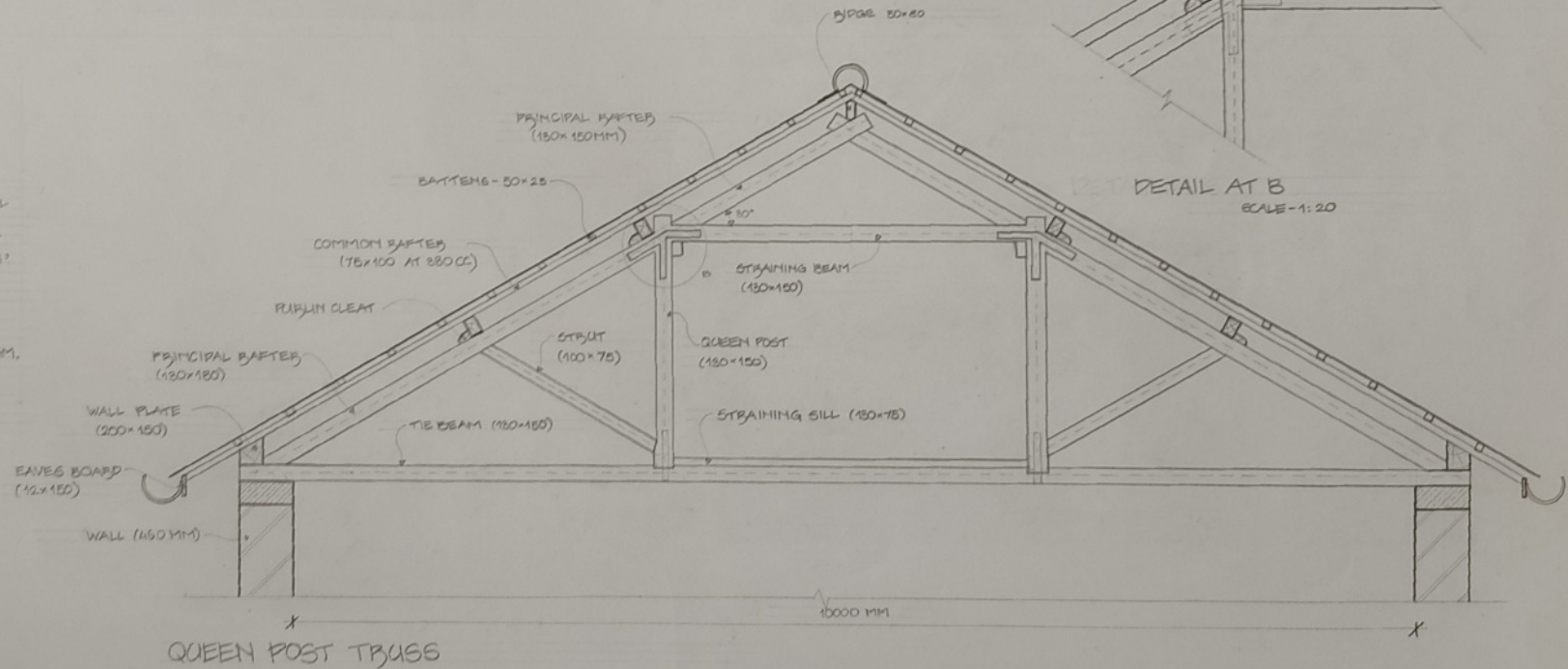


KING POST TRUSS

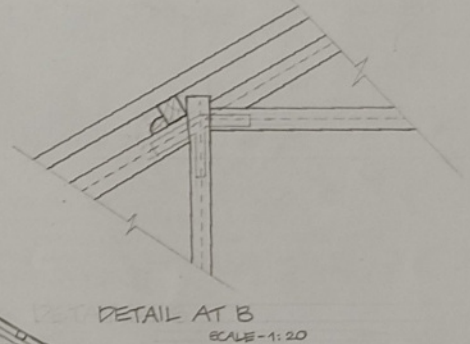


- THE SPACING OF THE KING POST TRUSS IS LIMITED TO CENTRE TO CENTRE.
- THE PRINCIPLE RAFTER SUPPORT THE PURLIN.
- THE PURLIN SUPPORTS THE CLOSELY SPACED COMMON RAFTER WHICH HAVE THE SAME SLOPE, AS THE PRINCIPLE RAFTERS.
- THE COMMON RAFTERS SUPPORT ROOF COVERING.
- KING POST PREVENTS SAGGING IN TIE BEAM AT ITS CENTRE.
- THE STRUTS CONNECTED TO THE TIE BEAM AND PRINCIPLE RAFTER PREVENTS SAGGING OF THE PRINCIPLE RAFTER.
- COMMON RAFTERS REST ON PURLIN AT EQUAL DISTANCES OF 30-45 CMS.
- THE TRUSS DERIVES ITS NAME FROM THE CENTRAL WOODEN UPRIGHT CALLED KING POST.
- SUITABLE FOR SPANS VARYING FROM 6-9 M.

- DIFFERS FROM KING POST TRUSS IN HAVING TWO VERTICAL POSTS, RATHER THAN ONE. THOSE VERTICAL POSTS ARE KNOWN AS 'QUEEN POSTS'.
- TOPS OF QUEEN POSTS WHICH ARE CONNECTED BY HORIZONTAL PIECE IS KNOWN AS 'STRAINING BEAM'.
- TWO STRUTS ARE PROVIDED TO JOIN FEET OF EACH QUEEN POST TO PRINCIPLE RAFTERS.
- QUEEN POSTS ARE TENSION MEMBERS.
- CONSIST OF TWO QUEEN POSTS, TWO PRINCIPLE RAFTERS, TWO STRUTS, TIE BEAM, STRAINING BEAM, PURLIN, STRAINING SILL, CLEATS, ETC.
- QUEEN POST PREVENTS SAGGING IN THE BEAM.
- SUITABLE FOR SPAN VARYING FROM 9-14 M.

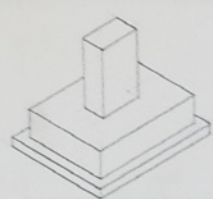


QUEEN POST TRUSS



TRUSS

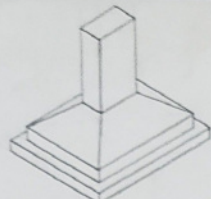
SIGN AND STAMP	DATE - 10-10-23	HABIBA, VINOD KANHAIYI	ROLL NO -
SCALE - 1:25		BT-III	05
SHEET NO -		SEM'S CLG. OF ARCHITECTURE,	SEM - II
5		SAPARA	YEAR - 2023-24



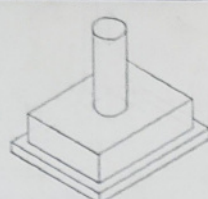
VIEW SCALE-1:80



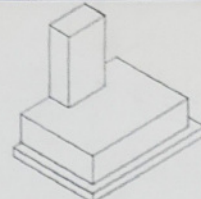
VIEW SCALE-1:80



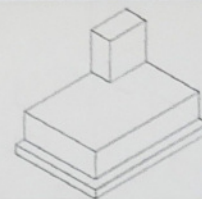
VIEW SCALE-1:80



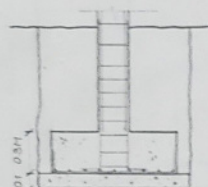
VIEW SCALE-1:80



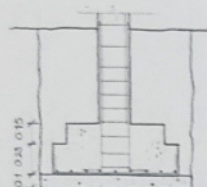
VIEW SCALE-1:80



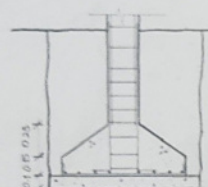
VIEW SCALE-1:80



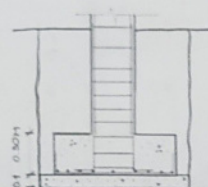
SECTION AA'



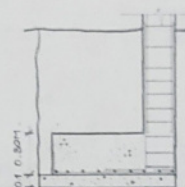
SECTION BB'



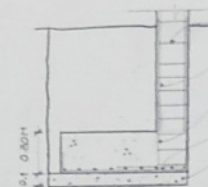
SECTION CC'



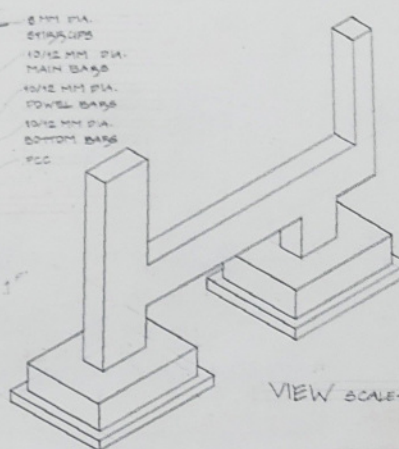
SECTION DD'



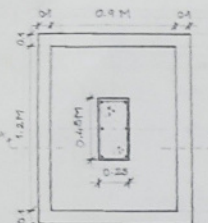
SECTION EE'



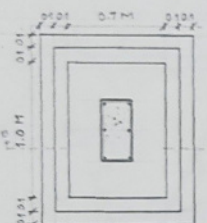
SECTION FF'



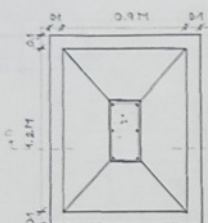
VIEW SCALE-1:80



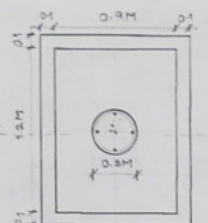
PLAN SCALE-1:20
SINGLE



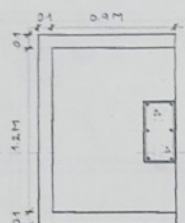
PLAN SCALE-1:20
STEPPED



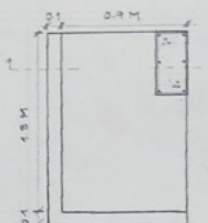
PLAN SCALE-1:20
SLOPED



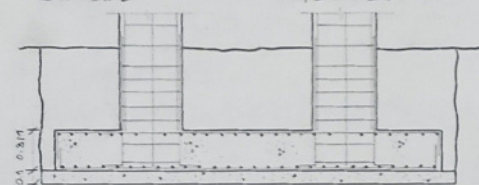
PLAN SCALE-1:20
SINGLE



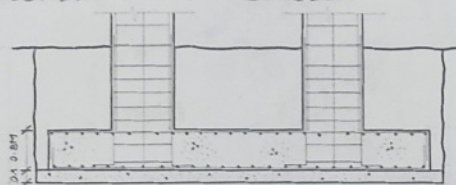
PLAN SCALE-1:20
ECCENTRIC



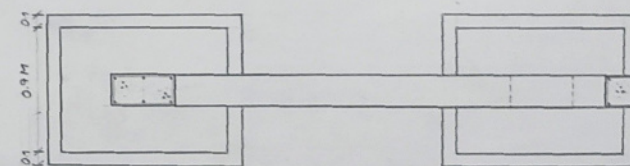
PLAN SCALE-1:20
CORNER ECCENTRIC



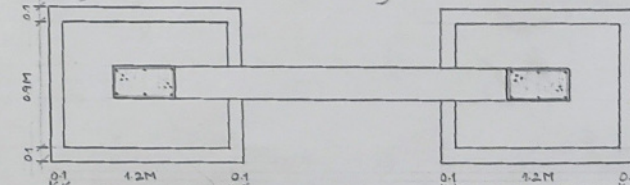
SECTION MM' SCALE-1:20



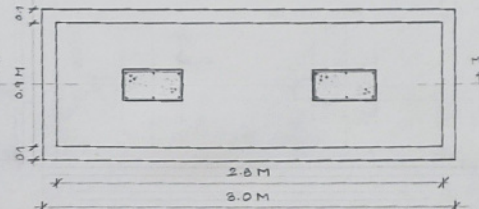
SECTION NN' SCALE-1:20



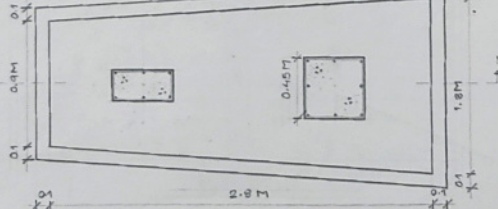
PLAN SCALE-1:20
STRAP BEAM CANTILEVER



PLAN SCALE-1:20
STRAP BEAM COMBINED



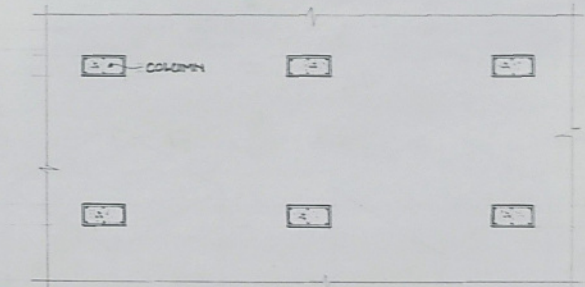
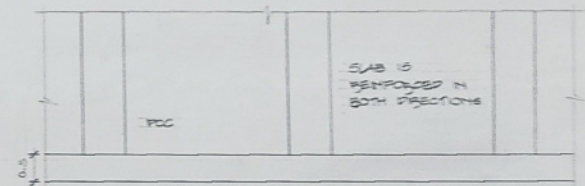
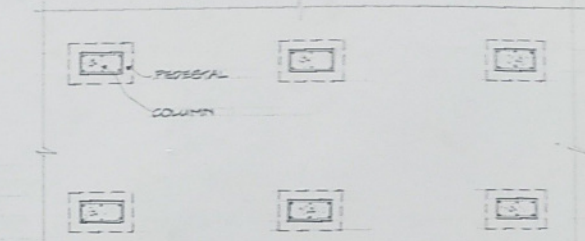
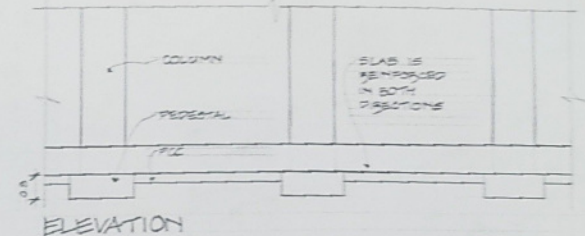
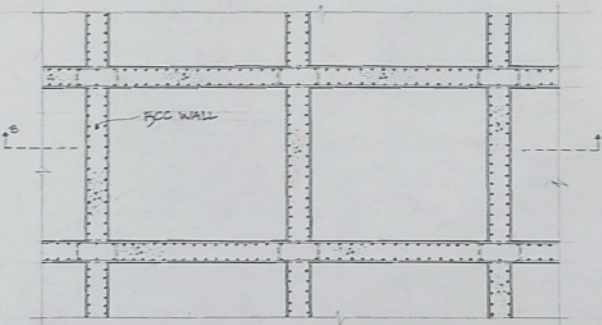
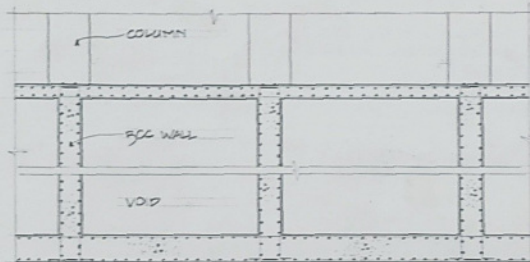
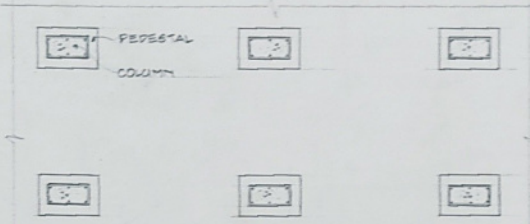
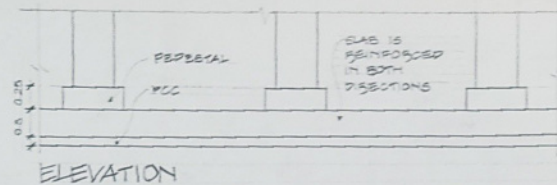
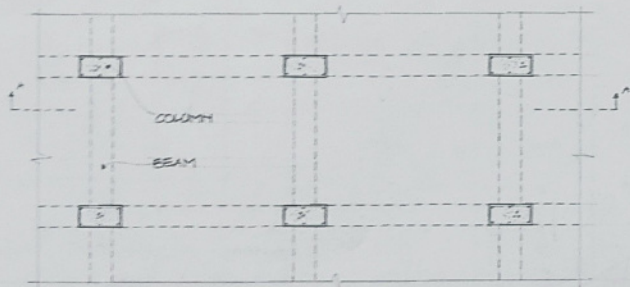
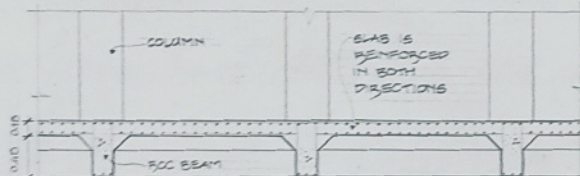
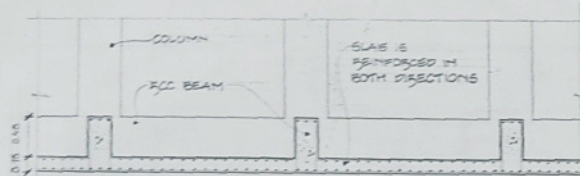
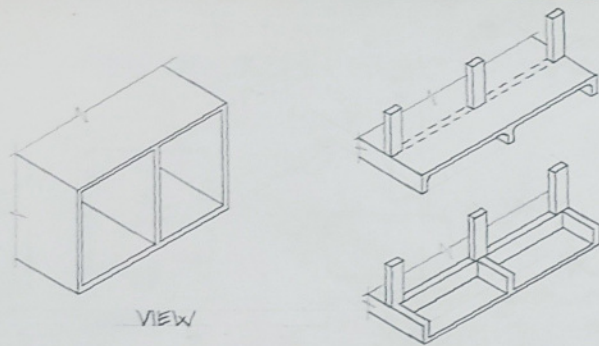
PLAN SCALE-1:20
COMBINED RECTANGULAR



PLAN SCALE-1:20
COMBINED TRAPEZOIDAL

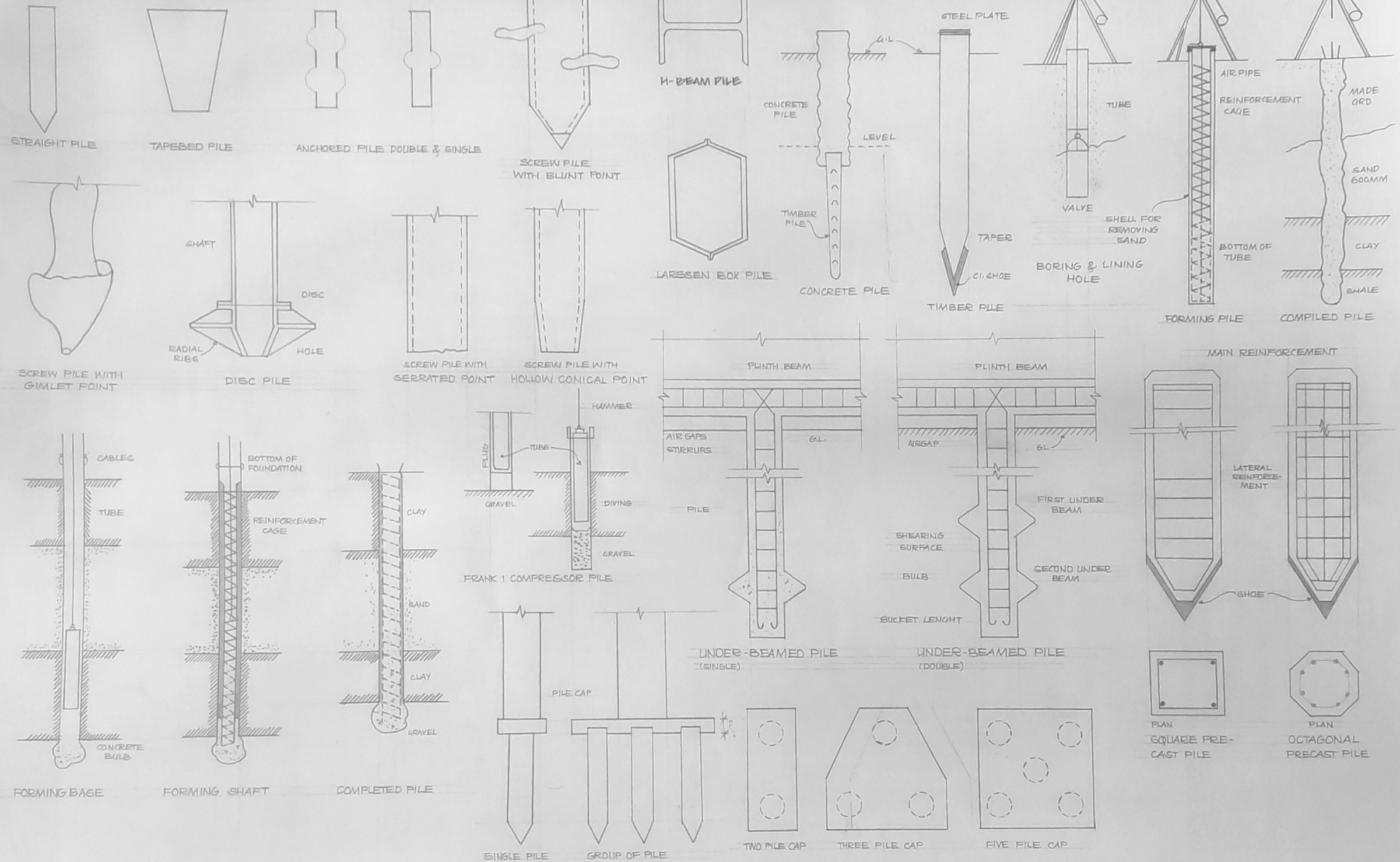
TYPES OF FOOTINGS - 1

SIGN AND STAMP	DATE-19-02-24	HABIBA, VINOD, HANAKATTI.	ROLL NO.-
SCALE -		BT-IV	05
SHEET NO. -	01	SSM'S CLG. OF ARCHITECTURE	YEAR- SEM- IV
		SOLAPUR.	2023-24



TYPES OF FOOTINGS-2

ASIN AND SCAMP	DATE - 15-05-24	HARIYA VINOD KANTHATI	BOOK NO. -
	SCALE - 1:120	B.T.-IV	05
	SHEET NO. -	02	
		SEEM'S CG. OF ARCHITECTURE	SEM - II
		SOLAPUR	YEAR - 2023-24



PILE FOUNDATION

SIGN/STAMP	SHEET NO.	VAISHNAVI GUNVANT KARBHARI.	ROLL NO.
	01	BUILDING CONSTRUCTION AND TECHNOLOGY.	07
	SCALE- 1:50,100	SSSM'S COLLEGE OF ARCHITECTURE,	SEM V
	2023-2024	SOLAPUR.	T.Y. B-ARCH

RAFTER BACK TO NORTHLIGHT TRUSS
(ANGLES)
2X 160X75X10

ANGLE PURLIN
95X60X10

ROOF COVERING IS OF HBRG
CEMENT SHEETING WHICH
COULD BE ISOLATED WITH HERE
SPAN ON THE UNDERSIDE

ANGLE RAIS WELDED TOGETHER
125X15X10
30X60X10
FLASHING.

ANGLE BRACKET
100X75X10
PATENT GLAZING GUSSET
PLATE GLASS

GLASS SHEETING
ANGLE RAIL
125X75X10
BAYES FILLER
PIECE

ANGLE CLEAT
100X100X10
DETAIL - G
SCALE - 1:10

SEATING FOR PRECAST
CONCRETE VALLEY
GUTTER

PRECAST CONCRETE
SPANNING MEMBERS
OF BEAM

BOLTED DRY
CONNECTION
JOINT

BOLTED DRY
JUNCTION JOINT

INTERNAL
SUPPORTING
MEMBER

SINGLE SPAN NORTHLIGHT
ROOF TRUSS

DETAIL AT 'J'
SCALE - 1:15

SOUTH FACE - LIGHT WEIGHT
SHEET RCC - COVERING
FIXED PURLINS

PATENT
GLAZING TO
HEATH FACE

PERIMETER COLUMNS SUPPORTING
ROOF TRUSSES & WALL COLUMNS

SINGLE SPAN NORTHLIGHT
ROOF TRUSS

NORTH LIGHT TRUSSES
AT 3.75M CENTRES

LATTICE
GURDER

NORTHLIGHT TRUSS ELEVATION IN

DIAGRAMMATIC ELEVATION OF LATTICE GIRDER

ANGLE CLEATS
125X15X10
60X60X10

ANGLES
250X100X10

NORTH LIGHT
TRUSS

GUSSET PLATE

I - SECTION
40X40X16

PATENT
GLAZING ROOF

LATTICE
GURDER

NORTH - LIGHT
TRUSS

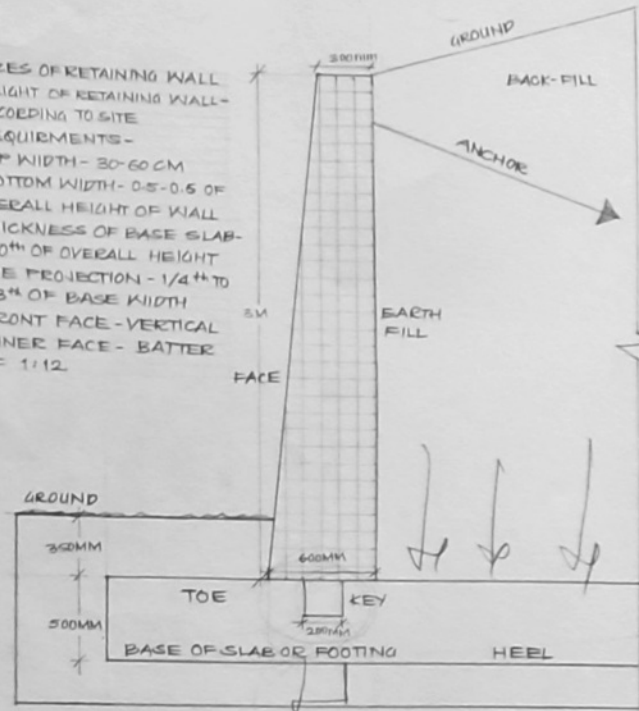
VIEW
SCALE - 1:20

NORTH LIGHT TRUSSES

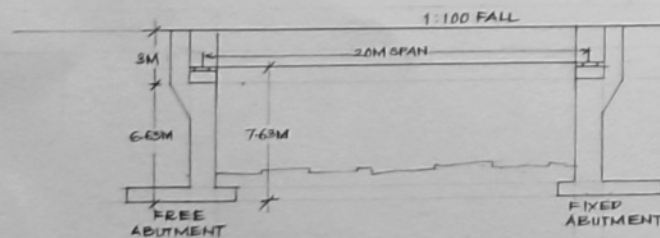
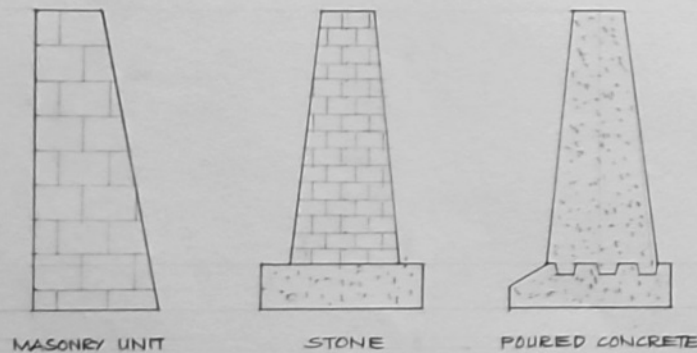


SIGN/STAMP	SHEET NO.	NAME - VAISHNAVI GUNVANT KARBHARI	ROLL NO.
	04	BUILDING CONSTRUCTION AND TECHNOLOGY	07
	SCALE - 1:50, 20	COLLEGE NAME - GSSM'S COLLEGE OF	SEM V
	2023 - 2024	ARCHITECTURE, SOLAPUR.	TY B ARCH

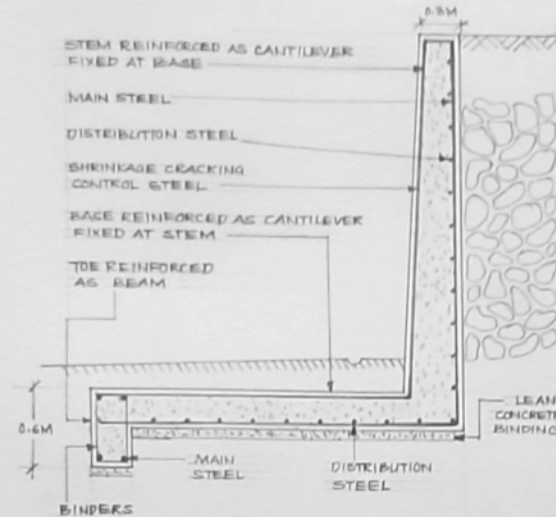
SIZES OF RETAINING WALL
 HEIGHT OF RETAINING WALL -
 ACCORDING TO SITE
 REQUIREMENTS -
 TOP WIDTH - 30-60 CM
 BOTTOM WIDTH - 0.5-0.6 OF
 OVERALL HEIGHT OF WALL
 THICKNESS OF BASE SLAB -
 $1/10^{th}$ OF OVERALL HEIGHT
 TOE PROJECTION - $1/4^{th}$ TO
 $1/3^{th}$ OF BASE WIDTH
 FRONT FACE - VERTICAL
 INNER FACE - BATTER
 OF 1:12



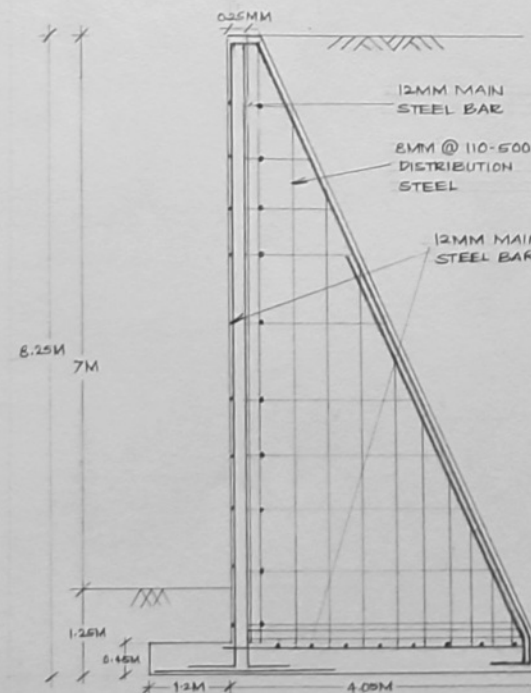
BASIC COMPONENT PARTS OF RETAINING WALLS
 SCALE - 1:20



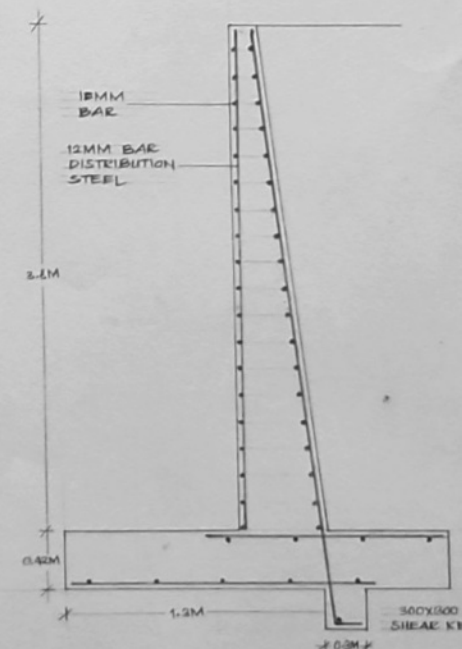
BRIDGE ABUTMENT
 SCALE - 1:200



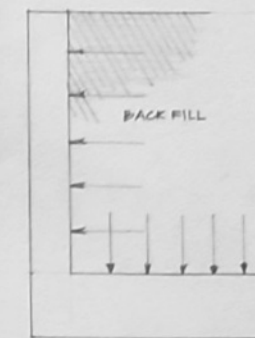
TYPICAL REINFORCED CONCRETE CANTILEVER
 RETAINING WALLS
 SCALE - 1:20



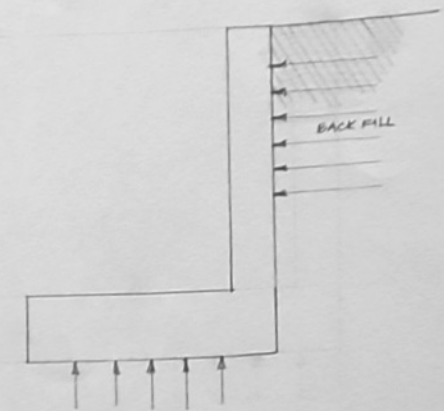
CROSS SECTIONAL DETAIL OF WALL THROUGH COUNTERFORT
 SCALE - 1:50



T-SHAPE CANTILEVER WALL WITH
 SHEAR KEY
 SCALE - 1:200

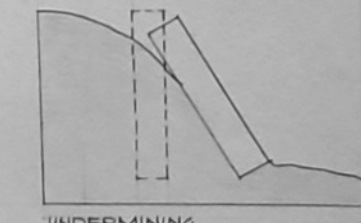
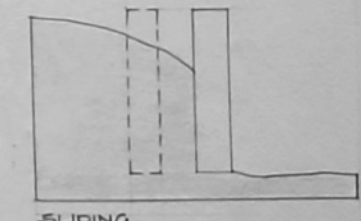
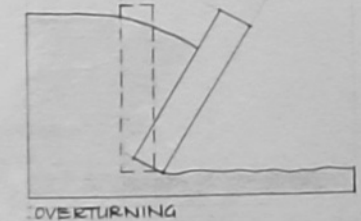


CANTILEVER RETAINING WALL
 WITHOUT TOE



CANTILEVER RETAINING WALL
 WITHOUT HEEL

L-SHAPE CANTILEVER RETAINING WALL WITH TOE BEAM,
 WITHOUT TOE SLAB, WITHOUT HEEL SLAB.

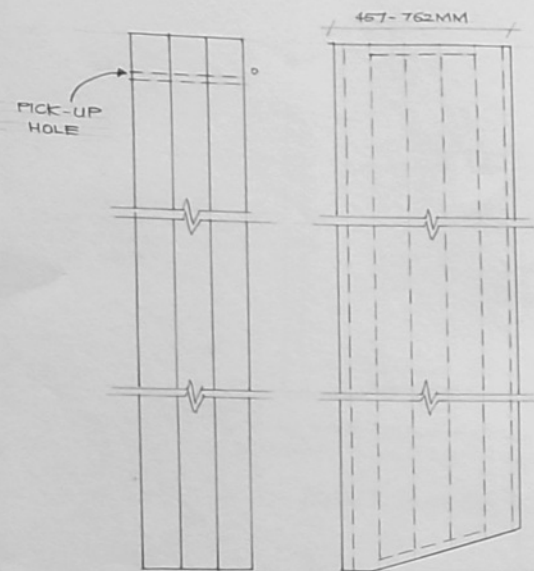


CAUSES OF FAILURE OF
 RETAINING WALL

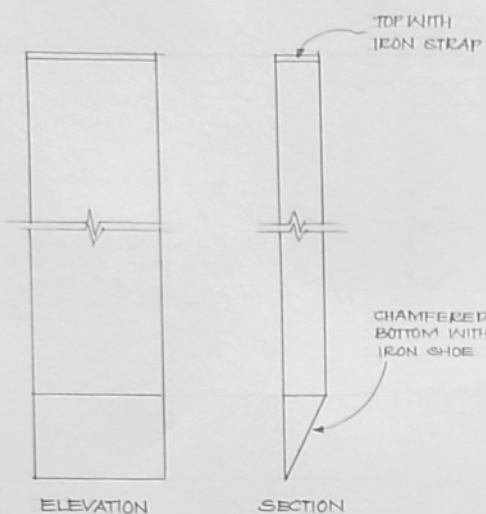
RETAINING WALL



SIGN/STAMP-	SHEET NO -	VAISHNAVI GUNVANT KARBHARI.	ROLL NO. -
	01	BUILDING CONSTRUCTION AND TECHNOLOGY	08
	SCALE - 1:200	SSSM'S COLLEGE OF	BARCH. 2 nd YR
	DATE - 01/02/24	ARCHITECTURE, SOLAPUR.	SEM IV

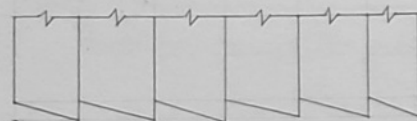
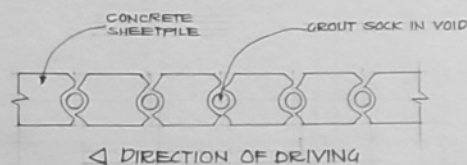


SIDE FRONT

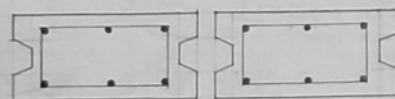


ELEVATION SECTION

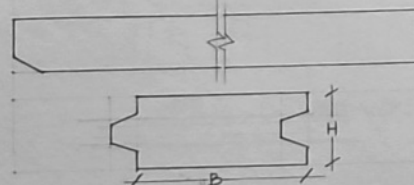
WOODEN SHEET PILES.



CONCRETE PILE



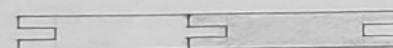
CONCRETE FLAT SHEET PILE



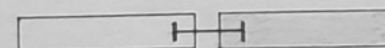
PLANKS



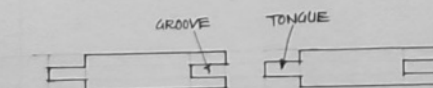
WAKEFIELD PILES



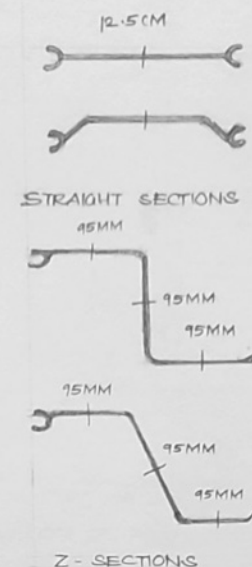
TONGUE AND GROOVE PILES



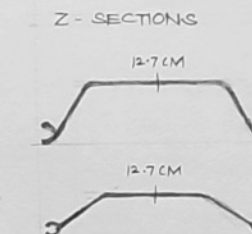
SPLINED PILES.



TIMBER PILE



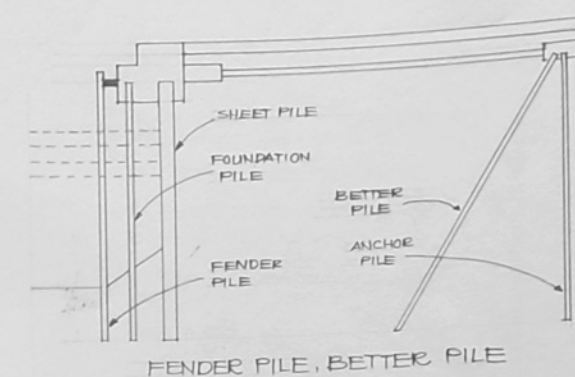
STRAIGHT SECTIONS



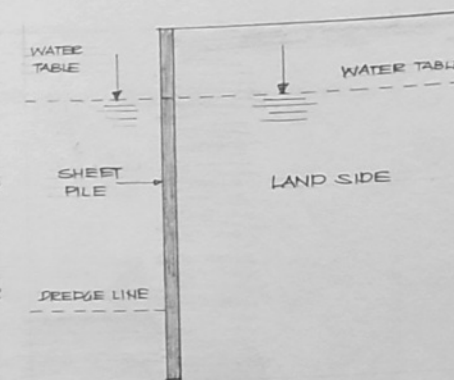
Z-SECTIONS

ARCHWED SECTIONS
STEEL PILE

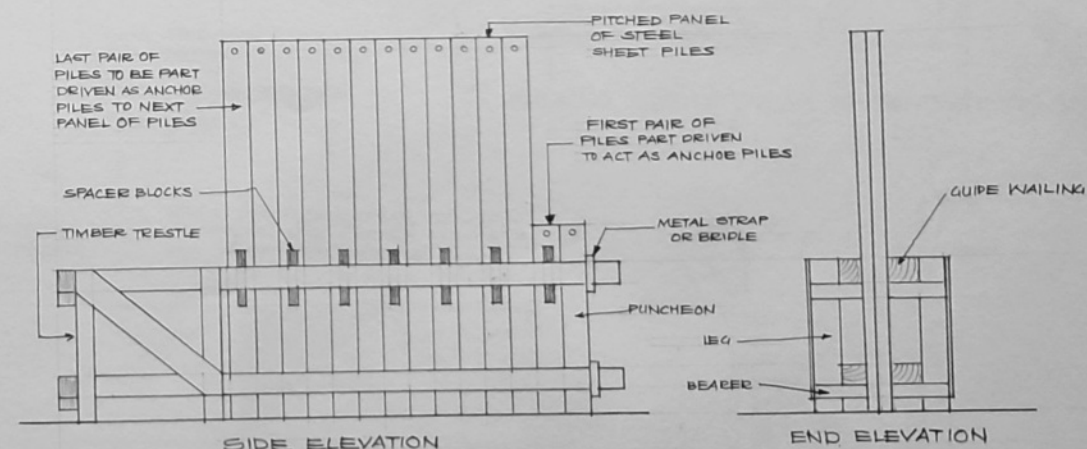
RCC SHEET PILES
THEY ARE USED FOR
PERMANENT WORK IN
CROSS SECTION. THEY
ARE USUALLY RECTANGLE
AND EITHER TONGUE &
GROOVED OR FEATHER
STRATA.
THE FEET ARE CHADED
TO RECEIVE DRIVING
HELMET IN THE SOIL IS
WATERLOUGHED & THE
DILING SYSTEM IS
REQUIRED TO BE WATER
TIGHT. CEMENT GROUT
IS POURED DOWN. THE
JOINTS TO EFFECT A
SEAL. COMMONLY USED
IN PERMANENT RIVERS
EMBANKMENTS



FENDER PILE, BETTER PILE



SHEET PILE INSTALLATION

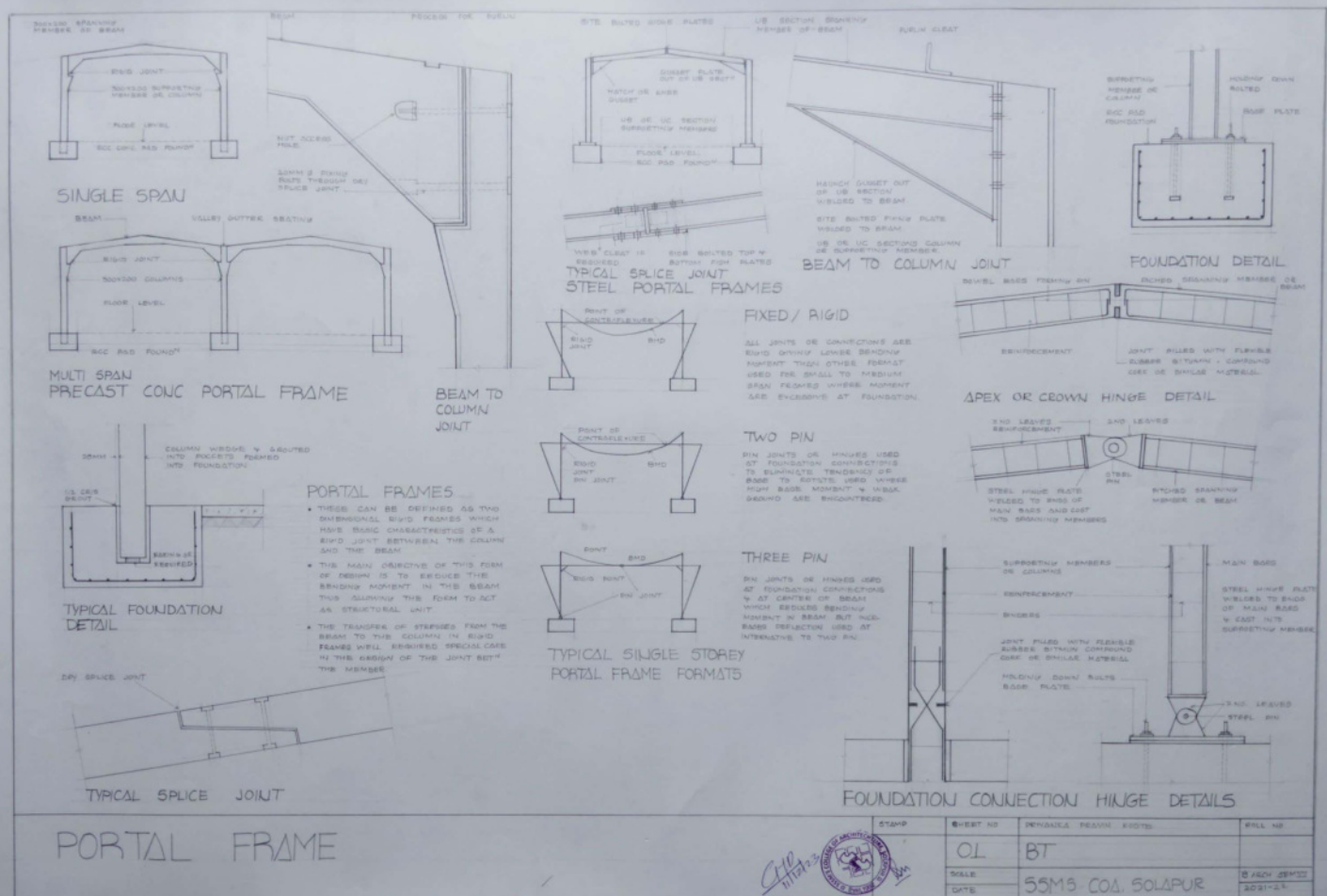


TYPICAL INSTALLATION DETAILS -
SCALE - 1 : 40

SHEET PILE



SIGN/STAMP-	SHEET NO.	VAISHNAVI GUNVANT KARBHARI.	ROLL NO. -
	02	BUILDING CONSTRUCTION AND TECHNOLOGY	08
	SCALE - 1:10,20	SSSM'S COLLEGE OF	BARCH, 3 rd YR
	DATE - 01/3/24	ARCHITECTURE, SOLAPUR	SEM VI



	STAMP	SHEET NO	PERGANA P. 1027E	ROLL NO
		02	BT	12
	SOLD	55M5. CoA GOLAPUR		REACH DEM ST
	DATE			2017-23