

© COPYRIGHT  
THIS DRAWING AND DESIGN ARE CONFIDENTIAL AND THE PROPERTY OF KANTEY & TEMPLER AND MAY NOT BE DISCLOSED TO THIRD PARTY, COPIED/REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF KANTEY & TEMPLER.

- GENERAL NOTES
1. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE ANY WORK BEGINS.
  2. ALL MATERIALS AND MANUFACTURE ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARDISED SPECIFICATION, SABS 1200 AND THE STANDARDS REFERRED TO THEREIN.

1:3 CEMENT MORTAR  
(60mm THICK – MINIMUM)

MANHOLE COVER SABS 558/1973  
TYPE 2A IN ROADWAYS TYPE 4A  
ELSEWHERE POLYMER CONCRETE

SABS APPROVED STEP IRONS  
300 c/c (VERT & HOR)

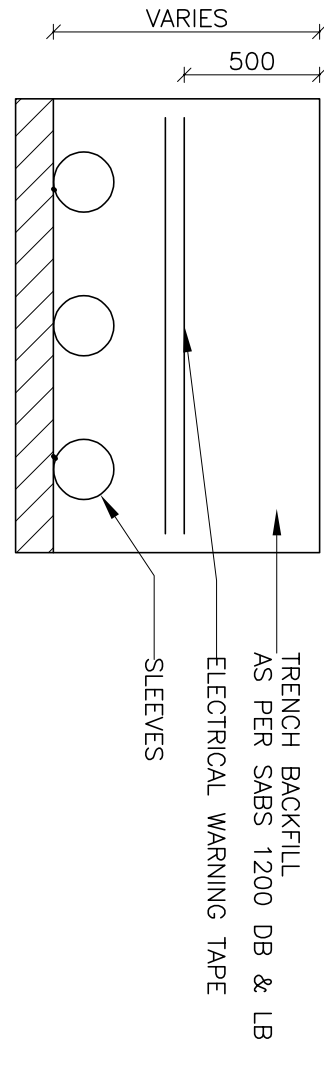
230mm BRICKWORK

110ø uPVC SLEEVE PIPES

25MPa CONCRETE WITH  
MESH REF. 395

### TYPICAL SECTION THROUGH CABLE MANHOLE

SCALE: 1 : 20



### TYPICAL SLEEVE ARRANGEMENT FOR ELECTRICAL CABLES

SCALE: 1 : 20


### SADDLE DETAIL

SCALE: 1 : 10

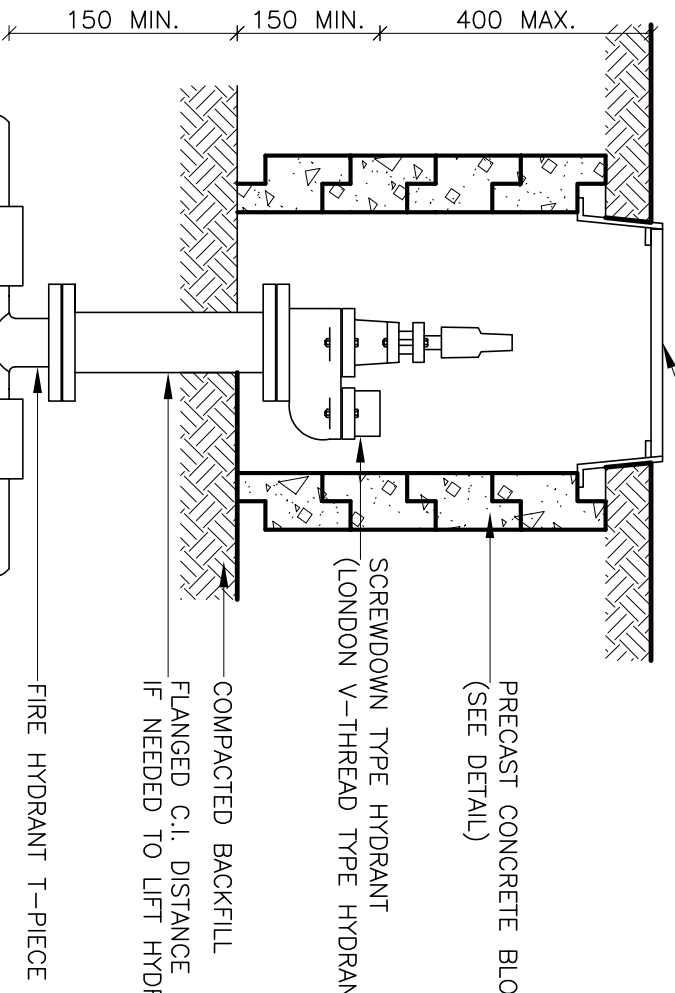
TYPE 5 THERMO PLASTIC  
FIRE PROTECTANT BOX  
(300x275x150)  
WITH HINGED LID

PRECAST CONCRETE BLOCK  
(SEE DETAIL)

SCREWDOWN TYPE HYDRANT  
(LONDON V-THREAD TYPE HYDRANT)

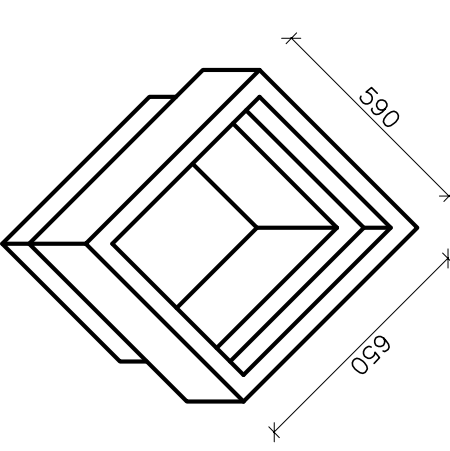
FLANGED C.I. DISTANCE PIECE  
IF NEEDED TO LIFT HYDRANT

COMPACTED BACKFILL



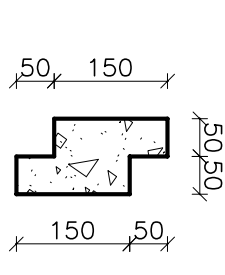
### FIRE HYDRANT CHAMBER

SCALE: 1 : 10



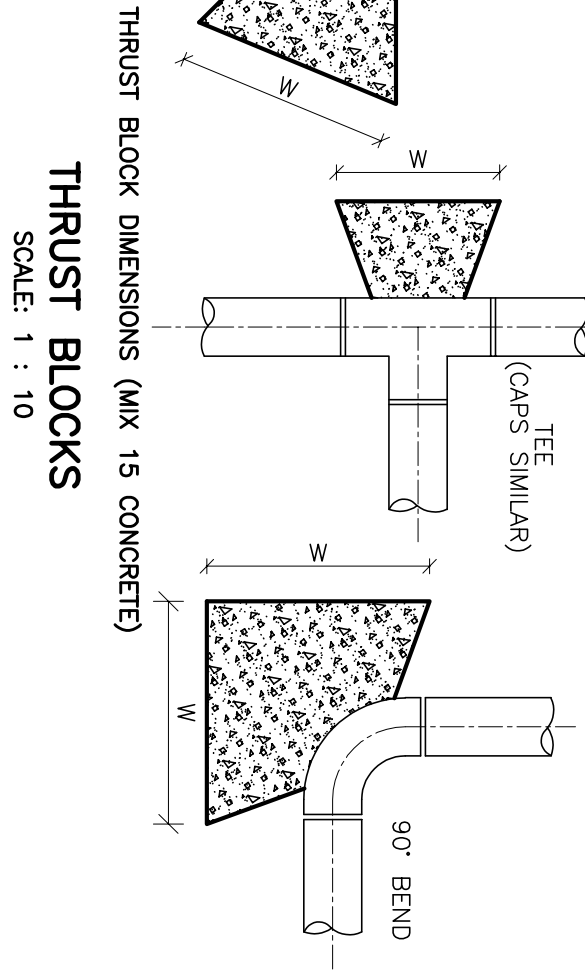
### PRECAST CONCRETE BLOCK

SCALE: 1 : 20



### SECTION THROUGH PRECAST CONCRETE BLOCK

SCALE: 1 : 10



### THRUST BLOCKS

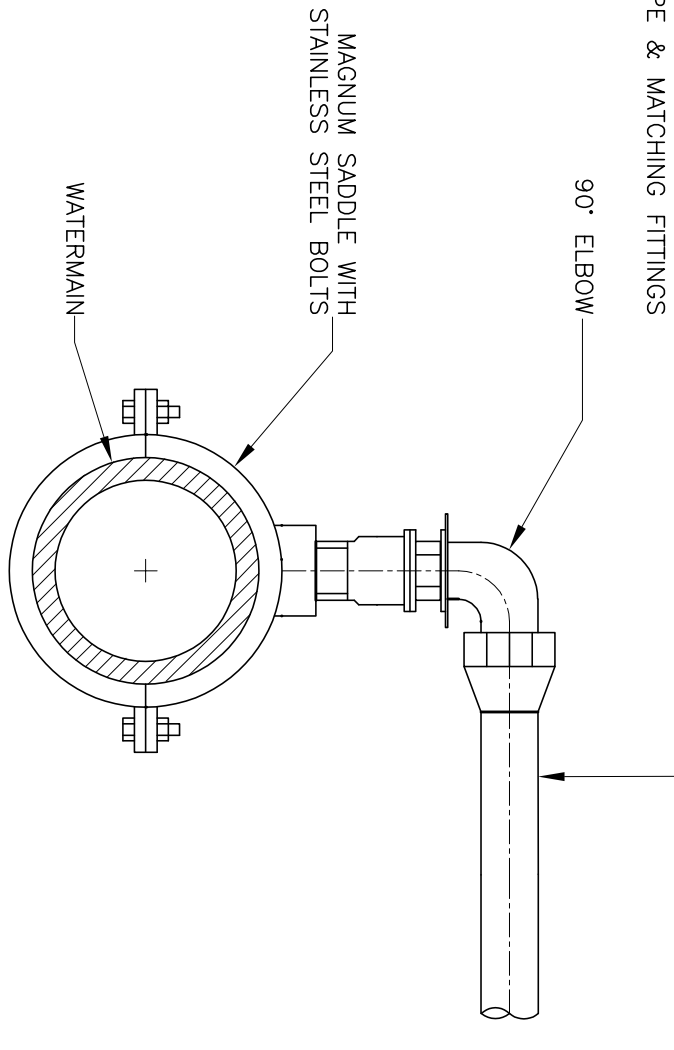
SCALE: 1 : 10

THRUST BLOCK DIMENSIONS (MIX 15 CONCRETE)											
PIPE DIA. (ø) mm	50	75	100	125	150	200	250	300			
FOR BENDS & TEES:											
DEPTH (d1) mm	170	235	340	425	510	680	850	1020			
WIDTH (w) mm	230	345	460	575	690	920	1150	1380			
45° BEND	185	275	370	460	550	735	920	1100			
22½° BEND	95	140	185	230	275	370	460	550			
11¼° BEND	50	70	95	115	140	185	230	275			
FOR GATE VALVES:											
KEY DEPTH (d2) mm	100	100	250	350	450	600	700	900			
BLOCK DEPTH (b) mm	100	150	150	150	150	200	250	300			

### TYPICAL DETAILS FOR WATER MAINS

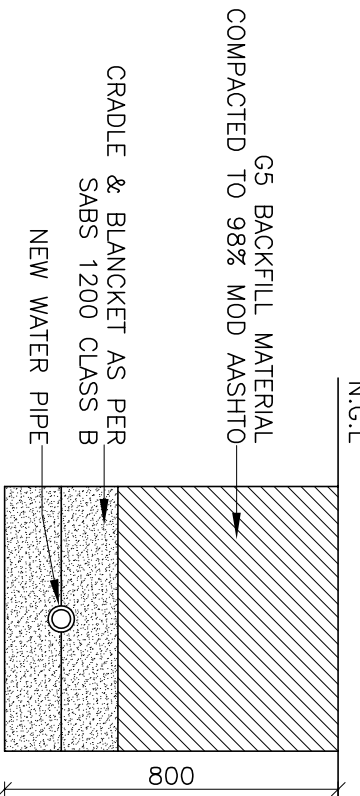
CONSULT PRODUCT SPECIFICATIONS FOR REQUIREMENTS

SCALE: 1 : 5



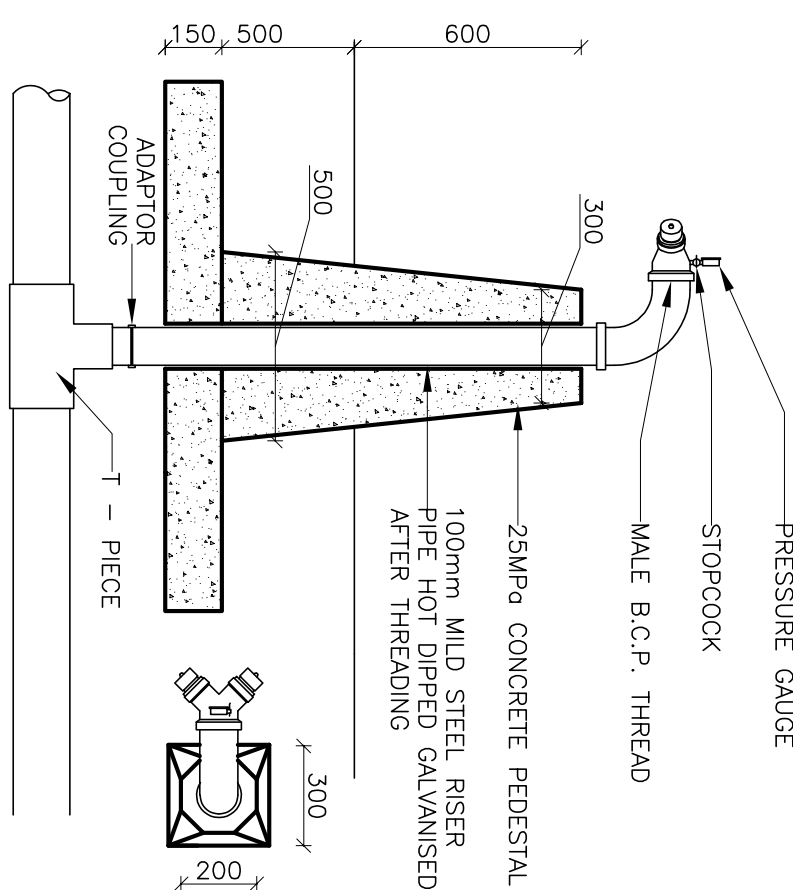
### TYPICAL SECTION THROUGH NEW WATER LINE

SCALE: 1 : 20



### DOUBLE HEADED BOOSTER CONNECTOR

SCALE: 1 : 20

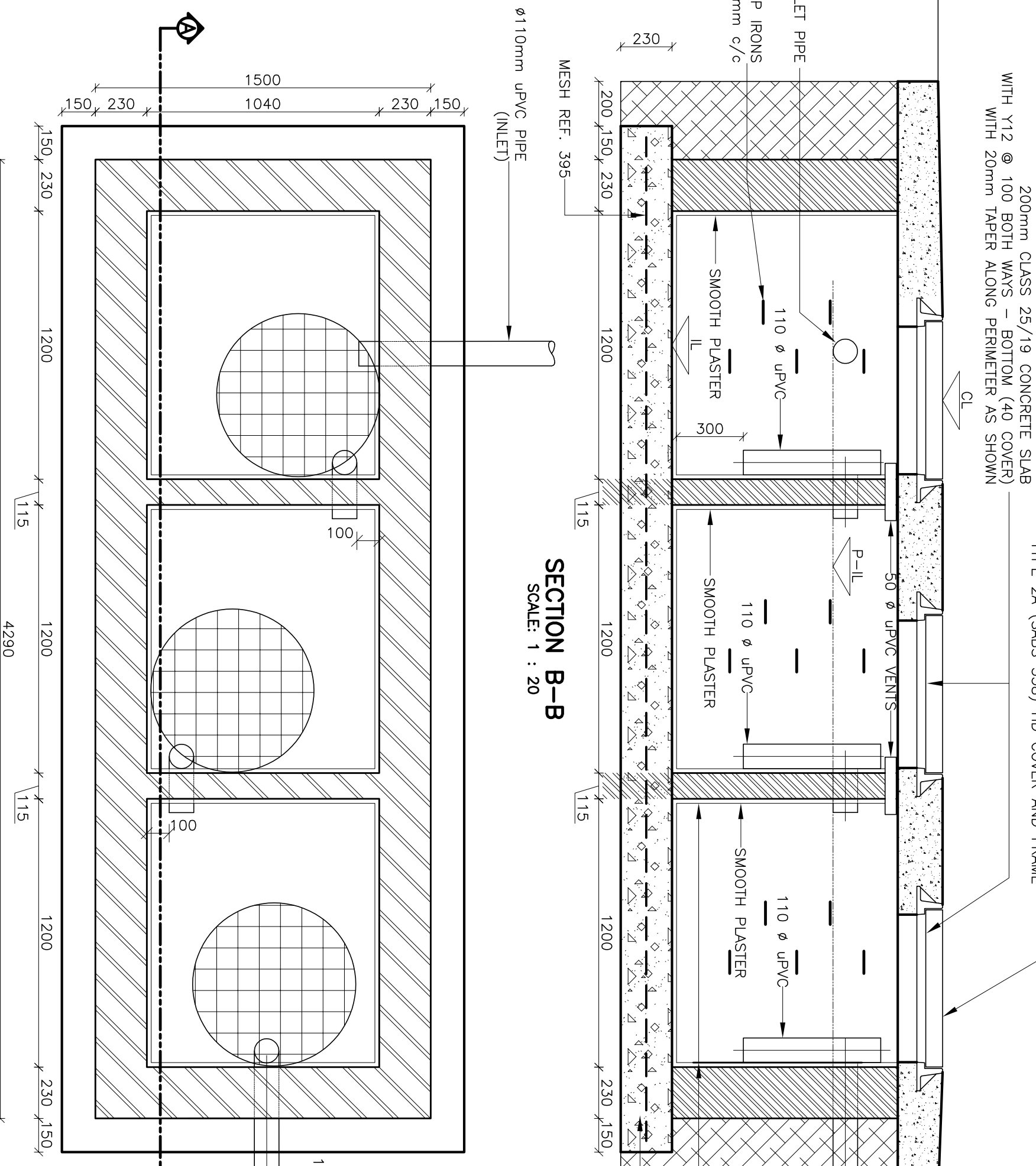


NOTE: 1. 20mm SMOOTH CEMENT PLASTER  
WITH DURALTEX OR SIMILAR AND  
AGENT.  
TWO COATS ARE DURALTEX OR  
SIMILAR APPROVED WATERPROOFING  
AS PER MANUFACTURER'S SPECS

CLASS 20/19 CONCRETE

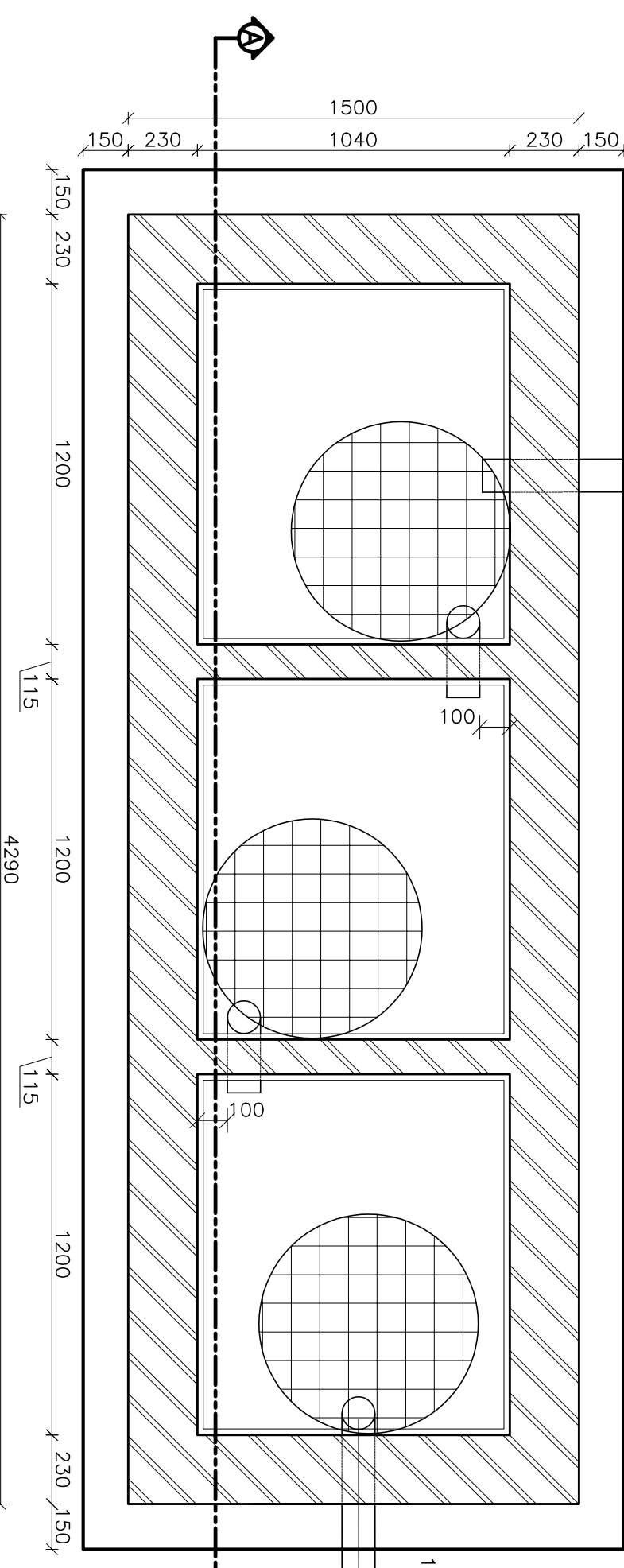
### SECTION B-B

SCALE: 1 : 20



### PLAN LAYOUT OF SEPARATOR

SCALE: 1 : 20



### WATER NOTES

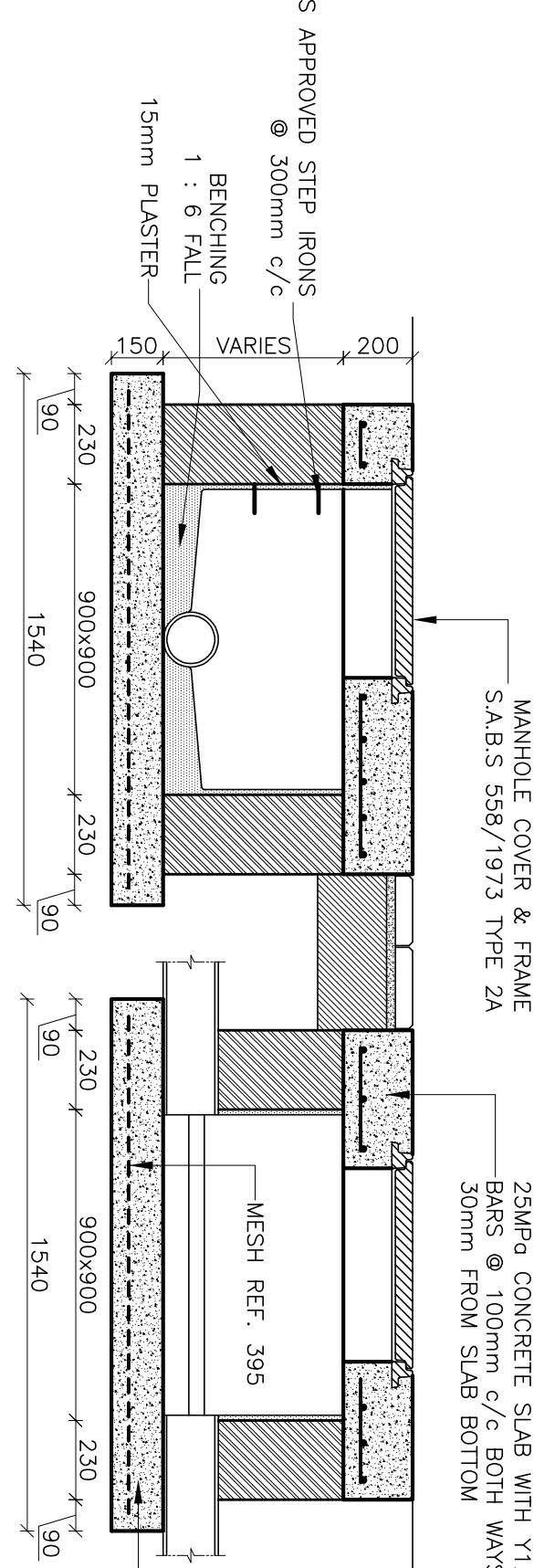
1. STEEL FABRICATED ITEMS TO BE HOT  
DIPPED GALVANIZED FLANGES TO  
BE SIZED TO FIT THE PIPE  
ALL DISTANCE PIECES TO BE SIZED  
& FITTED ON SITE.
2. MINIMUM COVER TO UNDER PIPES TO BE 150mm.
3. INTERNAL WALLS TO BE PLASTERED SMOOTH.

### WATER PIPE SPECIALS

NAME	No.	DESCRIPTION
A	1	75ø uPVC CLASS 12 PIPE
B	1	80ø x 50ø REDUCER ONE END FLANGED
C	2	50ø FLANGED REDUCER PIECE
D	2	50ø A.W.P. ELBOW
E	2	50ø A.W.P. ELBOW
F	1	50ø A.W.P. FLANGED STRAINER
G	1	50ø x 80ø REDUCER BOTH ENDS FLANGED
H	1	50ø x 80ø REDUCER BOTH ENDS FLANGED
I	1	80ø A.W.P. TYPED GATE VALVE
J	1	80ø NRY (AWK) SWING VALVE, CLOSED BUSHINGS)
K	1	80ø DISTANCE PIECE WITH PUDDLE
L	1	50ø STEEL TO uPVC ADAPTOR

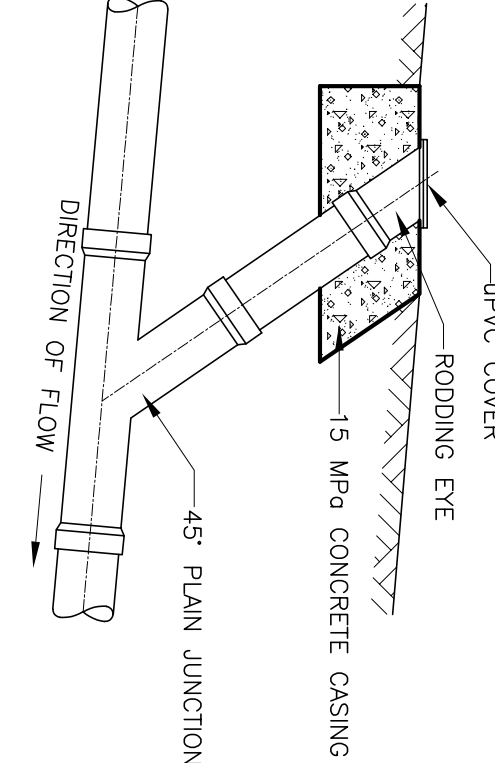
### TYPICAL SEWER MANHOLE

SCALE: 1 : 20



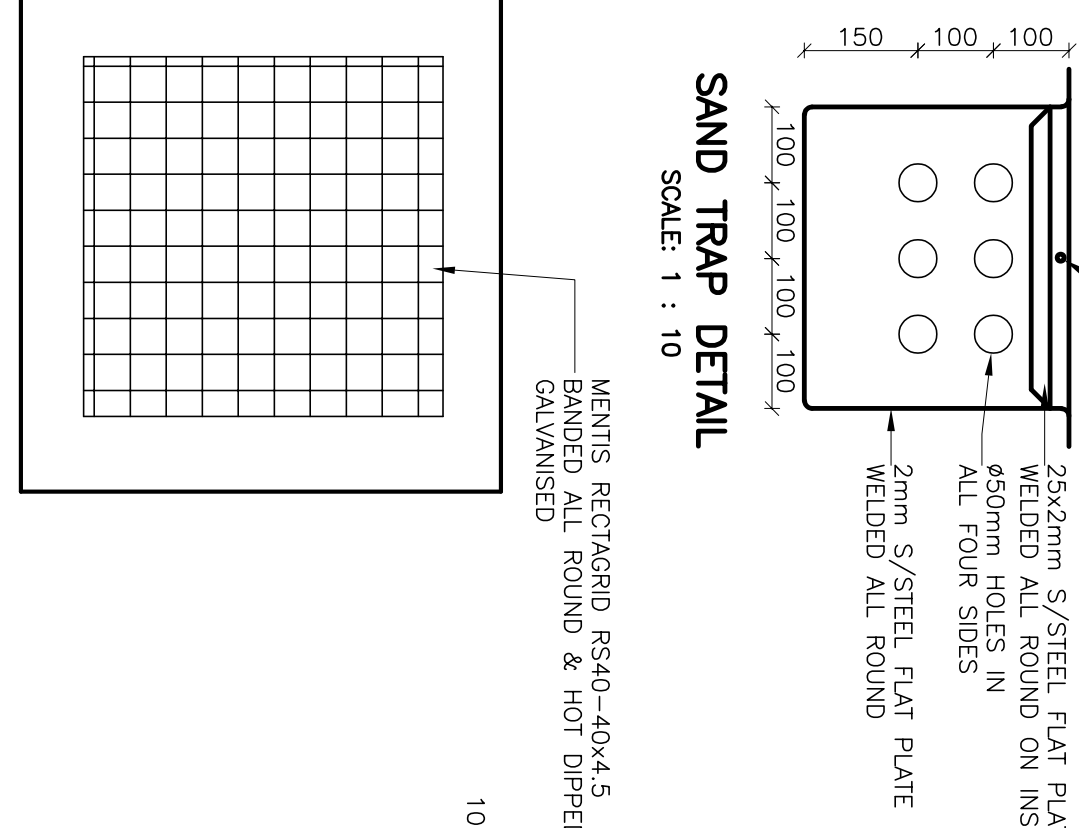
### RODDING EYE DETAIL

SCALE: 1 : 20



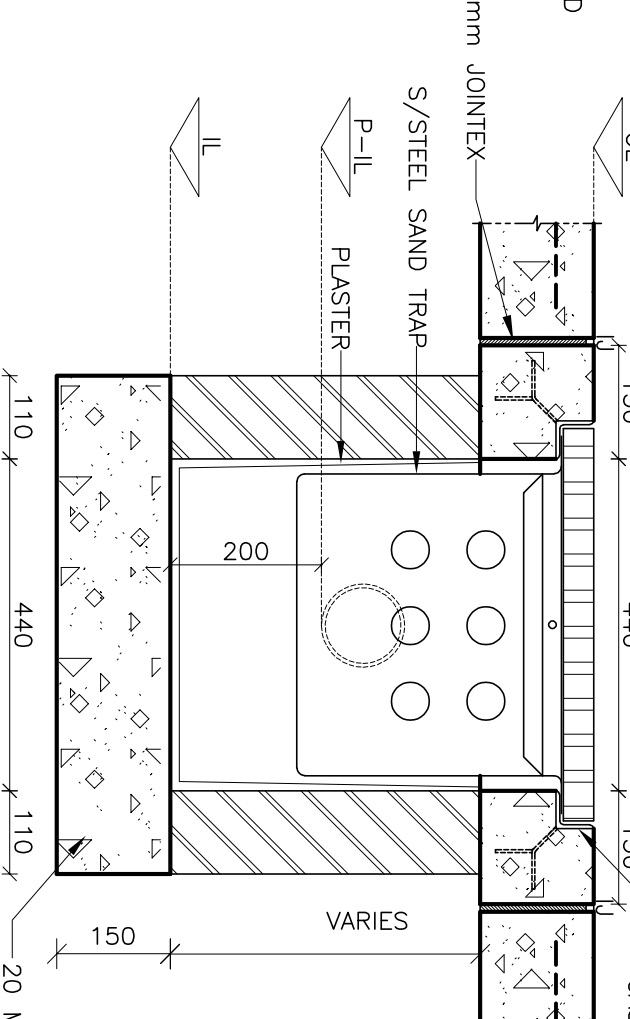
### SAND TRAP DETAIL

SCALE: 1 : 10



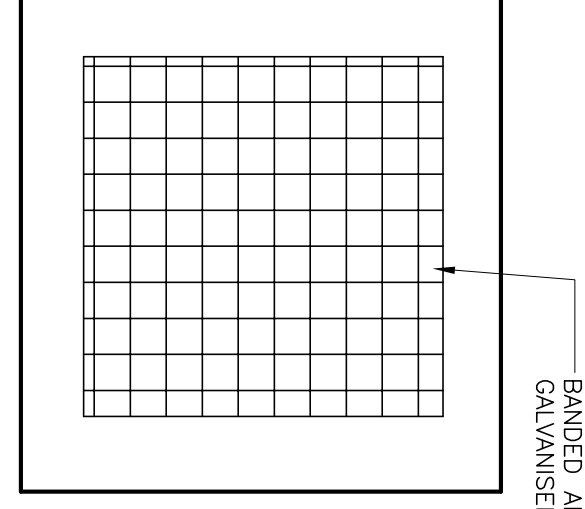
### TYPICAL SECTION THROUGH CATCHPIT

SCALE: 1 : 10



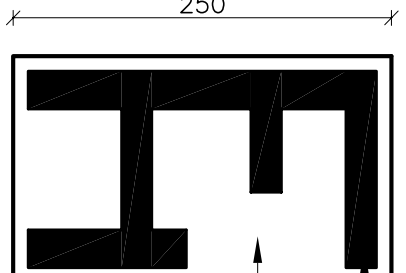
### TYPICAL CATCHPIT DETAIL

SCALE: 1 : 10



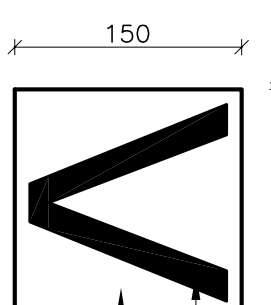
### FIRE HYDRANT MARKING

SCALE: 1 : 5



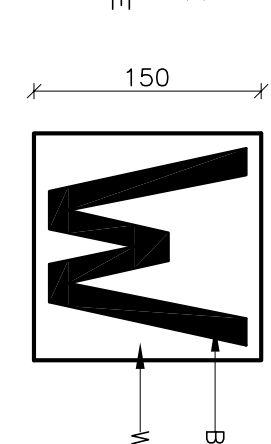
### VALVE MARKING

SCALE: 1 : 5



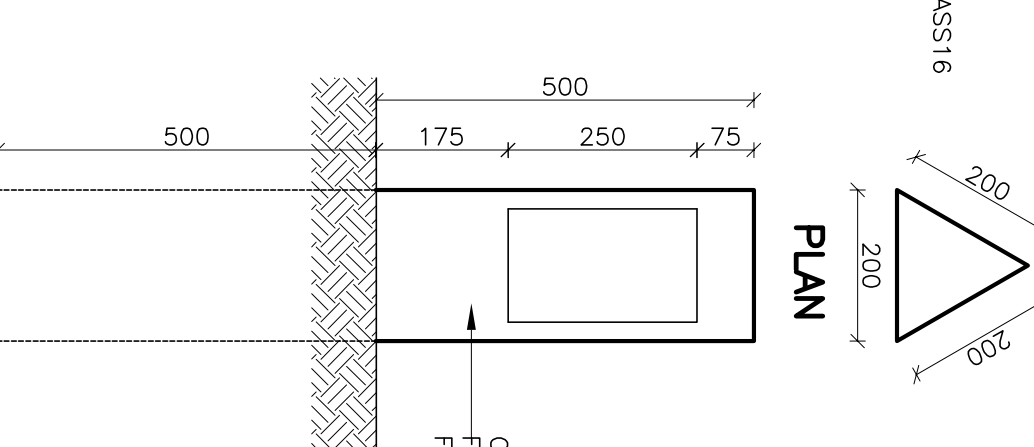
### WATER PIPE MARKING

SCALE: 1 : 5



### FIRE HYDRANT WATER PIPE & GATE VALVE MARKER POLES

SCALE: 1 : 10



CIVIL SERVICES  
SECTIONS & DETAILS

DRAWN No. GS211BA-CE-003

CLIENT  
**Garden Route**  
DISTRICT MUNICIPALITY

PROJECT  
NEW FIRE STATION FOR  
GARDENROUTE DISTRICT  
MUNICIPALITY  
ERF 22494/22495  
GEORGE

**K&T**  
KANTEY & TEMPLER  
CONSULTING ENGINEERS  
Engineering & Urban Development

P O BOX 458 GEORGE SOUTH AFRICA 6530 TEL: +27 44 874 2177

No	DESCRIPTION	DRAWN	DATE	APP
A	ISSUE FOR TENDER	TH	30-03-22	NA
INITIALS	SIGN	DATE		
DESIGNED	T.H	30-Mar-22		
DRAWN	T.H	30-Mar-22		
PROJECT ENG.	C.G.A	30-Mar-22		
APPROVED	C.G.A	30-Mar-22		