

CLIENT



10400 Rodgers Road
Houston, Texas 77070
Phone: 281-374-8644
Fax: 281-374-8992

HV Main Contractor



STRUCTURAL ENGINEER



ARCHITECT

Henry J Lyons

LEGEND

NOTES

DISCIPLINE



PROJECT

ESSDUB98
KISHOGE 110KV SUBSTATION

Rev	Date	Description	By	Ckd
P03	12.04.2022	ISSUED FOR PLANNING	KB	HF

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Drawn by IC	Checked by HF	Date 01-12-2021
Scale (@ A1) AS INDICATED	Status code S1	Project number 21_100

Drawing Title
**MANHOLE DETAILS
SHEET 1**

Drawing Number
(Project Code-Originator-Volume-Level-Type-Role-Sheet no.)
ESSDUB98-CSE-01-XX-DR-C-3103 **P03**

MANHOLE COVER & FRAME TO COMPLY WITH EN124 & BS7903 (ALL CLASS D400 COVERS SHALL HAVE MIN. FRAME DEPTH 100-150mm) MIN. OPE. Ø600mm

1 No. COURSE MIN. 3 No. COURSES MAX OF CLASS B ENGINEERING BRICKS SET IN M30 MORTAR

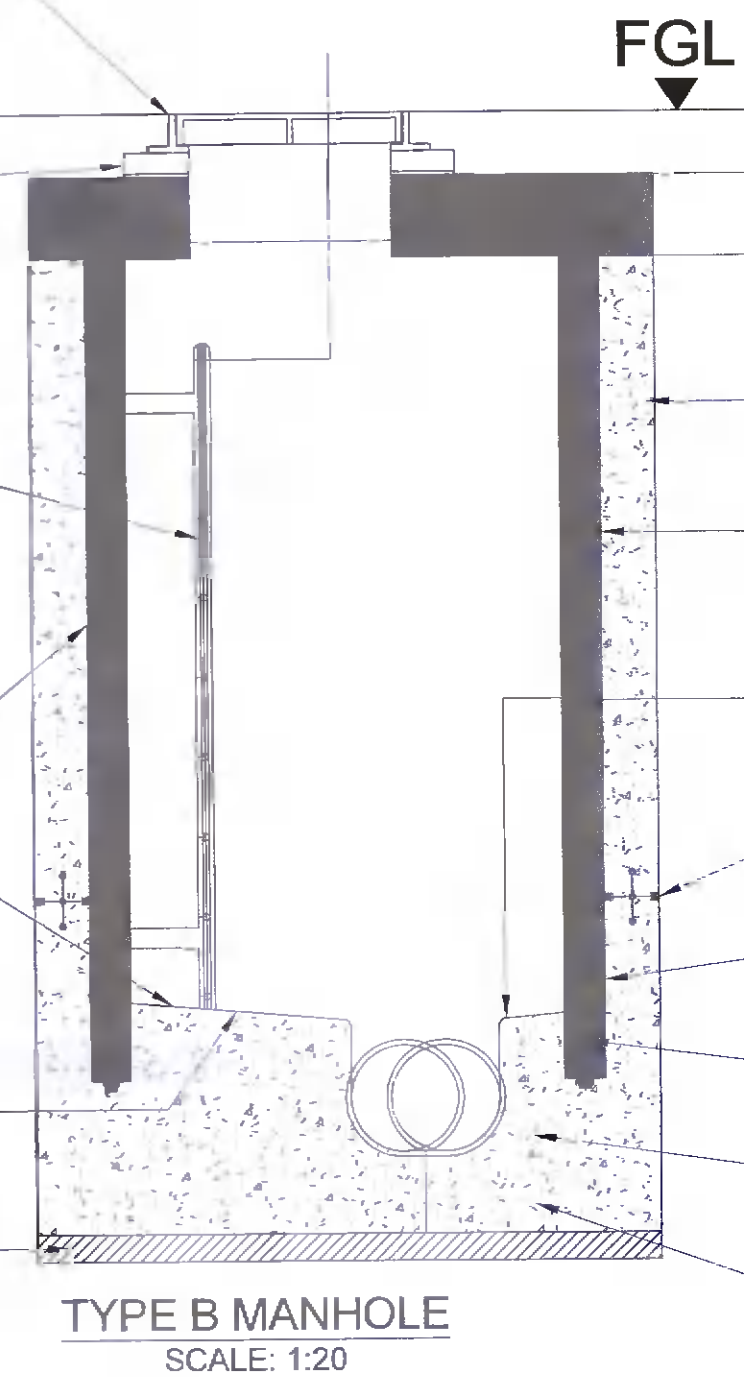
MANHOLE STEPS TO COMPLY WITH IS EN 13101, TYPE D, CLASS 1. GALVANISED MILD STEEL & PLASTIC ENCAPSULATED. STEPS ARE REQUIRED IN MANHOLES UP TO A GROUND TO PIPE SOFFIT DEPTH OF LESS THAN 3.0m. MANHOLE LADDERS ARE REQUIRED FOR MANHOLES WITH A DEPTH IN EXCESS OF 3.0m & ARE TO COMPLY WITH IS EN 14396.

ELASTOMETRIC JOINT SEAL TO EN 681

MIN. WIDTH OF BENCHING FOR LANDING TO BE 500mm MIN. WIDTH OF BENCHING OPPOSITE LANDING TO BE 325mm (SEE STD-WW-10)

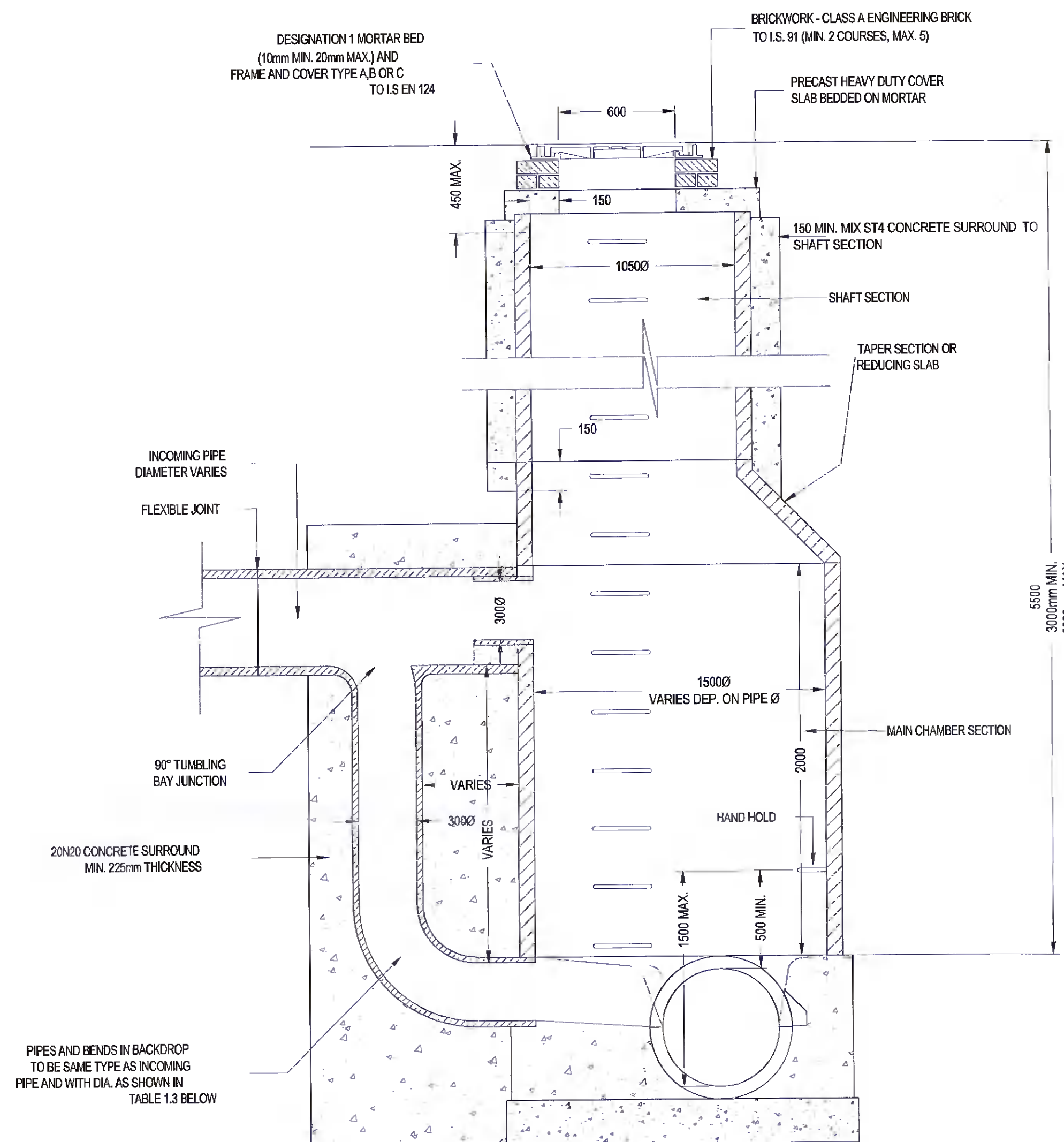
1:3 CEMENT SAND MORTAR WITH STEEL TROWEL FINISH AT A 1:30 SLOPE TOWARDS THE CHANNEL

75mm GRADE C12/15 BLINDING CONCRETE



TYPE B MANHOLE
SCALE: 1:20

- 150mm GRADE C20/25 IN-SITU CONCRETE SURROUND
- PRECAST CONCRETE MANHOLE RINGS TO IS 420 IN CONJUNCTION WITH IS EN 1917 : 2004
- DISTANCE BETWEEN TOP OF PIPE & UNDERSIDE OF PRECAST SECTION TO BE 50mm MIN & 300mm MAX
- CONSTRUCTION JOINT
- BOTTOM PRECAST SECTION TO BE BUILT INTO BASE CONCRETE MINIMUM 75 mm
- FIRST RING SUNK INTO IN-SITU CONCRETE BASE
- REINFORCED GRADE C30/37 BASE/BENCHING
- INVERT SHOULD BE FORMED WITH CAST IN-SITU CONCRETE C25/20 20mm AGGREGATE FINISHED WITH A 1:3 CEMENT SAND MORTAR



CASCADE/BACKDROP MANHOLE: DROP GREATER THAN 0.5m

TABLE 1.3

INCOMING PIPE DIAMETER, mm	BACKDROP PIPE DIAMETER, mm
150	150
225	225
300 - 450	300
525 - 675	450
750 - 900	600
1050 - 1200	750