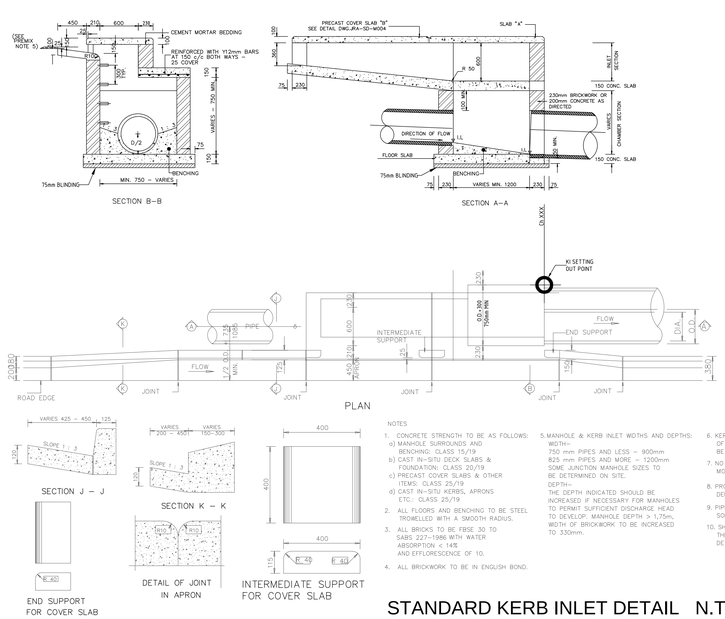


NOTES

1. CONCRETE STRENGTH TO BE AS FOLLOWS:
   a) MANHOLE SURROUNDS AND BENCHING: CLASS 15/19
   b) CAST IN–SITU DECK SLABS & FOUNDATION: CLASS 20/19
   c) PRECAST COVER SLABS & OTHER ITEMS: CLASS 25/19
   d) CAST IN–SITU KERBS, APRONS ETC.: CLASS 25/19
2. ALL FLOORS AND BENCHING TO BE STEEL TROWELLED WITH A SMOOTH RADIUS.
3. ALL BRICKS TO BE FBSE 30 TO SABS 227–1986 WITH WATER ABSORPTION < 14% AND EFFLORESCENCE OF 10.
4. ALL BRICKWORK TO BE IN ENGLISH BOND.
5. MANHOLE & KERB INLET WIDTHS AND DEPTHS:
   WIDTH–
   750 mm PIPES AND LESS – 900mm
   825 mm PIPES AND MORE – 1200mm
   SOME JUNCTION MANHOLE SIZES TO BE DETERMINED ON SITE.
   DEPTH–
   THE DEPTH INDICATED SHOULD BE INCREASED IF NECESSARY FOR MANHOLES TO PERMIT SUFFICIENT DISCHARGE HEAD TO DEVELOP. MANHOLE DEPTH > 1,75m.
   WIDTH OF BRICKWORK TO BE INCREASED TO 330mm.
6. KERB INLET – THE APRON OVER THE LENGTH OF THE KERB INLET AND THE TRANSITION TO BE LOWERED BY 25mm
7. NO BACKFILL TO BE DONE UNTIL MORTAR IS SEVEN DAYS OLD.
8. PROVIDE STEP IRONS WHEN DEPTH > 1,200m
9. PIPES AT INLET AND OUTLET TO BE LAID SOFFIT TO SOFFIT
10. SHOULD THERE BE A CHANGE IN PIPE DIAMETER THE GREATER OF THE TWO SHOULD BE USED TO DETERMINE THE POSITIONING OF THE PIPES.

ALL K.I.'s ARE 4.0m LONG UNLESS OTHERWISE SHOWN

ALL CROSS CONNECTING K.I.'S TO BE MAX. 1.5m DEEP

STANDARD KERB INLET DETAIL N.T.S.

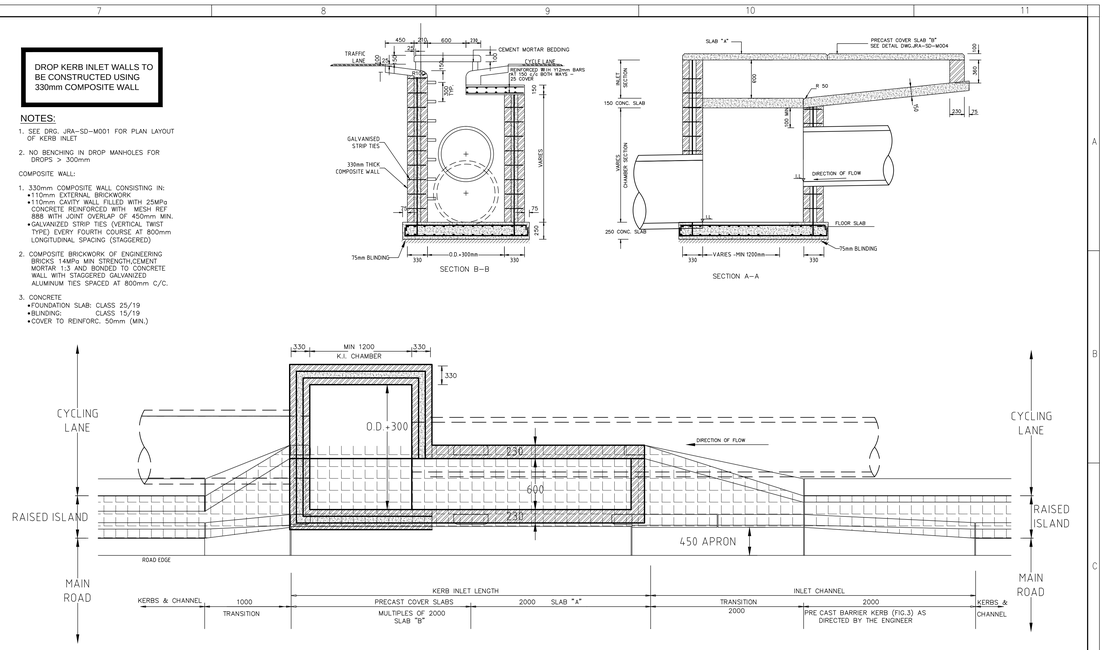
DROP KERB INLET WALLS TO BE CONSTRUCTED USING 330mm COMPOSITE WALL

NOTES:

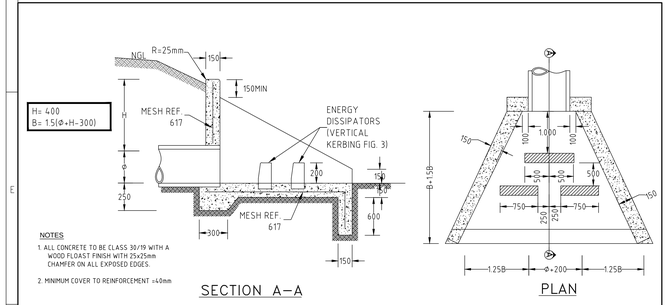
1. SEE DRG. JRA–SD–M001 FOR PLAN LAYOUT OF KERB INLET
2. NO BENCHING IN DROP MANHOLES FOR DROPS > 300mm

COMPOSITE WALL:

1. 330mm COMPOSITE WALL CONSISTING IN:
   - 110mm EXTERNAL BRICKWORK
   - 110mm CAVITY WALL FILLED WITH 25MPa CONCRETE REINFORCED WITH MESH REF 888 WITH JOINT OVERLAP OF 450mm MIN.
   - GALVANIZED STRIP TIES (VERTICAL TWIST TYPE) EVERY FOURTH COURSE AT 800mm LONGITUDINAL SPACING (STAGGERED)
2. COMPOSITE BRICKWORK OF ENGINEERING BRICKS 14MPa MIN STRENGTH,CEMENT MORTAR 1:3 AND BONDED TO CONCRETE WALL WITH STAGGERED GALVANIZED ALUMINUM TIES SPACED AT 800mm C/C.
3. CONCRETE
   - FOUNDATION SLAB: CLASS 25/19
   - BLINDING: CLASS 15/19
   - COVER TO REINFORC. 50mm (MIN.)



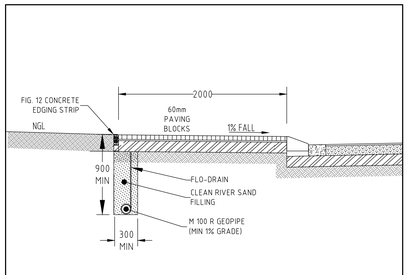
KERB INLET ON RAISED ISLAND DETAIL N.T.S.



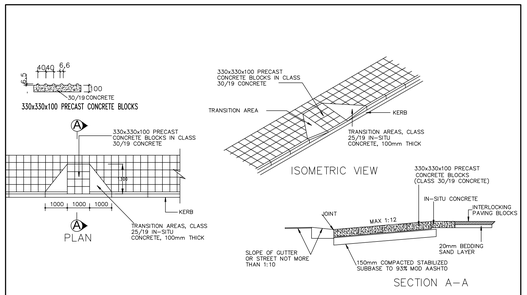
NOTES

1. ALL CONCRETE TO BE CLASS 30/19 WITH A WOOD FLOAST FINISH WITH 25x25mm CHAMFER ON ALL EXPOSED EDGES.
2. MINIMUM COVER TO REINFORCEMENT =40mm

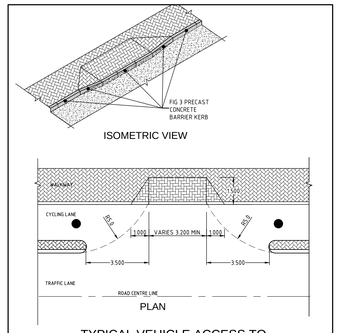
TYPICAL HEAD WALL DETAIL N.T.S.



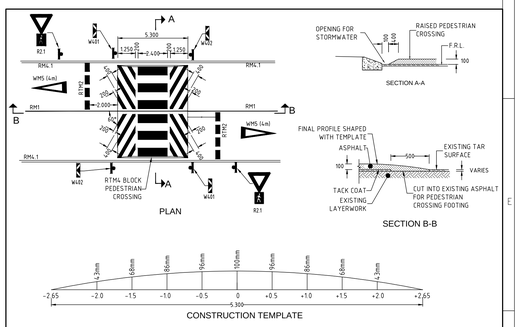
TYPICAL SUB-SURFACE DRAIN Scale N.T.S.



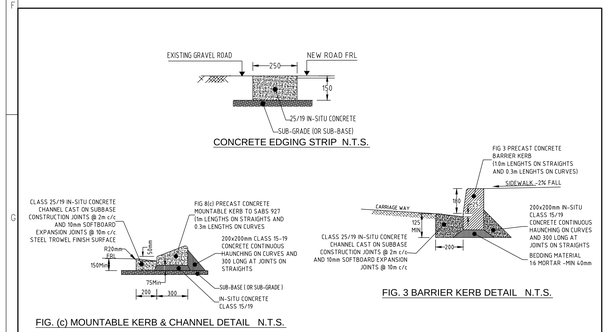
DISABLED RAMP DETAIL N.T.S.

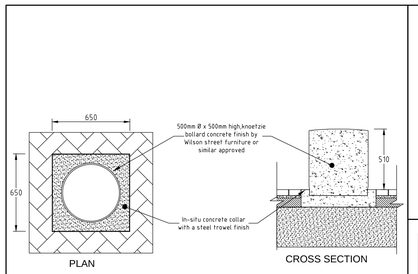


TYPICAL VEHICLE ACCESS TO STAND DETAIL N.T.S.

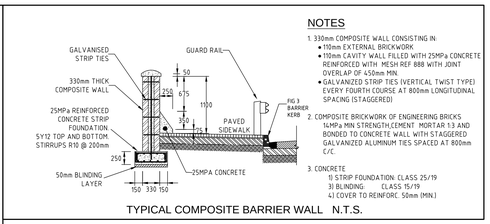


SPEED HUMP DETAIL N.T.S.





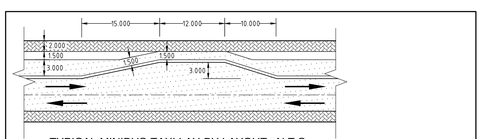
PRECAST CONCRETE BOLLARD DETAIL N.T.S.



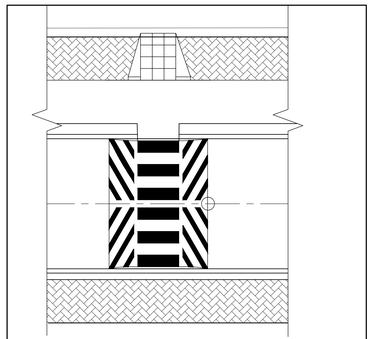
NOTES

1. 330mm COMPOSITE WALL CONSISTING IN:
   - 110mm EXTERNAL BRICKWORK
   - 110mm CAVITY WALL FILLED WITH 25MPa CONCRETE REINFORCED WITH MESH REF 888 WITH JOINT OVERLAP OF 450mm MIN
   - GALVANIZED STRIP TIES (VERTICAL TWIST TYPE) EVERY FOURTH COURSE AT 800mm LONGITUDINAL SPACING (STAGGERED)
2. COMPOSITE BRICKWORK OF ENGINEERING BRICKS 14MPa MIN STRENGTH,CEMENT MORTAR 1:3 AND BONDED TO CONCRETE WALL WITH STAGGERED GALVANIZED ALUMINUM TIES SPACED AT 800mm C/C.
3. CONCRETE
   1) STRIP FOUNDATION: CLASS 25/19
   3) BLINDING: CLASS 15/19
   4) COVER TO REINFORC. 50mm (MIN.)

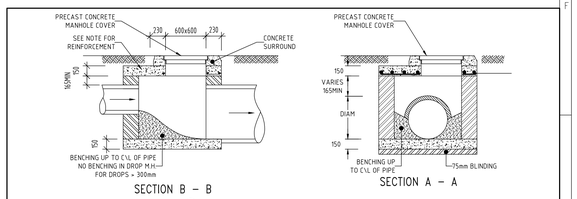
TYPICAL COMPOSITE BARRIER WALL N.T.S.

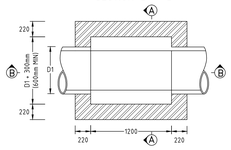


TYPICAL MINIBUS-TAXI LAY-BY LAYOUT N.T.S.



RAMP/SPEED HUMP INTERFACE N.T.S





NOTES

1. CONCRETE
   - ROOF SLAB – CLASS 30/19
   - BASE SLAB –CLASS 30/19
   - BLINDING – CLASS 15/19
   - COVER TO REINFORCEMENT 50mm (MIN.)
2. 150mm REINFORCED CONCRETE ROOF SLAB
   - Y12 @ 150 BOTH WAYS (BOTTOM) WITH 40mm COVER MIN.
3. TYPE 2A CONCRETE MANHOLE COVERS IN ACCORDANCE WITH SABS 558 TO BE USED INSIDE ROAD SURFACE AREA
4. TYPE 6 CONCRETE MANHOLE COVERS IN ACCORDANCE WITH SABS 558 TO BE USED OUTSIDE ROAD SURFACE AREA
5. FLOOR BENCHING AND COVER FRAME SURROUNDS TO BE STEEL TROWELLED
6. ALL BRICKWORKS FOR THE MANHOLES SHALL BE BUILT IN ENGLISH BOND, USING BRICKS OF QUALITY FBSE 30 TO SABS 227–1986, WITH WATER ABSORPTION LESS THAN 14% AND EFFLORESCENCE LESS THAN 10

TYPICAL STORMWATER MANHOLE DETAIL N.T.S.

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CLIENT: JDA Johannesburg Development Agency

PROJECT: DIEPSLOOT UPGRADE INGONYAMA ROAD

DRAWING TITLE: TYPICAL DETAILS

NO.	DATE	REVISION	DRAWN
E	13/06/13	SW REVISED AND RE-ISSUED FOR JRA APPROVAL	A.A.
D	08/05/13	ISSUED FOR JRA APPROVAL	A.A.
C	07/05/13	ISSUED FOR TENDER	A.A.
B	21/02/13	ISSUED FOR JDA APPROVAL	A.A.
A	08/11/12	ISSUED FOR APPROVAL	A.A.

This Drawing is not to be scaled. Figured Dimensions only are to be followed. Additional dimensions, when required, will be provided upon request. Contractors are to check all dimensions before work commences and refer any discrepancy to the Engineer for adjudication.

	SIGNATURE FOR HLANGANANI	DATE
DESIGNED	K. RAMBOROSA	06/11/2012
DRAWN	A. ALANNI	06/11/2012
CHECKED	K. RAMBOROSA	06/11/2012
APPROVED	K. RAMBOROSA	06/11/2012
P. R. ENGINEER		

SCALE: AS SHOWN (100mm On Original)

CONTRACT NUMBER: JDA 046.03.4.2\CN032

REVISION: E

DRAWING NUMBER: JJ771–D–01

DATE OF FIRST ISSUE	SHEET SIZE	DWG STATUS
06 Nov. 2012	A0	PRELIMINARY ✓ / CONSTRUCTION

PROJECT TITLE: DIEPSLOOT UPGRADE INGONYAMA ROAD DETAILS

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