



GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

TYPICAL PLANS FOR ROAD DESIGN

2019

VOLUME 2 OF 2

HEAD OF DEPARTMENT
DEPARTMENT OF ROADS AND TRANSPORT
PRIVATE BAG X83
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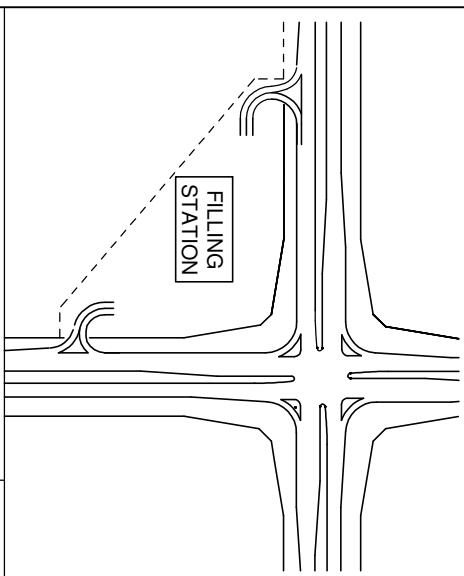
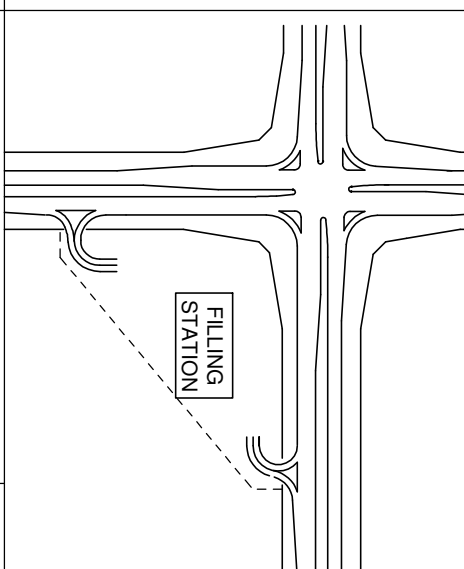
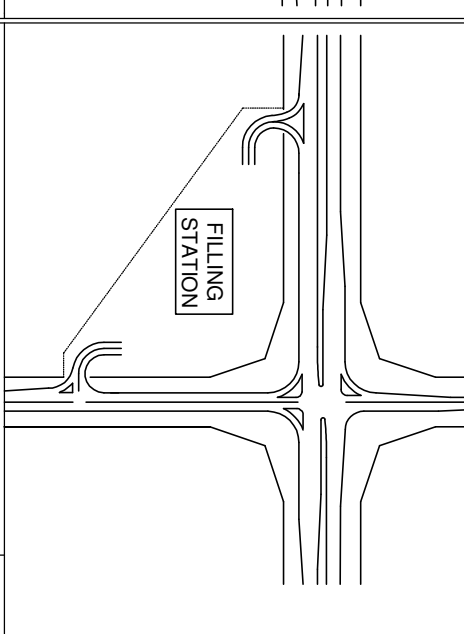
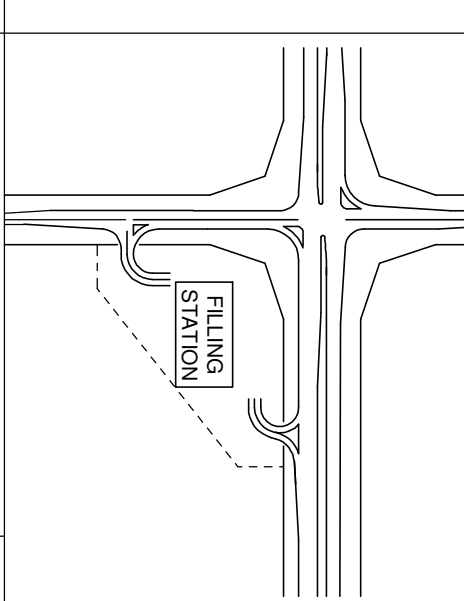
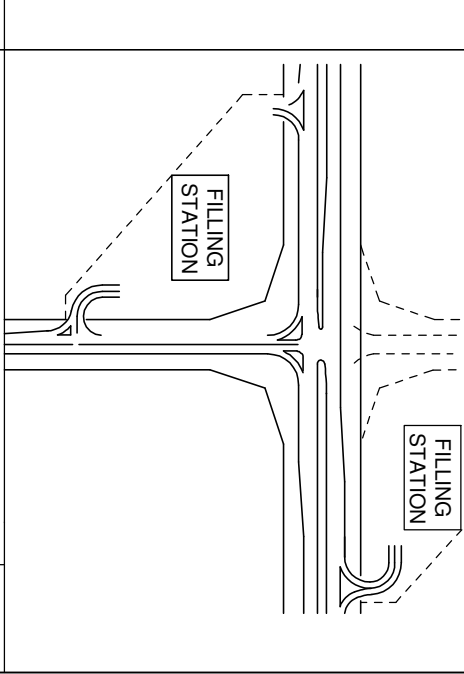
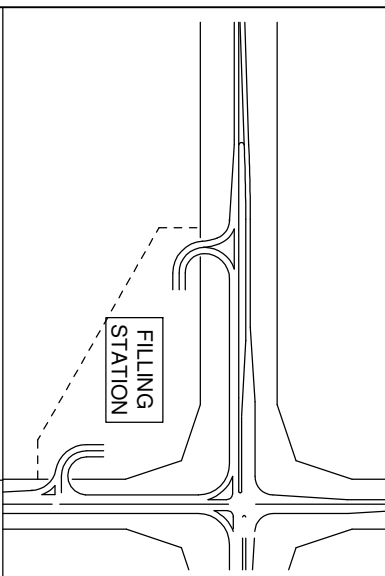
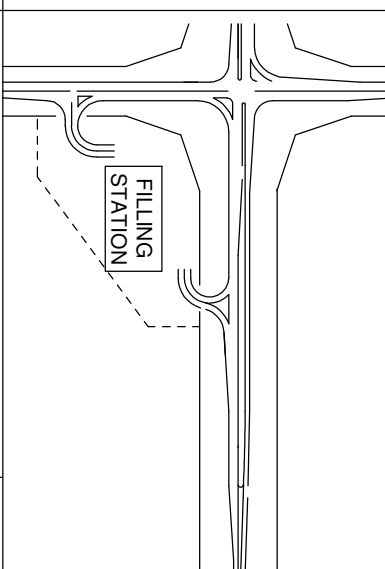
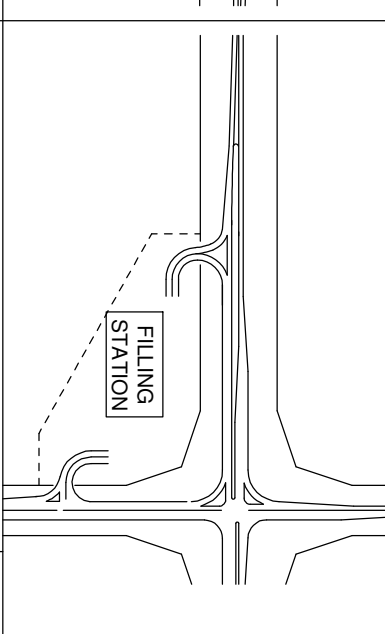
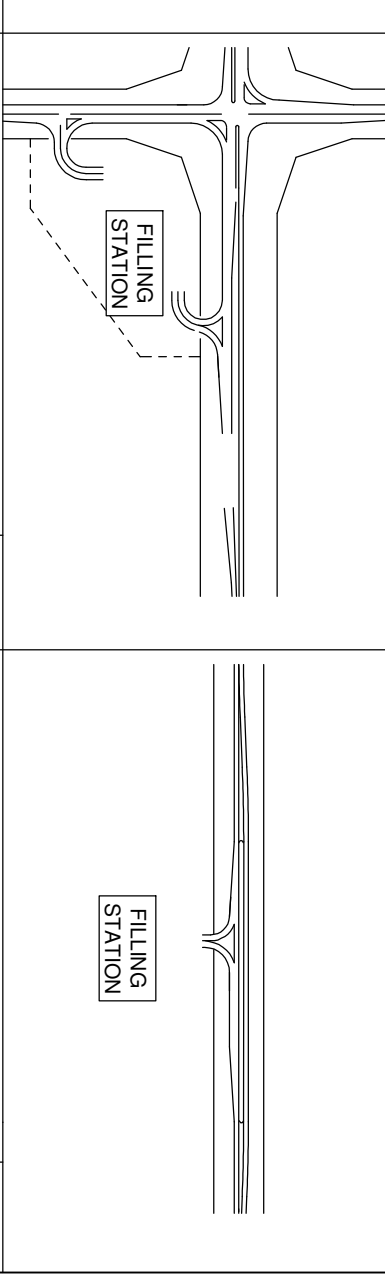
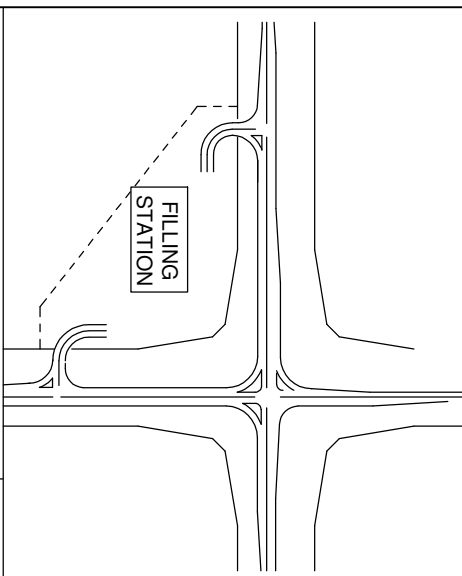
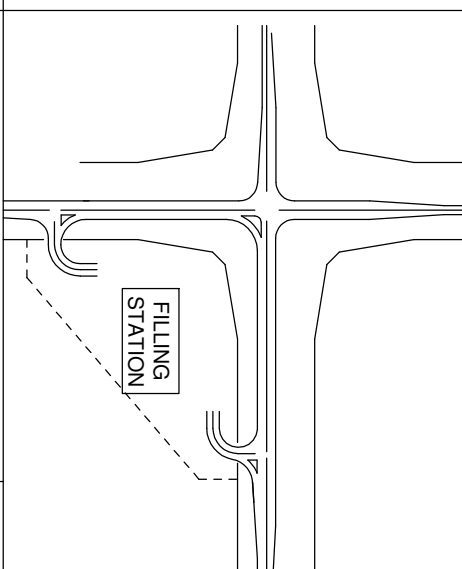
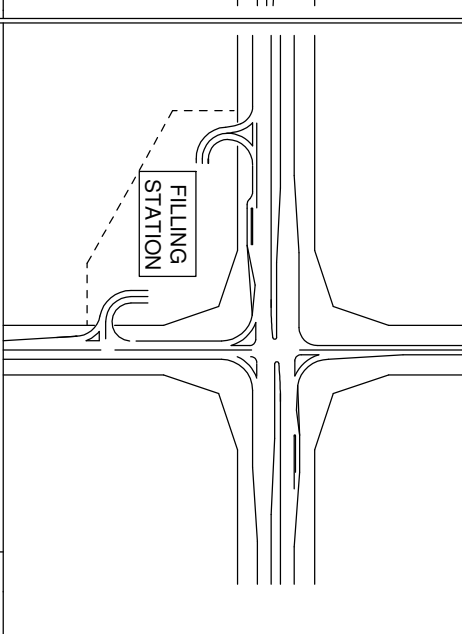
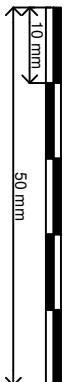
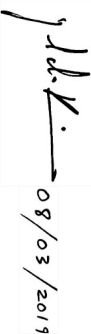
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INTERSECTION OF TWO DUAL-CARRIAGEWAY ROADS				INTERSECTION OF A DUAL-CARRIAGEWAY ROAD AND A SINGLE-CARRIAGEWAY ROAD																							
																											
FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/2	FILLING STATION UPSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/3	FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/4	FILLING STATION UPSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/5	FILLING STATION AT T-INTERSECTION		PLAN No GTP 16/6													
INTERSECTION OF TWO SINGLE-CARRIAGEWAY ROADS WITH A PARTIAL MEDIAN																											
FILLING STATION ACCESS FROM THE EXISTING THROUGH ROAD						FILLING STATION ACCESS FROM WIDENED PORTION OF THE THROUGH ROAD						FILLING STATION NOT NEAR AN INTERSECTION															
																											
FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD						PLAN No GTP 16/7 & GTP 16/8	FILLING STATION UPSTREAM OF THE CONNECTING ROAD						PLAN No GTP 16/9 & GTP 16/10	FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD						PLAN No GTP 16/11 & GTP 16/12	FILLING STATION UPSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/13 & GTP 16/14	FILLING STATION NOT NEAR AN INTERSECTION		PLAN No GTP 16/15	
INTERSECTION OF TWO SINGLE-CARRIAGEWAY ROADS WITHOUT A PARTIAL MEDIAN														NOTES: 1. PLAN No's GTP 16/7,9,11 AND GTP 16/13 REPRESENTS THE CASE WHERE THE PARTIAL MEDIAN IS AT A MINIMUM DISTANCE FROM THE ROAD CENTRE LINE. 2. PLAN No's GTP 16/8, 10, 12 AD GTP 16/14 REPRESENTS THE CASE CASE WHERE THE PARTIAL MEDIAN IS ON THE EDGE OF THE EXISTING ROAD. 3. THE TYPICAL PLANS MUST BE READ IN CONJUNCTION WITH BB2 GUIDELINES FOR ACCESS TO FILLING STATIONS (NOV. 2003) 4. PLAN GTP16/24 REPRESENTS THE CASE WHERE A PUBLIC TRANSPORT STOP IS REQUIRED. 5. PLANS GTP 25 AND GTP 26 DEFINE THE SIGHT DISTANCES DETERMINING THE LOCATION OF FILLING STATIONS ACCESS.													
																		FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/16	FILLING STATION UPSTREAM OF THE CONNECTING ROAD		PLAN No GTP 16/17				
FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD						PLAN No GTP 16/16	FILLING STATION UPSTREAM OF THE CONNECTING ROAD						PLAN No GTP 16/17					FILLING STATION DOWNSTREAM OF THE CONNECTING ROAD						PLAN No GTP 16/18			
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SCALE ON REDUCED DRAWING 						USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.								 GAUTENG PROVINCE ROADS AND TRANSPORT REPUBLIC OF SOUTH AFRICA				KEY PLAN									
REV. No. DATE AMENDMENTS						1 2018 SUPERSEDES GTP 16/1 (NOV 2003)																					
APPROVED BY:						SCALE: AS SHOWN				SHEET: 1 OF 1																	
 for HEAD of DEPARTMENT						DATE				GTP 16/1																	

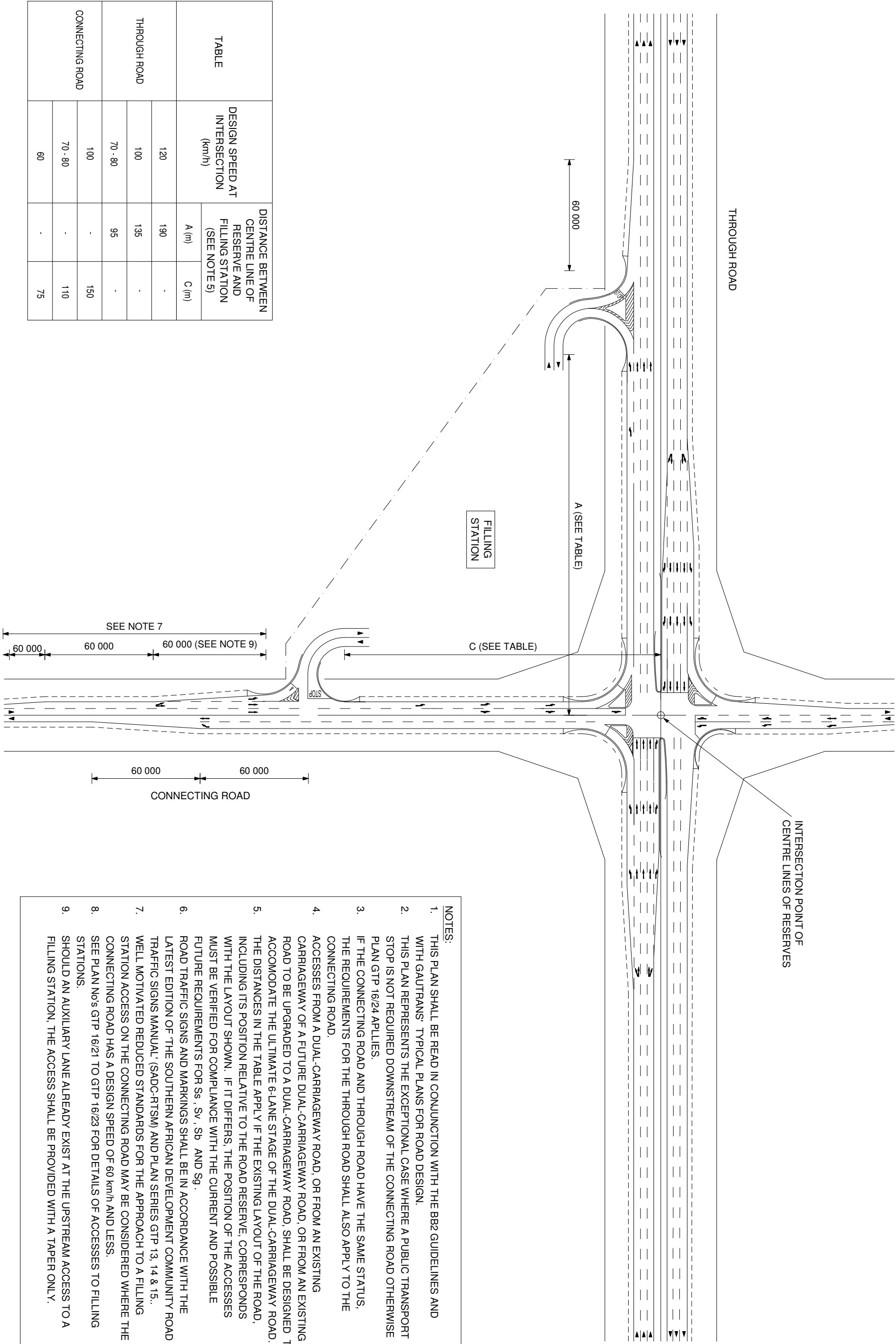


TABLE	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION (SEE NOTE 5)	
		A (m)	C (m)
THROUGH ROAD	120	190	-
	100	135	-
	70 - 80	95	-
CONNECTING ROAD	100	-	150
	70 - 80	-	110
	60	-	75

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD OTHERWISE PLAN GTP 16/24 APPLIES.
 - IF THE CONNECTING ROAD AND THROUGH ROAD HAVE THE SAME STATUS, THE REQUIREMENTS FOR THE THROUGH ROAD SHALL ALSO APPLY TO THE CONNECTING ROAD.
 - ACCESSES FROM A DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD. THE DISTANCES IN THE TABLE APPLY IF THE EXISTING LAYOUT OF THE ROAD, INCLUDING ITS POSITION RELATIVE TO THE ROAD RESERVE, CORRESPONDS WITH THE LAYOUT SHOWN. IF IT DIFFERS, THE POSITION OF THE ACCESSES MUST BE VERIFIED FOR COMPLIANCE WITH THE CURRENT AND POSSIBLE FUTURE REQUIREMENTS FOR Ss, Sv, Sb AND Sg.
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15..
 - WELL MOTIVATED REDUCED STANDARDS FOR THE APPROACH TO A FILLING STATION ACCESS ON THE CONNECTING ROAD MAY BE CONSIDERED WHERE THE CONNECTING ROAD HAS A DESIGN SPEED OF 60 km/h AND LESS.
 - SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
 - SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.

SCALE ON REDUCED DRAWING

10 mm

50 mm

USER NOTE:

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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

1

2018

SUPERSEDES GTP 16/4 (2003)

REV. No.

DATE

AMENDMENTS

FILLING STATION ACCESS ON THE DOWNSTREAM SIDE OF THE CONNECTING ROAD AT THE INTERSECTION OF A DUAL-CARRIAGEWAY ROAD AND A SINGLE-CARRIAGEWAY ROAD

APPROVED BY:



08/03/2019

SCALE:

AS SHOWN

SHEET:

1 OF 1

GTP 16/4

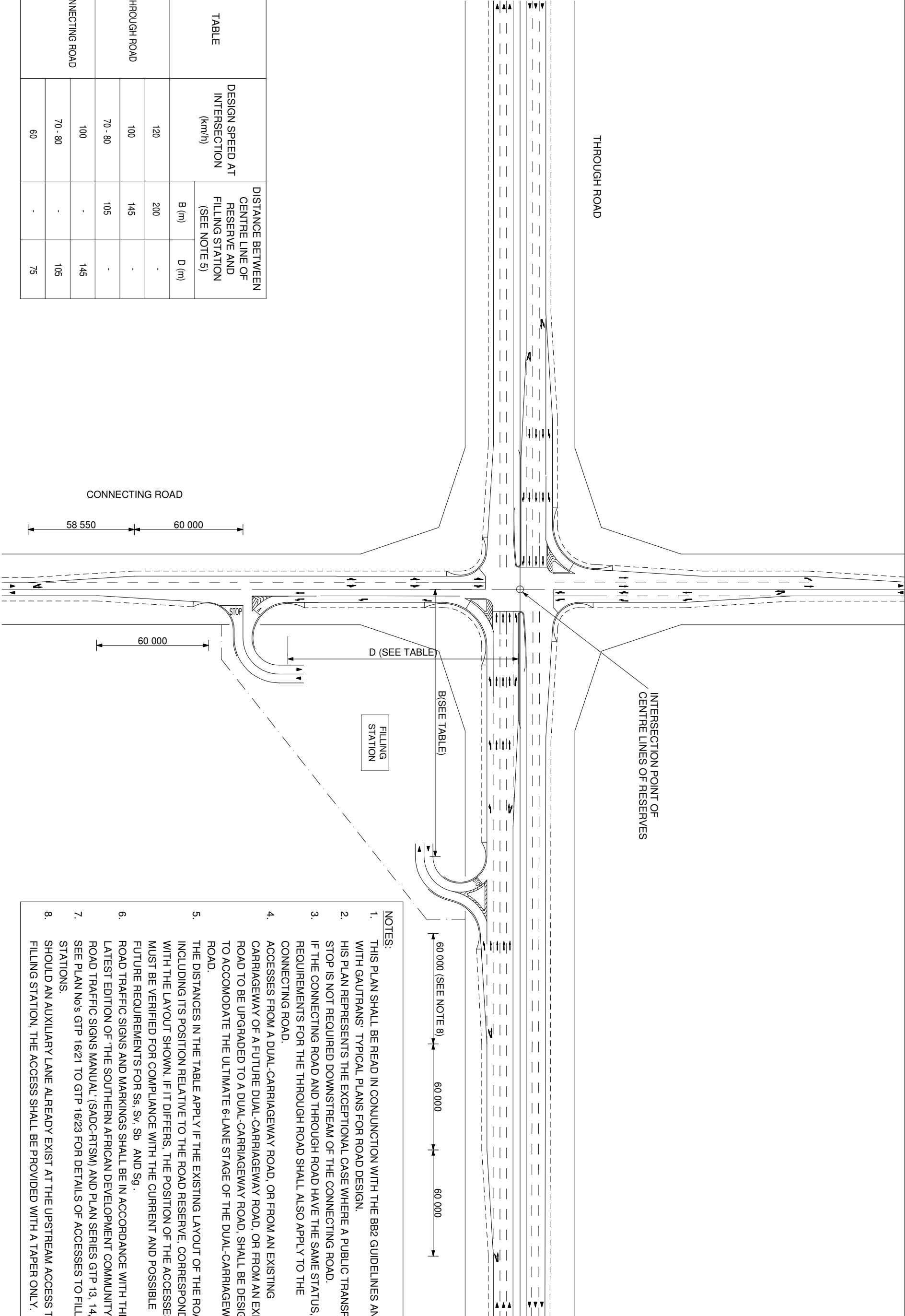
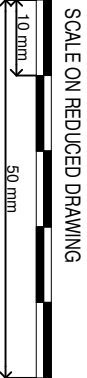


TABLE	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION (SEE NOTE 5)	
		B (m)	D (m)
THROUGH ROAD	120	200	-
	100	145	-
	70 - 80	105	-
CONNECTING ROAD	100	-	145
	70 - 80	-	105
	60	-	75



USER NOTE:
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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

NOTES:

1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
2. HIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
3. IF THE CONNECTING ROAD AND THROUGH ROAD HAVE THE SAME STATUS, THE REQUIREMENTS FOR THE THROUGH ROAD SHALL ALSO APPLY TO THE CONNECTING ROAD.
4. ACCESSES FROM A DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
5. THE DISTANCES IN THE TABLE APPLY IF THE EXISTING LAYOUT OF THE ROAD, INCLUDING ITS POSITION RELATIVE TO THE ROAD RESERVE, CORRESPONDS WITH THE LAYOUT SHOWN. IF IT DIFFERS, THE POSITION OF THE ACCESSES MUST BE VERIFIED FOR COMPLIANCE WITH THE CURRENT AND POSSIBLE FUTURE REQUIREMENTS FOR Ss, Sv, Sb AND Sg.
6. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14, & 15.
7. SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
8. SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.

FILLING STATION ACCESS ON THE UPSTREAM
SIDE OF THE CONNECTING ROAD AT THE
INTERSECTION OF A DUAL-CARRIAGEWAY ROAD
AND A SINGLE-CARRIAGEWAY ROAD

APPROVED BY:

J. J. J.
08/03/2019

for HEAD of DEPARTMENT

DATE

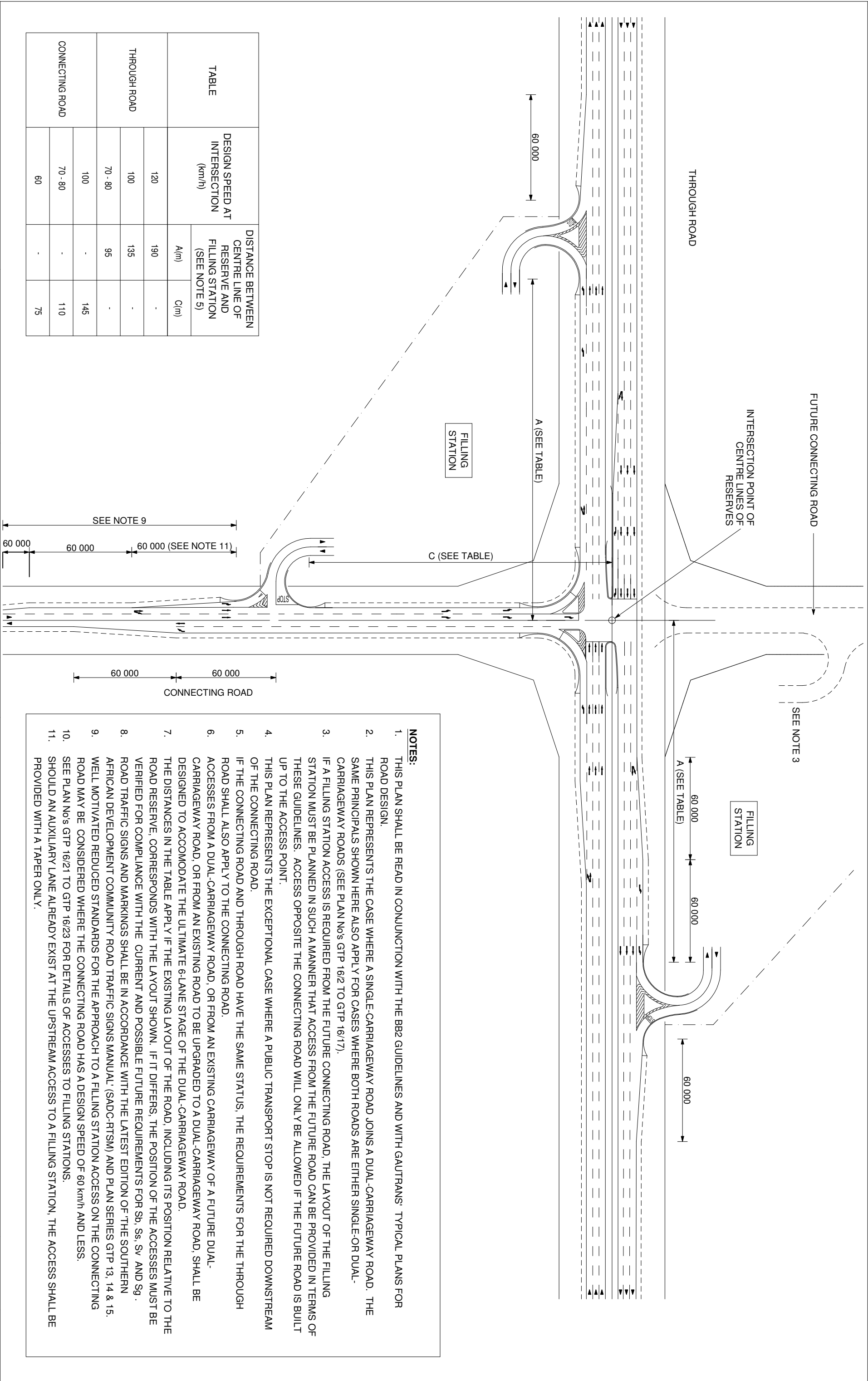
SCALE:
AS SHOWN

SHEET:
1 OF 1

GTP 16/5

REV. No. DATE AMENDMENTS

1 2018 SUPERSEDES GTP 16/5 (2003)



SCALE ON REDUCED DRAWING

10 mm

50 mm

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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

FILLING STATION ACCESS AT A T-INTERSECTION OF A SINGLE-CARRIAGEWAY ROAD WITH A DUAL-CARRIAGEWAY ROAD

APPROVED BY: 08/03/2019

for HEAD of DEPARTMENT

SCALE: AS SHOWN

SHEET: 1 OF 1

1

2018

SUPERSEDES GTP 16/6 (2003)

REV. No.

DATE

AMENDMENTS

GTP 16/6

TABLE 1	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION ACCESS (SEE NOTE 5)	
		A (m)	C (m)
THROUGH ROAD	120	190	-
	100	135	-
	70 - 80	95	-
CONNECTING ROAD	100	-	145
	70 - 80	-	105
	60	-	75

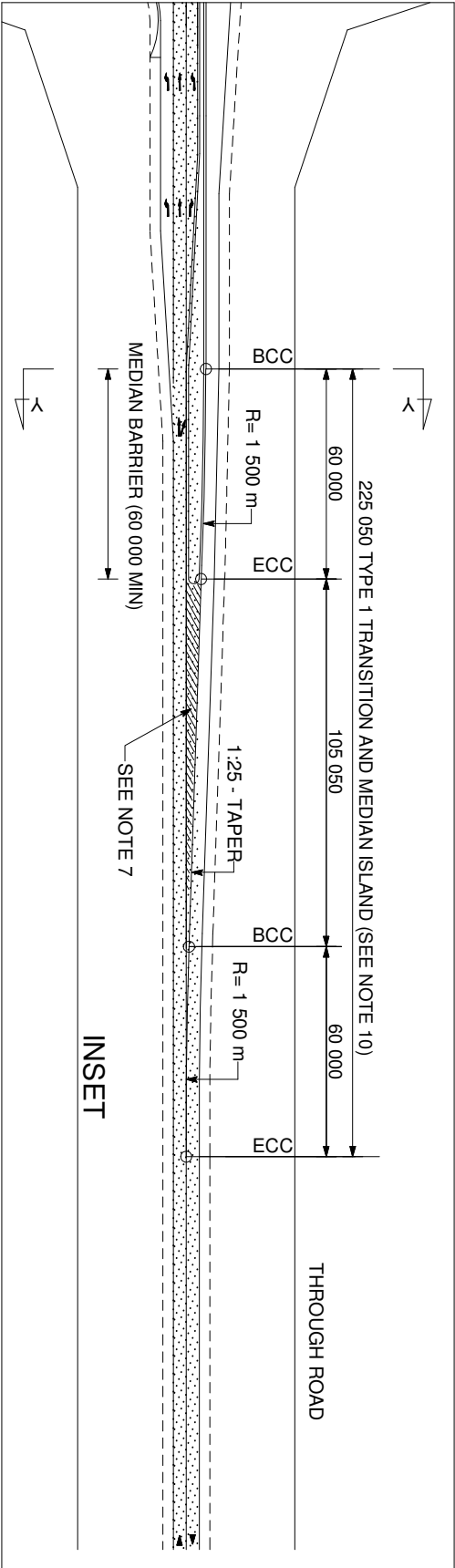


TABLE 2		
ROAD RESERVE	X	Y
≤30m	3 500	1 800
≥40m	3 700	3 000

LEGEND:

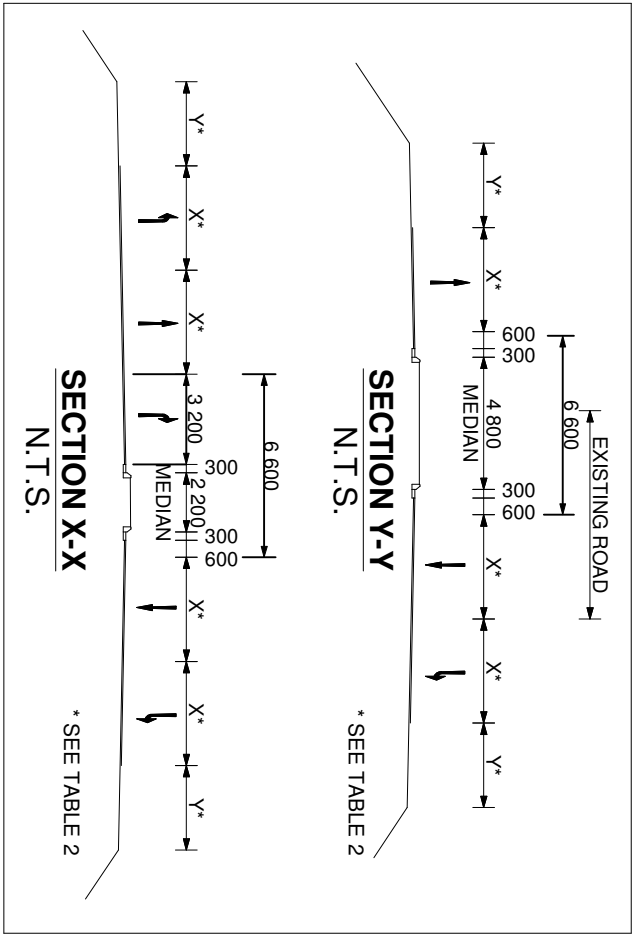
EXISTING ROAD

- NOTES:**
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 - ROAD STUDS SHALL BE PROVIDED IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITIONS AND MEDIAN ISLAND.
 - WELL MOTIVATED REDUCED STANDARDS FOR THE APPROACH TO A FILLING STATION ACCESS ON THE CONNECTING ROAD MAY BE CONSIDERED WHERE THE CONNECTING ROAD HAS A DESIGN SPEED OF 60 km/h AND LESS.
 - SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
 - SEE PLAN No GTP 16/20 FOR DETAILS OF TRANSITION AND MEDIAN ISLAND.
 - SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.

SCALE ON REDUCED DRAWING

SCALE ON REDUCED DRAWING		
		
1	2018	SUPERSEDES GTP 16/7 (2003)
REV. No.	DATE	AMENDMENTS

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SCALE ON REDUCED DRAWING

10 mm	50 mm	
1	2018	SUPERSEDES GTP 16/7 (2003)
REV. No.	DATE	AMENDMENTS

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SCALE ON REDUCED DRAWING

ANGLE-CARRIAGEWAY ITION ACCESS FROM AD AND DOWNSTREAM AD, MEDIAN AT MINIMUM NG ROAD CENTRE LINE	APPROVED 
100 HEAD of DEPAR	

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SCALE ON REDUCED DRAWING

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REV. No.	DATE	AMENDMENTS

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	60	-	75

TABLE 2			
ROAD RESERVE	X	Y	
≤30m	3 500	1 800	
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LEGEND:
 EXISTING ROAD

- NOTES:
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2. THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.

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4. ACCESSES FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.

5. THE DISTANCES IN TABLE 1 APPLY IF THE EXISTING LAYOUT OF THE ROAD, INCLUDING ITS POSITION RELATIVE TO THE ROAD RESERVE, CORRESPONDS WITH THE LAYOUT SHOWN. IF IT DIFFERS, THE POSITION OF THE ACCESSES MUST BE VERIFIED FOR COMPLIANCE WITH THE CURRENT AND POSSIBLE FUTURE REQUIREMENTS FOR Ss, Sv, Sq, AND Sb.

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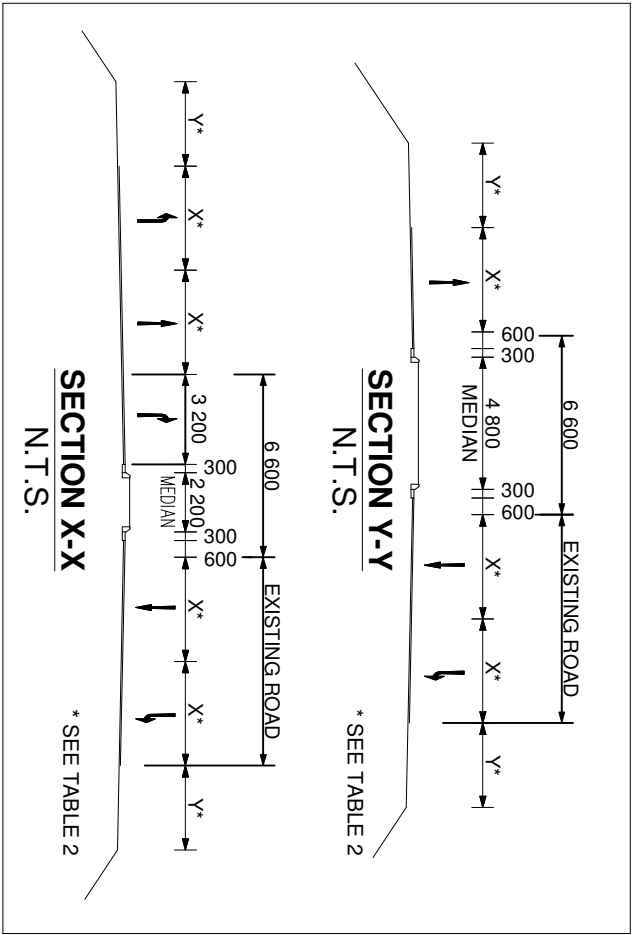
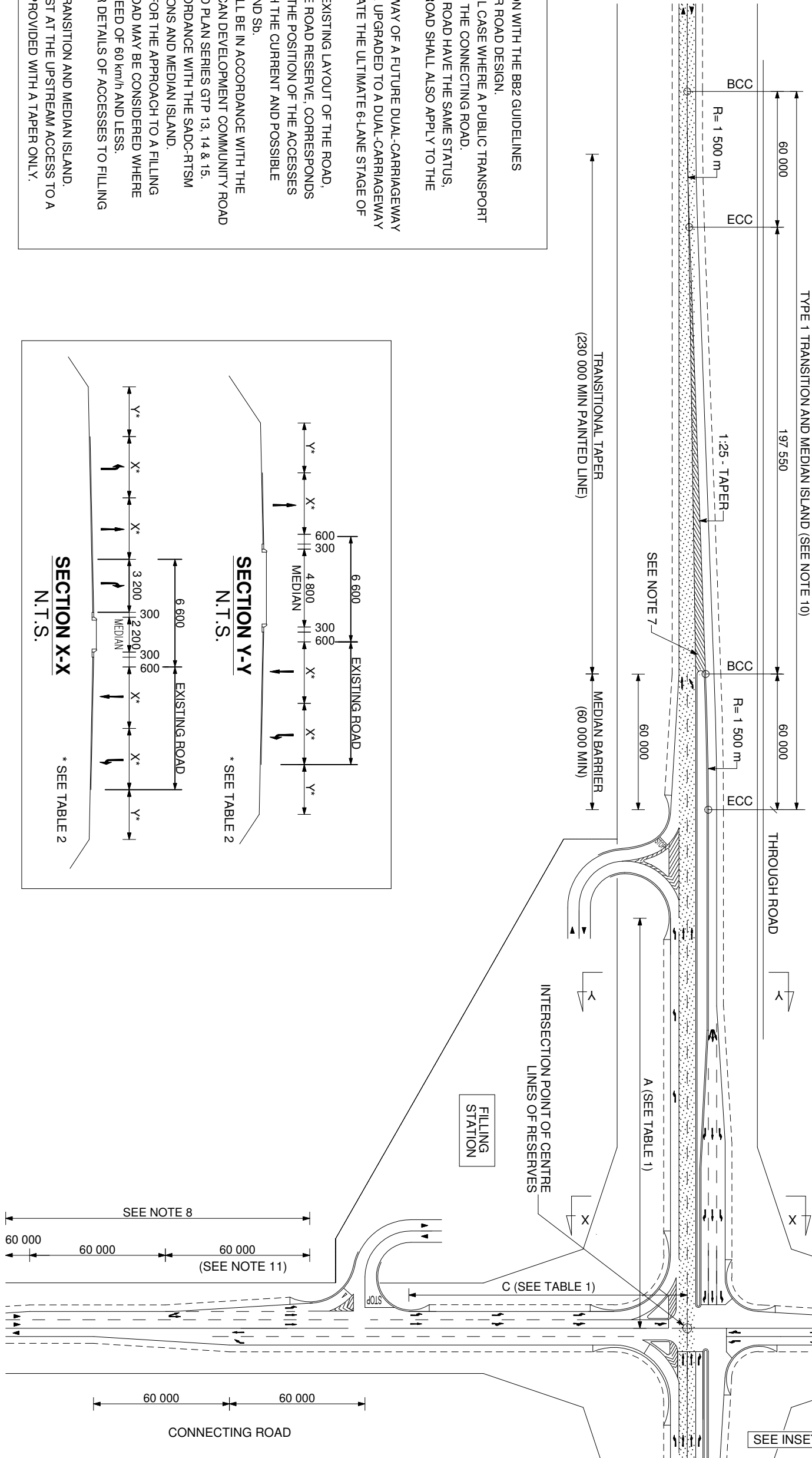
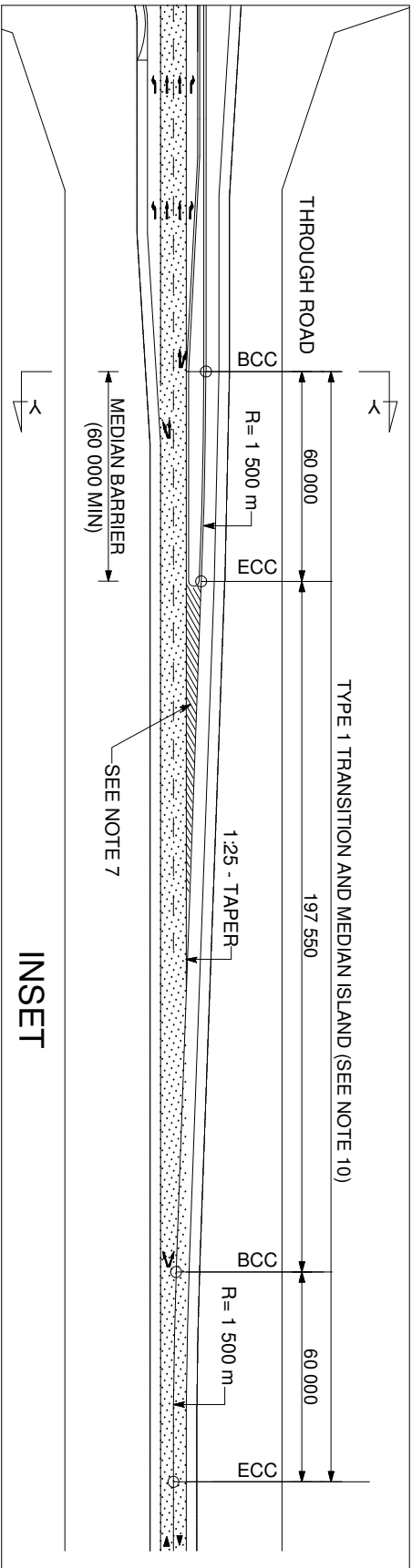
7. ROAD STUDS SHALL BE PROVIDED IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITIONS AND MEDIAN ISLAND.

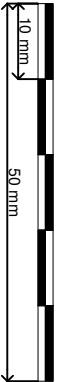
8. WELL MOTIVATED REDUCED STANDARDS FOR THE APPROACH TO A FILLING STATION ACCESS ON THE CONNECTING ROAD MAY BE CONSIDERED WHERE THE CONNECTING ROAD HAS A DESIGN SPEED OF 60 km/h AND LESS.

9. SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.

10. SEE PLAN No GTP 16/20 FOR DETAILS OF TRANSITION AND MEDIAN ISLAND.

11. SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.



SCALE ON REDUCED DRAWING	
	
1	2018
REV. No.	DATE

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PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS; FILLING STATION ACCESS FROM EXISTING THROUGH ROAD AND DOWNSTREAM OF THE CONNECTING ROAD, MEDIAN ON THE EDGE OF THE EXISTING ROAD

APPROVED BY:	SCALE: AS SHOWN	SHEET: 1 OF 1
		
for HEAD of DEPARTMENT	DATE	GTP 16/8

TABLE 1	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION ACCESS (SEE NOTE 5)	
		B (m)	D (m)
THROUGH ROAD	120	190	-
	100	135	-
	70 - 90	95	-
CONNECTING ROAD	100	-	145
	70 - 80	-	105
	60	-	75

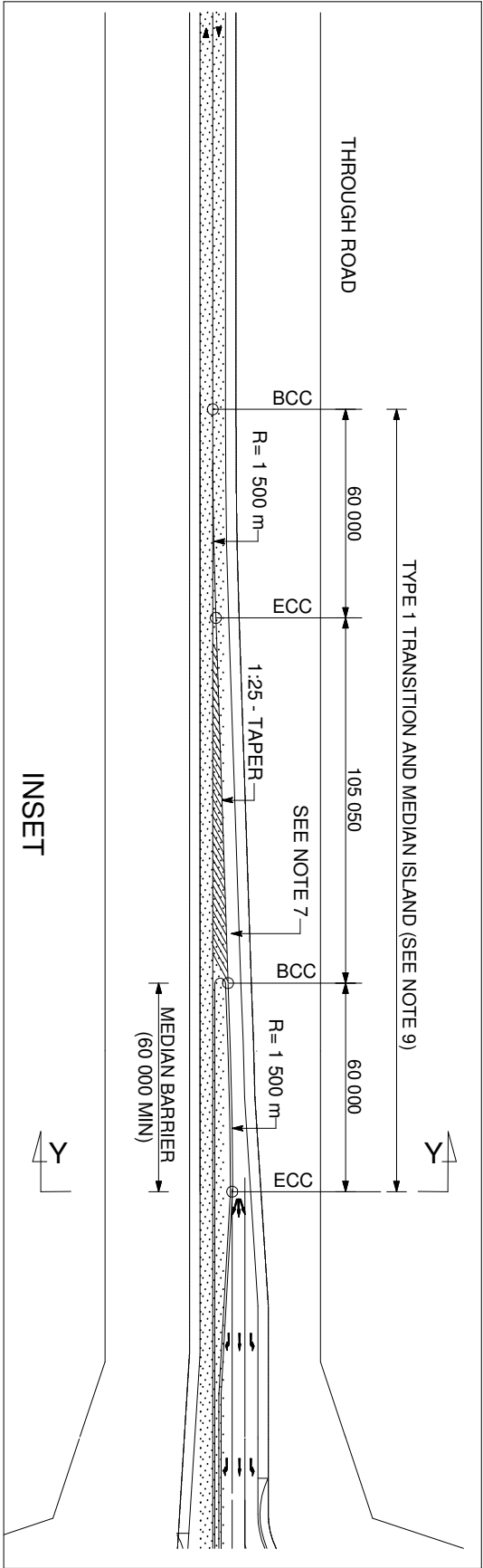
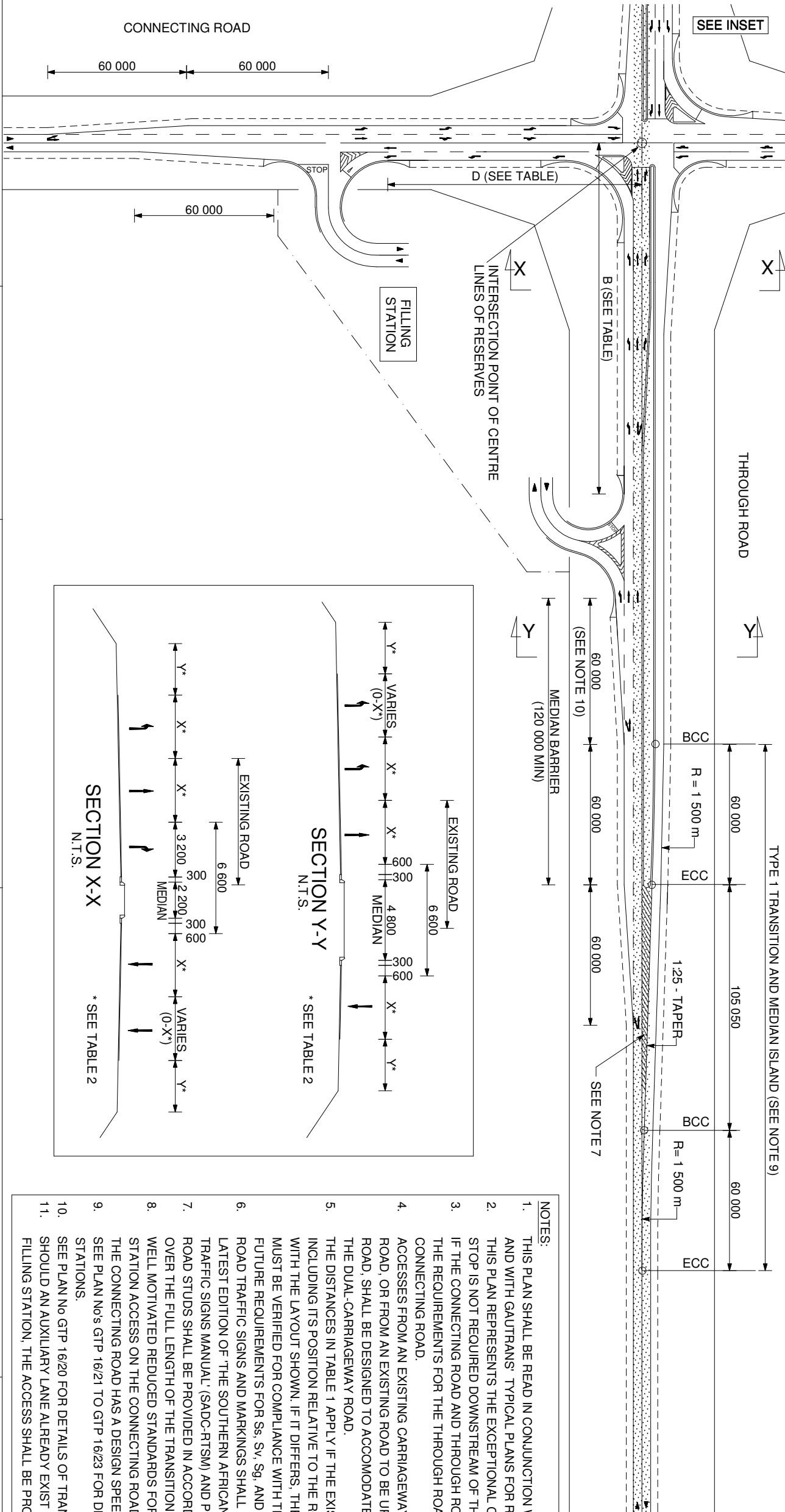
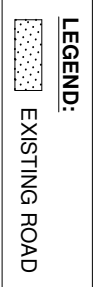
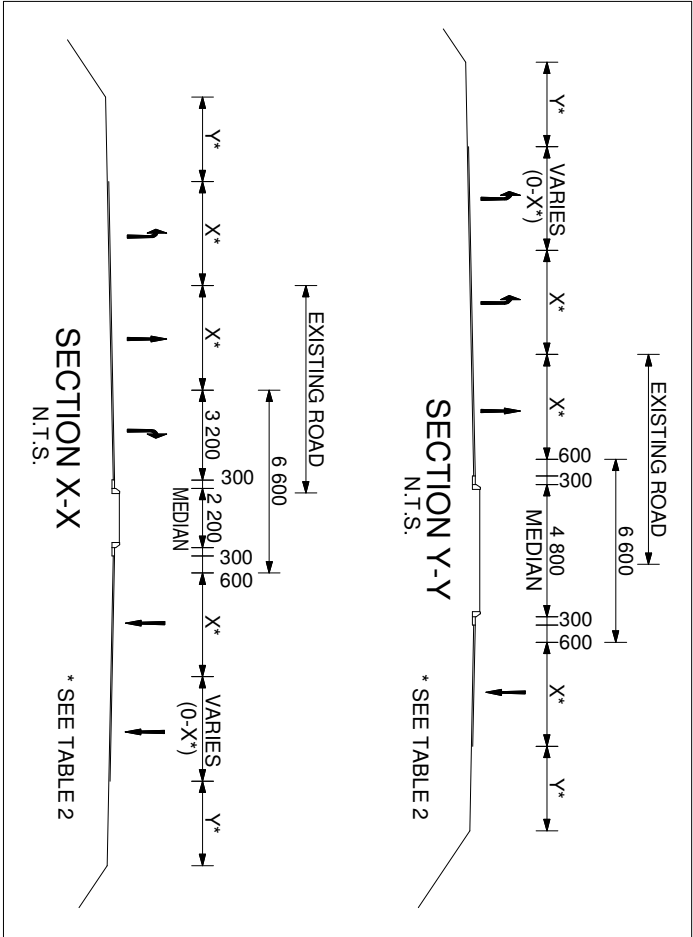


TABLE 2			
ROAD RESERVE	X	Y	
≤ 30m	3 500	1 800	
≥ 40m	3 700	3 000	



- NOTES:**
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SCALE ON REDUCED DRAWING

10 mm
50 mm

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1	2018	SUPERSEDES GTP 16/9 (2003)
REV. No.	DATE	AMENDMENTS

GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS:
FILLING STATION ACCESS FROM EXISTING THROUGH ROAD AND UPSTREAM OF THE CONNECTING ROAD, MEDIAN AT THE MINIMUM DISTANCE FROM THE EXISTING ROAD CENTRE LINE

APPROVED BY:	SCALE: AS SHOWN	SHEET: 1 OF 1
	GTP 16/9	
for HEAD of DEPARTMENT	DATE	

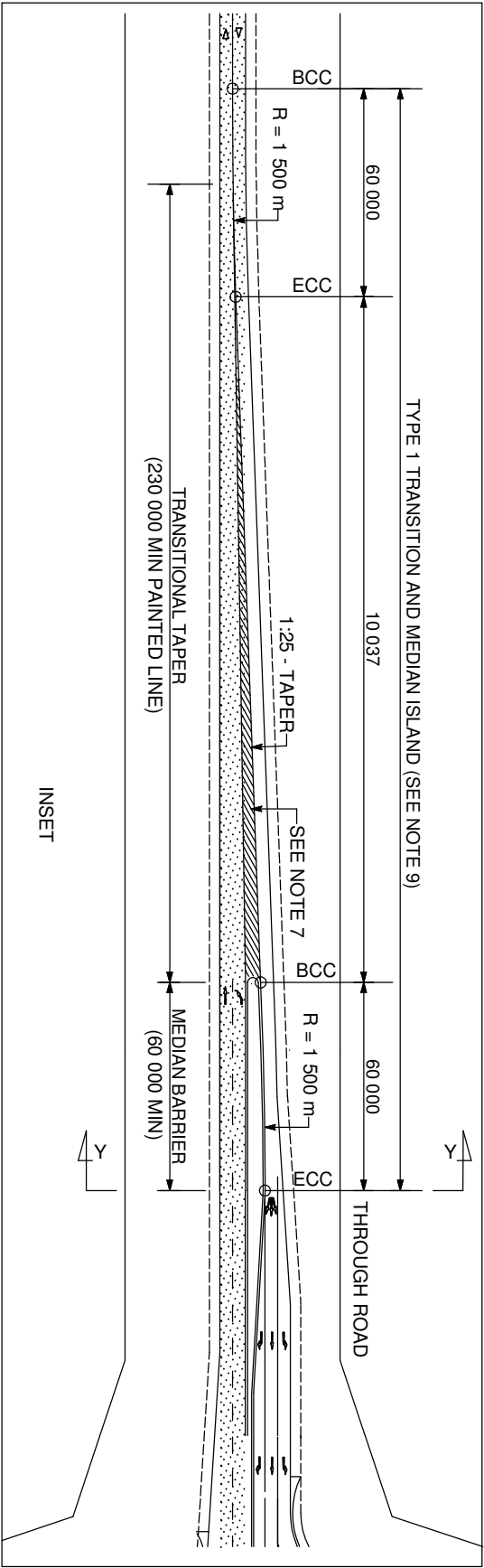
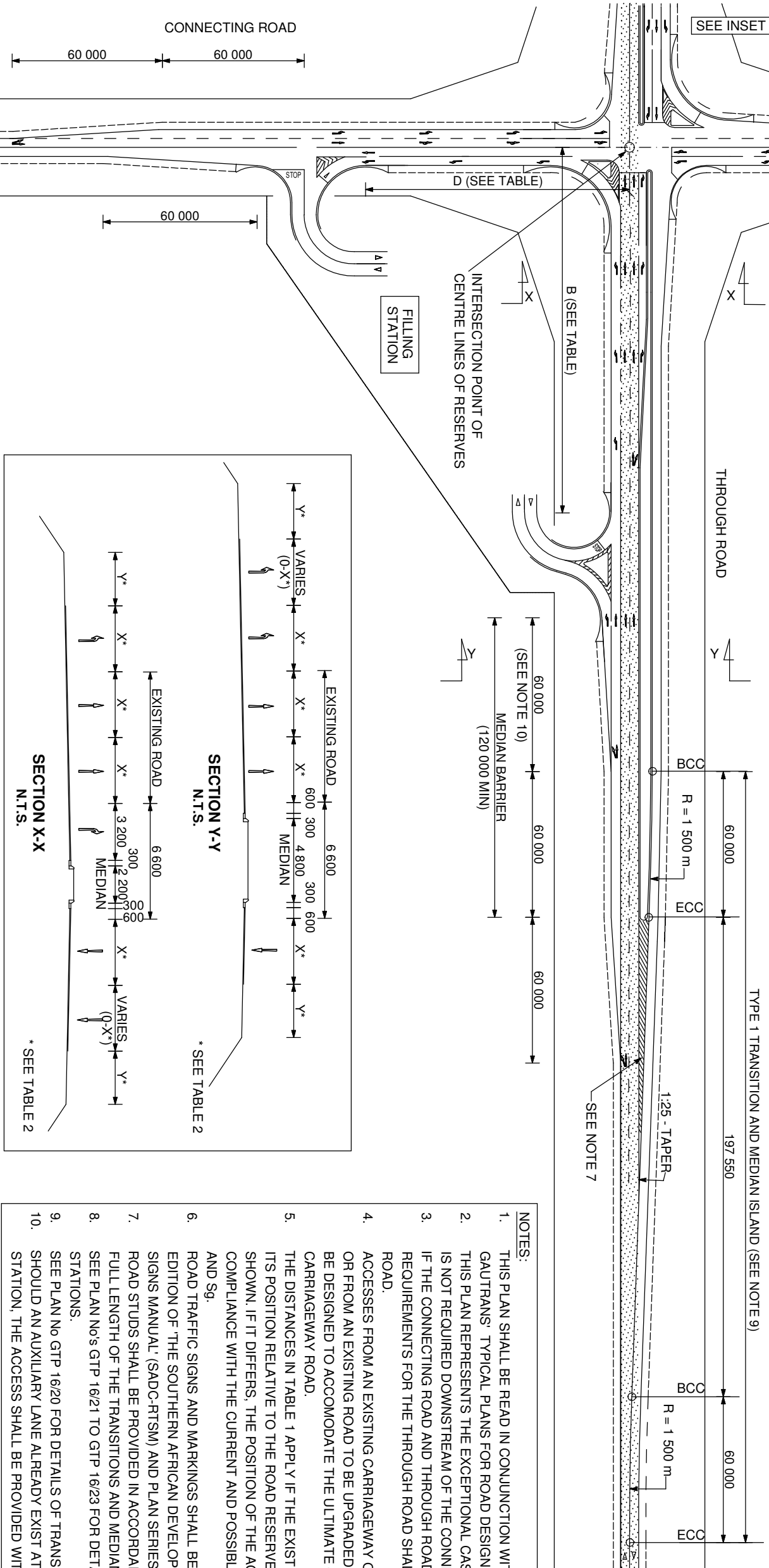


TABLE 1	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION ACCESS (SEE NOTE 5)	
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	70-80	105	-
CONNECTING ROAD	100	-	135
	70-80	-	95
CONNECTING ROAD	70-80	-	95
	60	-	75

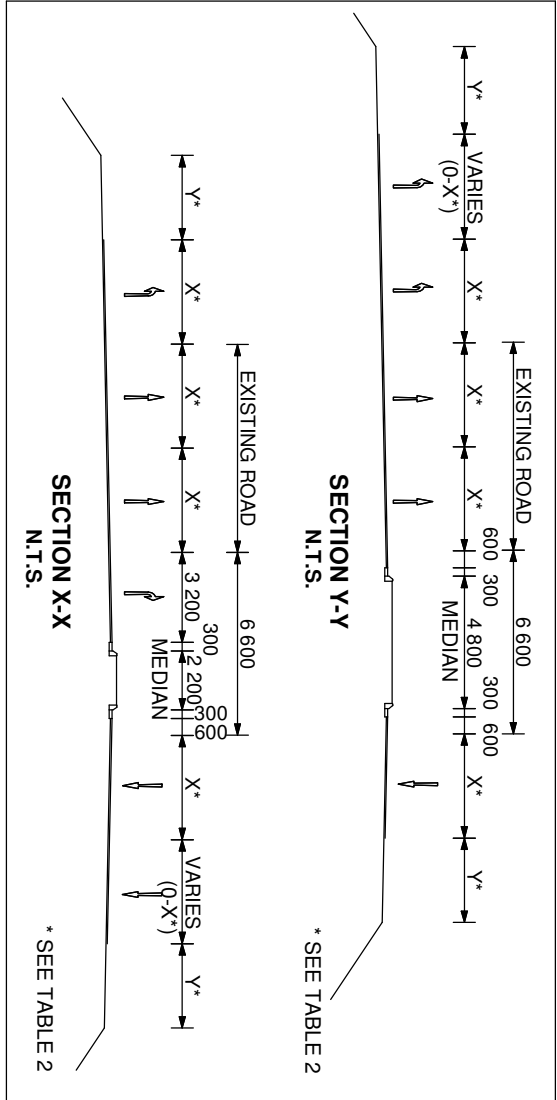
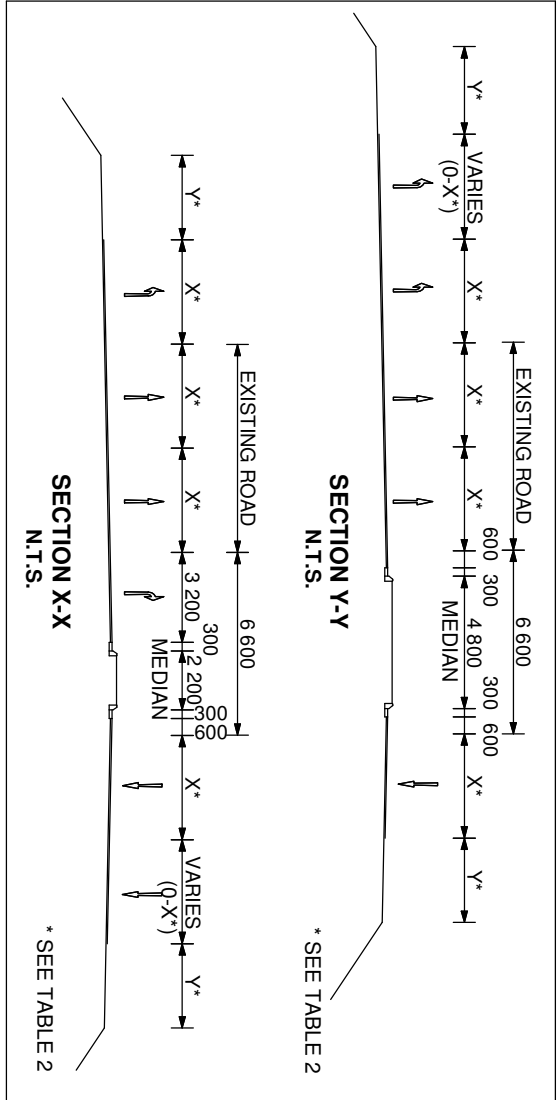
TABLE 2		
ROAD RESERVE	X	Y
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LEGEND:

 EXISTING ROAD



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SCALE ON REDUCED DRAWING

10 mm

50 mm

1

2018

SUPERSEDES GTP 16/10 (2003)

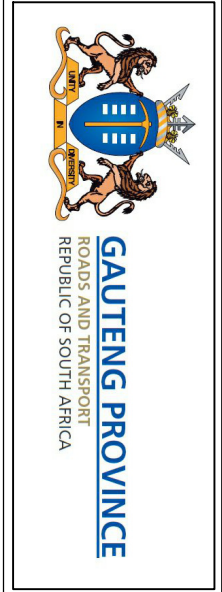
REV. No.

DATE

AMENDMENTS

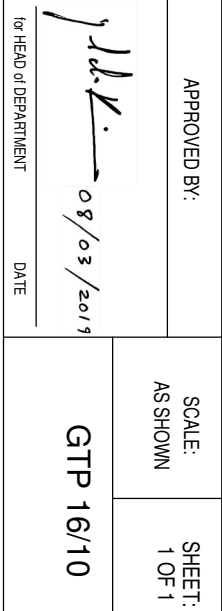
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PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS: FILLING STATION ACCESS FROM EXISTING THROUGH ROAD AND UPSTREAM OF THE CONNECTING ROAD, MEDIAN AT THE MINIMUM ON THE EDGE OF THE EXISTING ROAD

APPROVED BY:



for HEAD of DEPARTMENT

DATE

SCALE:

AS SHOWN

SHEET:

1 OF 1

GTP 16/10

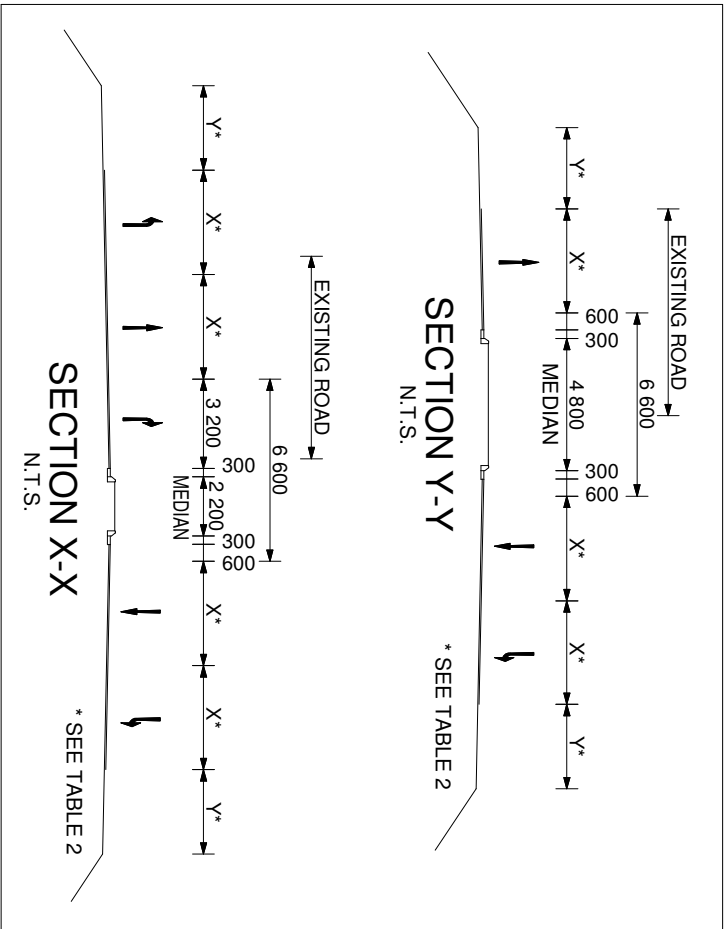
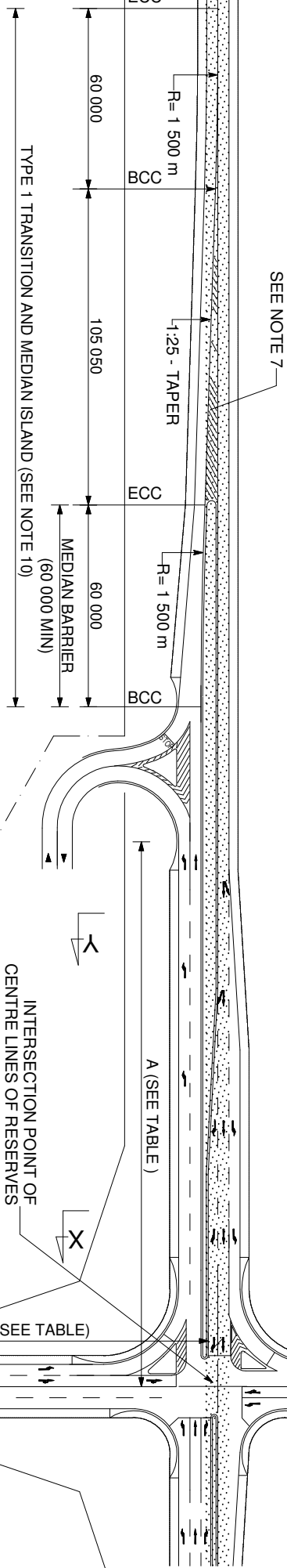
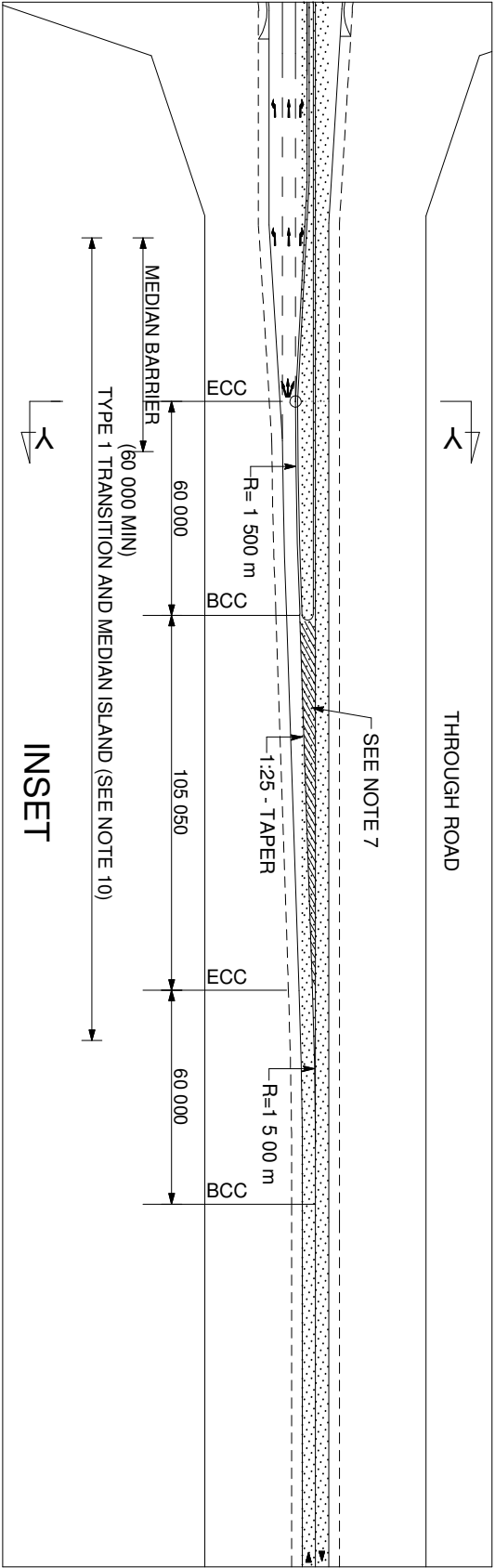
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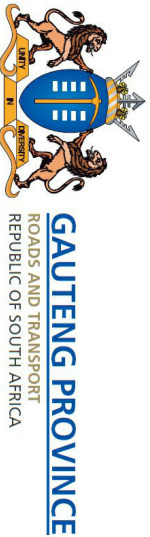


PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS:

FILLING STATION ACCESS FROM THE WIDENED PORTION OF THE THROUGH ROAD AND DOWNSTREAM OF THE CONNECTING ROAD, MEDIAN AT MINIMUM DISTANCE FROM THE EXISTING ROAD CENTRE LINE

SCALE ON REDUCED DRAWING	
1	2018
REV. No.	DATE

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APPROVED BY:

J. de K. 08/03/2019

for HEAD of DEPARTMENT

DATE

SCALE:
AS SHOWN

SHEET:
1 OF 1

GTP 16/11

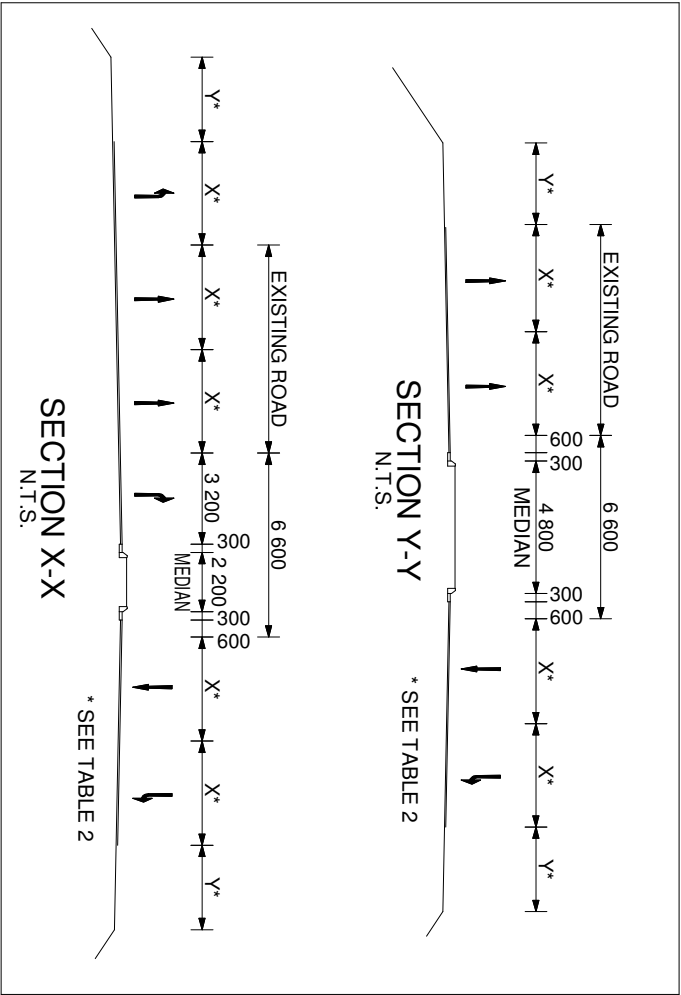
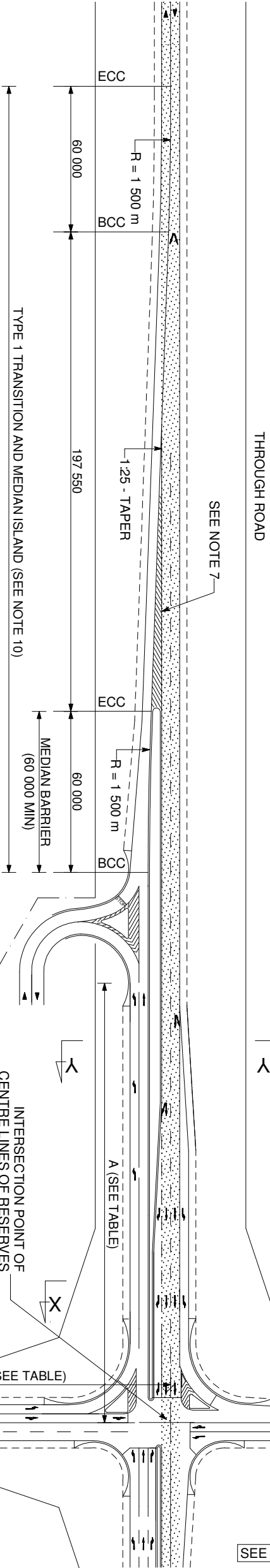
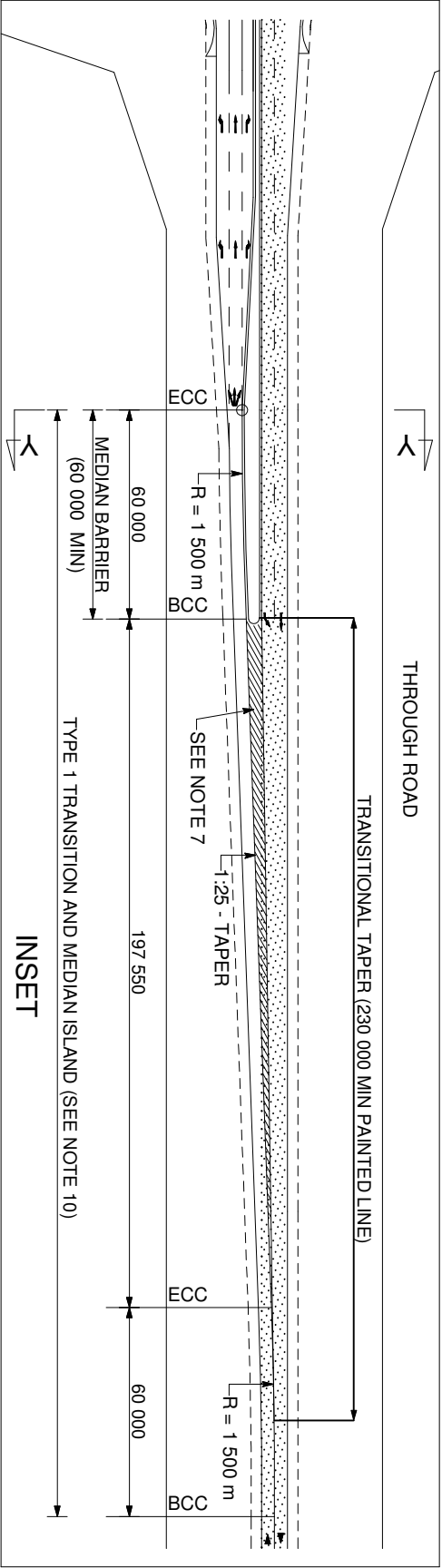
TABLE 1	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION ACCESS (SEE NOTE 5)	
		A (m)	C (m)
THROUGH ROAD	120	190	-
	100	135	-
	70 - 80	95	-
CONNECTING ROAD	100	-	145
	70 - 80	-	105
	60	-	75

TABLE 2			
ROAD RESERVE	X	Y	
≤ 30m	3 500	1 800	
≥40m	3 700	3 000	



NOTES:

- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
- THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
- IF THE CONNECTING ROAD AND THROUGH ROAD HAVE THE SAME STATUS, THE REQUIREMENTS FOR THE THROUGH ROAD SHALL ALSO APPLY TO THE CONNECTING ROAD.
- ACCESSES FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
- THE DISTANCES IN TABLE 1 APPLY IF THE EXISTING LAYOUT OF THE ROAD, INCLUDING ITS POSITION RELATIVE TO THE ROAD RESERVE, CORRESPONDS WITH THE LAYOUT SHOWN. IF IT DIFFERS, THE POSITION OF THE ACCESSES MUST BE VERIFIED FOR COMPLIANCE WITH THE CURRENT AND POSSIBLE FUTURE REQUIREMENTS FOR Ss, Sy, Sg, AND Sb.
- ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
- ROAD STUDS SHALL BE PROVIDED IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITIONS AND MEDIAN ISLAND.
- WELL MOTIVATED REDUCED STANDARDS FOR THE APPROACH TO A FILLING STATION ACCESS ON THE CONNECTING ROAD MAY BE CONSIDERED WHERE THE CONNECTING ROAD HAS A DESIGN SPEED OF 60 km/h AND LESS.
- SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
- SEE PLAN No GTP 16/20 FOR DETAILS OF TRANSITION AND MEDIAN ISLAND.
- SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.



SCALE ON REDUCED DRAWING	
10 mm	50 mm
1	2018
REV. No.	DATE

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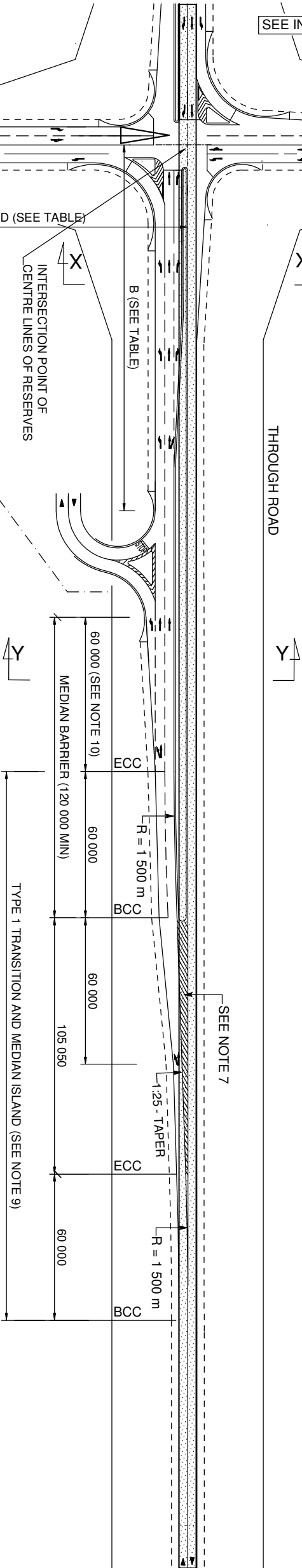
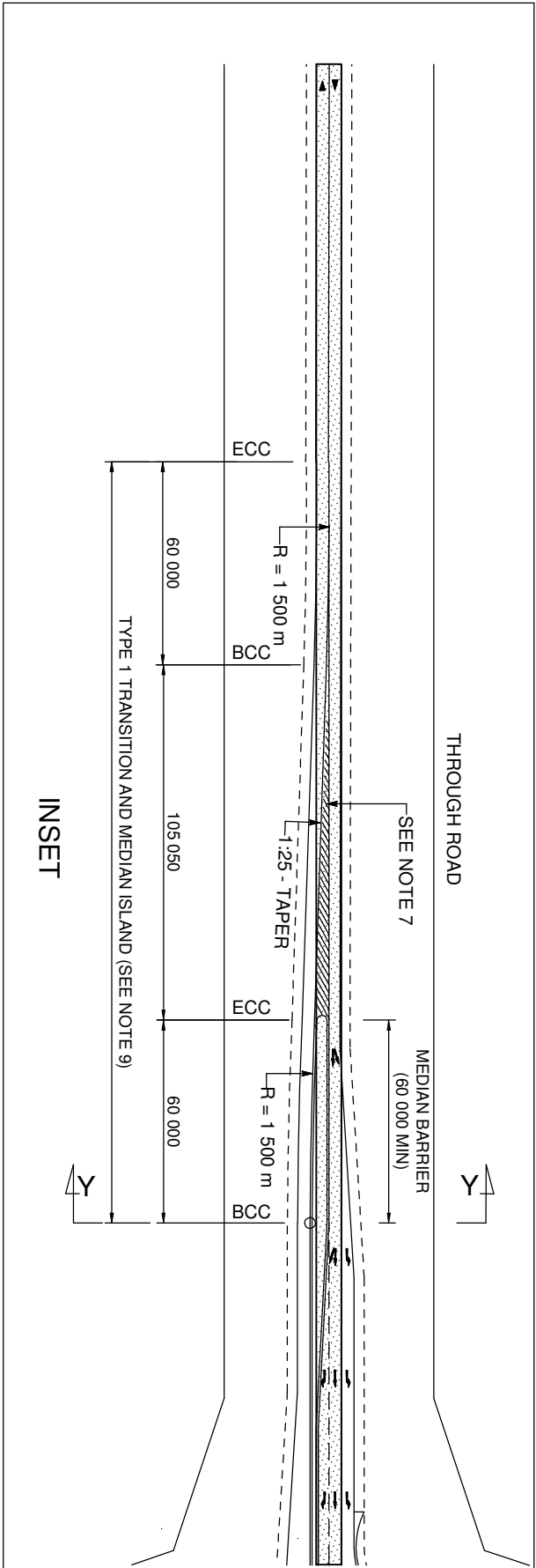


PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS:
FILLING STATION ACCESS FROM THE WIDENED PORTION OF THE THROUGH ROAD AND DOWNSTREAM OF THE CONNECTING ROAD, MEDIAN ON THE EDGE OF THE EXISTING ROAD CENTRE LINE

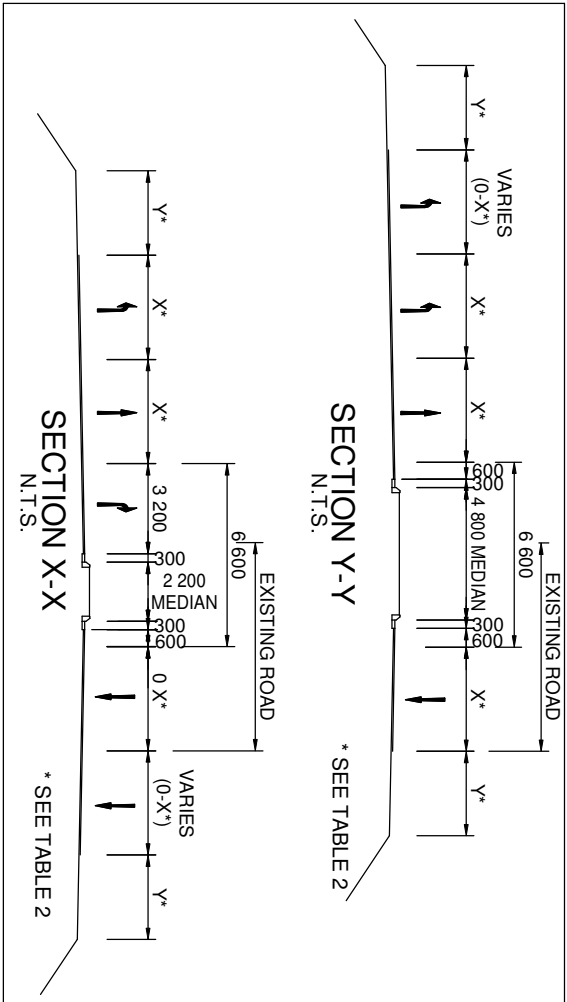
APPROVED BY:	SCALE: AS SHOWN	SHEET: 1 OF 1
for HEAD of DEPARTMENT	DATE	GTP 16/12

TABLE 1	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION ACCESS (SEE NOTE 5)	
		B(m)	D(m)
THROUGH ROAD	120	200	-
	100	145	-
	70-80	105	-
CONNECTING ROAD	100	-	140
	70-80	-	100
	60	-	75

TABLE 2			
ROAD RESERVE	X	Y	
≤ 30m	3 500	1 800	
≥ 40m	3 700	3 000	



- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
 - IF THE CONNECTING ROAD AND THROUGH ROAD HAVE THE SAME STATUS, THE REQUIREMENTS FOR THE THROUGH ROAD SHALL ALSO APPLY TO THE CONNECTING ROAD, ACCESSES FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 - THE DISTANCES IN TABLE 1 APPLY IF THE EXISTING LAYOUT OF THE ROAD, INCLUDING ITS POSITION RELATIVE TO THE ROAD RESERVE, CORRESPONDS WITH THE LAYOUT SHOWN. IF IT DIFFERS, THE POSITION OF THE ACCESSES MUST BE VERIFIED FOR COMPLIANCE WITH THE CURRENT AND POSSIBLE FUTURE REQUIREMENTS FOR S_v, S_b, S_s AND S_g.
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES 13, 14 & 15.
 - ROAD STUDS SHALL BE PROVIDED IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITIONS AND MEDIAN ISLAND.
 - SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
 - SEE PLAN No GTP 16/20 FOR DETAILS OF TRANSITION AND MEDIAN ISLAND.
 - SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.



SCALE ON REDUCED DRAWING	
10 mm	50 mm
1	2018
REV. No.	DATE

USER NOTE:
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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

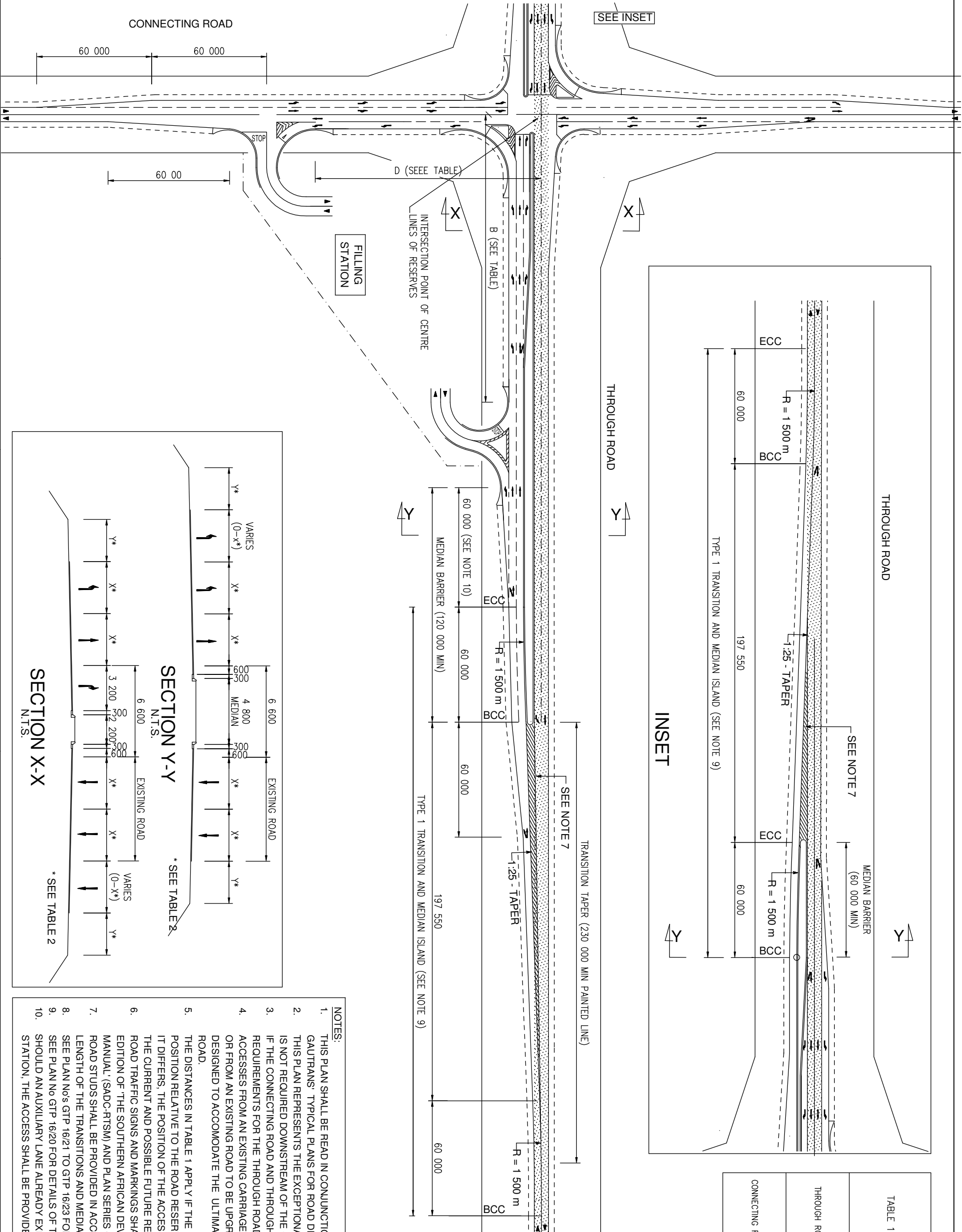
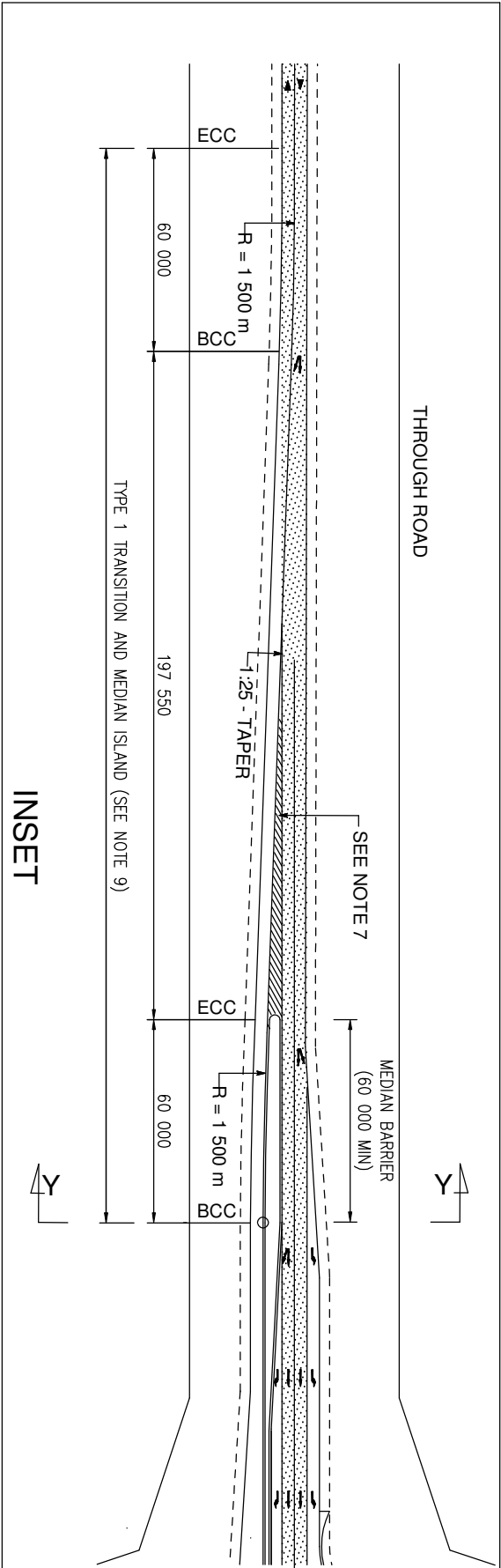
PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS:
FILLING STATION ACCESS FROM THE WIDENED PORTION OF THE THROUGH ROAD AND UPSTREAM OF THE CONNECTING ROAD, MEDIAN AT MINIMUM DISTANCE FROM THE EXISTING ROAD CENTRE LINE

APPROVED BY:		SCALE:	
AS SHOWN		SHEET: 1 OF 1	
for HEAD of DEPARTMENT		DATE	

GTP 16/13

TABLE 1	DESIGN SPEED AT INTERSECTION (km/h)	DISTANCE BETWEEN CENTRE LINE OF RESERVE AND FILLING STATION ACCESS (SEE NOTE 5)	
		B(m)	D(m)
THROUGH ROAD	120	200	-
	100	145	-
	70-80	105	-
CONNECTING ROAD	100	-	145
	70-80	-	105
	60	-	75

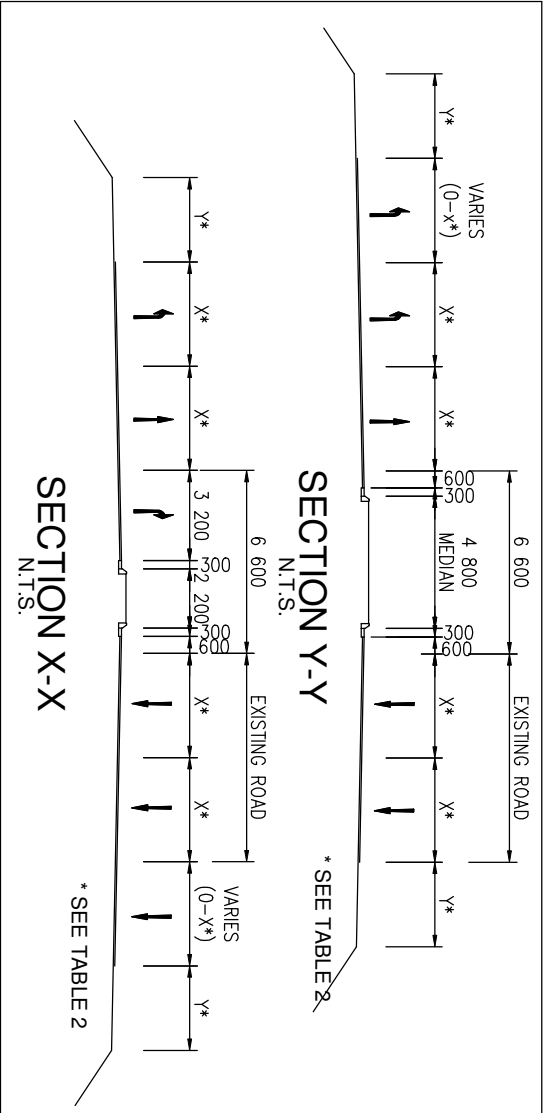
TABLE 2			
ROAD RESERVE	X	Y	
≤ 30m	3500	1800	
≥ 40m	3700	3000	



LEGEND:

 EXISTING ROAD

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
 - IF THE CONNECTING ROAD AND THROUGH ROAD HAVE THE SAME STATUS, THE REQUIREMENTS FOR THE THROUGH ROAD SHALL ALSO APPLY TO THE CONNECTING ROAD.
 - ACCESSES FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 - THE DISTANCES IN TABLE 1 APPLY IF THE EXISTING LAYOUT OF THE ROAD, INCLUDING ITS POSITION RELATIVE TO THE ROAD RESERVE, CORRESPONDS WITH THE LAYOUT SHOWN. IF IT DIFFERS, THE POSITION OF THE ACCESSES MUST BE VERIFIED FOR COMPLIANCE WITH THE CURRENT AND POSSIBLE FUTURE REQUIREMENTS FOR S_v, S_b, S_s AND S_g.
 - THE ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITYROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
 - ROAD STUDS SHALL BE PROVIDED IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITIONS AND MEDIAN ISLAND.
 - SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
 - SEE PLAN No GTP 16/20 FOR DETAILS OF TRANSITION AND MEDIAN ISLAND.
 - SHOULD AN AUXILIARY LANE ALREADY EXIST AT THE UPSTREAM ACCESS TO A FILLING STATION, THE ACCESS SHALL BE PROVIDED WITH A TAPER ONLY.



SCALE ON REDUCED DRAWING

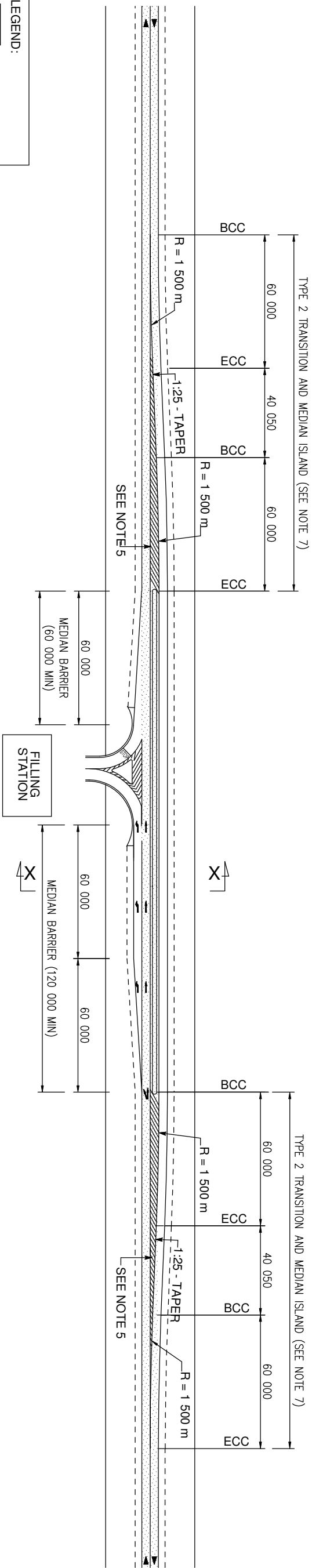
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USER NOTE:
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PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS:
FILLING STATION ACCESS FROM THE WIDENED PORTION OF THE THROUGH ROAD AND UPSTREAM OF THE CONNECTING ROAD, MEDIAN ON EDGE OF THE EXISTING ROAD

APPROVED BY:	SCALE: AS SHOWN	SHEET: 1 OF 1
 08/03/2019	GTP 16/14	
for HEAD of DEPARTMENT	DATE	



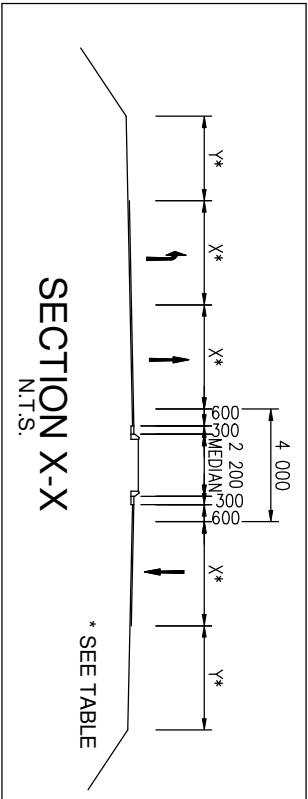
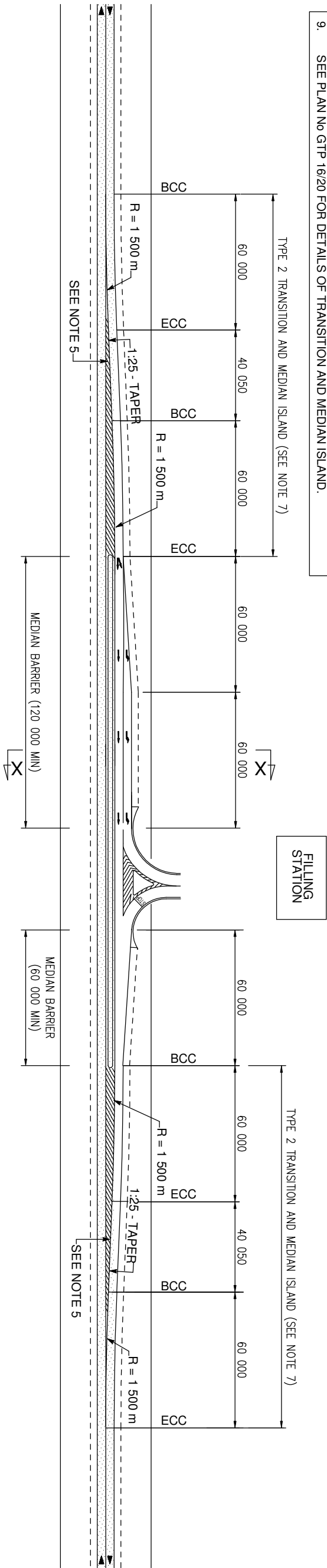
LEGEND:

EXISTING ROAD

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - ACCESS FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 - IF THE DISTANCE BETWEEN THE ISLAND NOSE AND THE PRECEDING / FOLLOWING INTERSECTION IS LESS THAN 150 m FOR A DESIGN SPEED OF 80 km/h AND LESS, OR 210m FOR A DESIGN SPEED OF MORE THAN 80 km/h, THE ISLAND MUST BBE EXTENDED BEYOND THE INTERSECTION (SEE PLAN No's GTP 16/7 AND GTP 16/14). IN SUCH CASES THE ISLAND WIDTH MAY NEED TO BE ADJUSTED AS WELL.
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL ' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
 - ROAD STUDS SHALL BE PROVIDED IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITIONS AND MEDIAN ISLAND.
 - SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.
 - SEE PLAN No GTP 16/20 FOR DETAILS OF TRANSITION AND MEDIAN ISLAND.

FILLING STATION ACCESS FROM THE EXISTING THROUGH ROAD

TABLE		
ROAD RESERVE	X	Y
≤ 30m	3500	1800
≥ 40m	3700	3000



SCALE ON REDUCED DRAWING

10 mm

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1

2018

SUPERSEDES GTP 16/15 (2003)

REV. No.

DATE

AMENDMENTS

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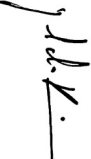


GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

PARTIAL MEDIAN ON SINGLE-CARRIAGEWAY ROADS:

FILLING STATION ACCESS NOT NEAR AN INTERSECTION AND MEDIAN AT MINIMUM DISTANCE FROM THE EXISTING ROAD CENTRE

APPROVED BY:



08/03/2019

for HEAD of DEPARTMENT

DATE

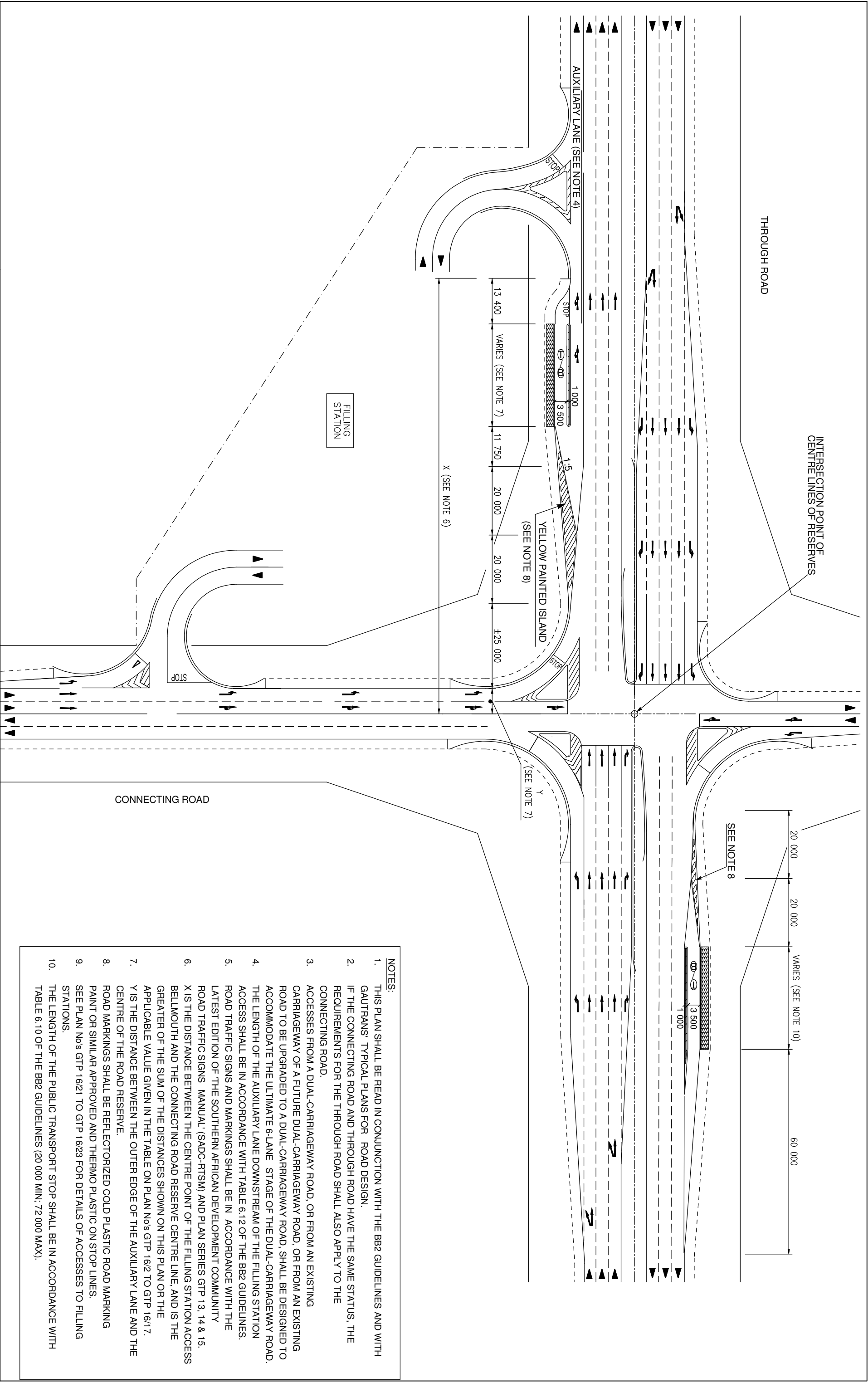
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SHEET:

1 OF 1

GTP 16/15



SCALE ON REDUCED DRAWING

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USER NOTE:

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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

PUBLIC TRANSPORT STOP COMBINED WITH A FILLING STATION ACCESS DOWNSTREAM OF AN INTERSECTION

APPROVED BY:



08/03/2019

SCALE:

AS SHOWN

SHEET:

1 OF 1

REV. No.

DATE

AMENDMENTS

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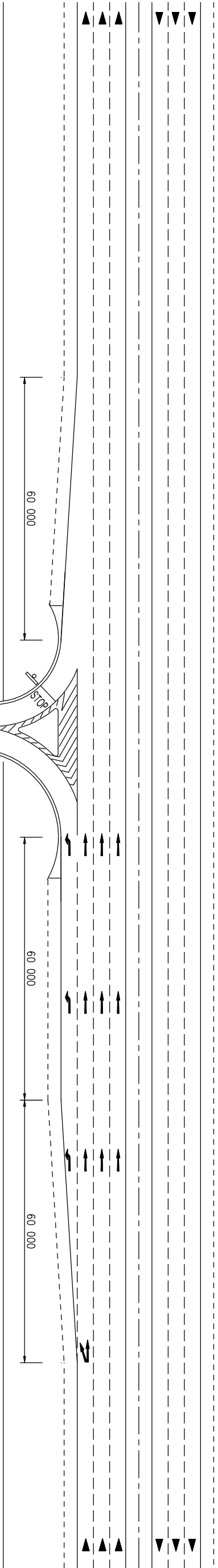
2018

SUPERSEDES GTP16/18 (2003)

for HEAD of DEPARTMENT

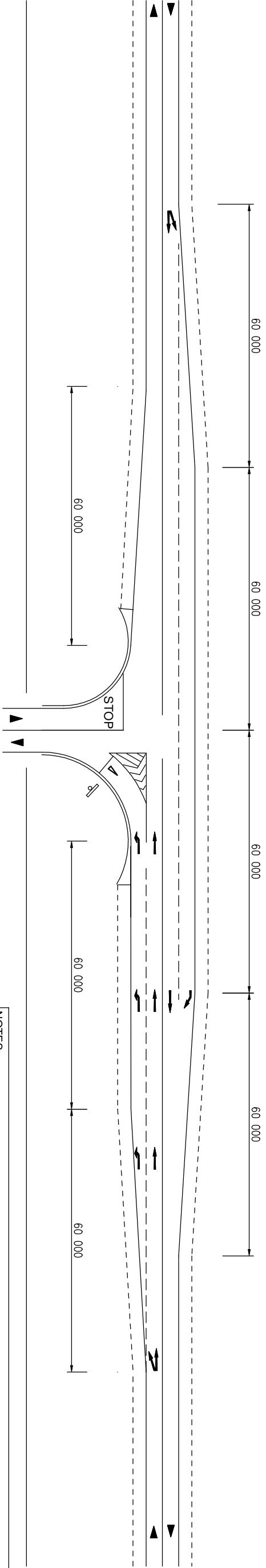
DATE

GTP 16/18



- NOTES:
1. A BARRIER SHALL BE PROVIDED ON THE MEDIAN AND SHALL EXTEND TO AT LEAST 100m ON BOTH SIDES OF THE FILLING STATION ACCESS CENTRE LINE. THE BARRIER SHALL BE ONE OR A COMBINATION OF THE FOLLOWING:
 - BARRIER KERBS ON THE EDGE OF THE CARRIAGEWAYS ON BOTH SIDES OF THE MEDIAN
 - SINGLE GUARDRAIL ON THE EDGE OF THE CARRIEGWAYS ON BOTH SIDES OF THE MEDIAN
 - DOUBLE SIDED GUARDRAIL ON THE MEDIAN CENTRE LINE
 - A NEW JERSEY TYPE CONCRETE BARRIER ON THE MEDIAN CENTRE LINE
 2. STORMWATER DRAINAGE AND EASE OF MAINTENANCE SHALL BE TAKEN INTO ACCOUND WHEN SELECTING A BARRIER.
 3. THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 4. ACCESSES FROM A DUAL-CARRIAGEWAY ROAD SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE ROAD.
 5. ROAD TRAFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
 6. SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESSES TO FILLING STATIONS.

DUAL-CARRIAGEWAY ROAD



- NOTES:
1. THIS DETAIL REPRESENTS THE CASE WHERE A PARTIAL MEDIAN IS NOT REQUIRED.
 2. ACCESSES FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 3. ROAD TRAFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
 4. SEE PLAN No's GTP 16/21 TO GTP 16/23 FOR DETAILS OF ACCESS TO FILLING STATIONS.

SINGLE-CARRIAGEWAY ROAD

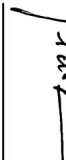
SCALE ON REDUCED DRAWING	
1	2018
REV. No.	DATE
	AMENDMENTS

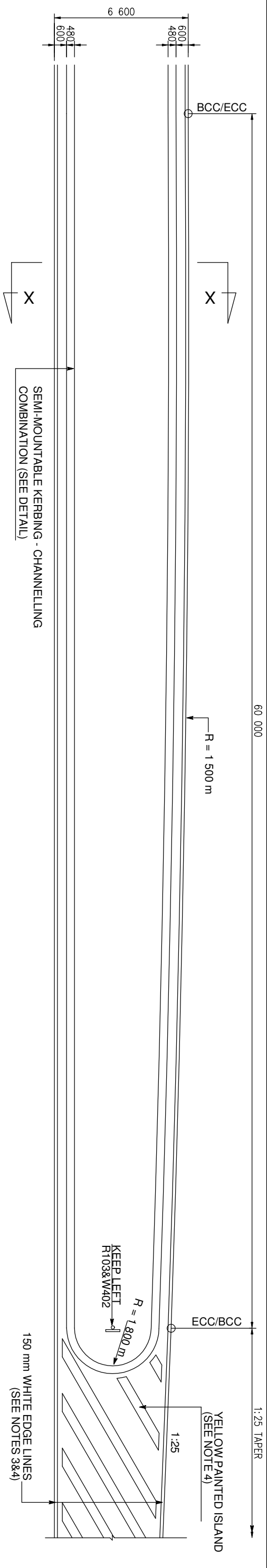
USER NOTE:
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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

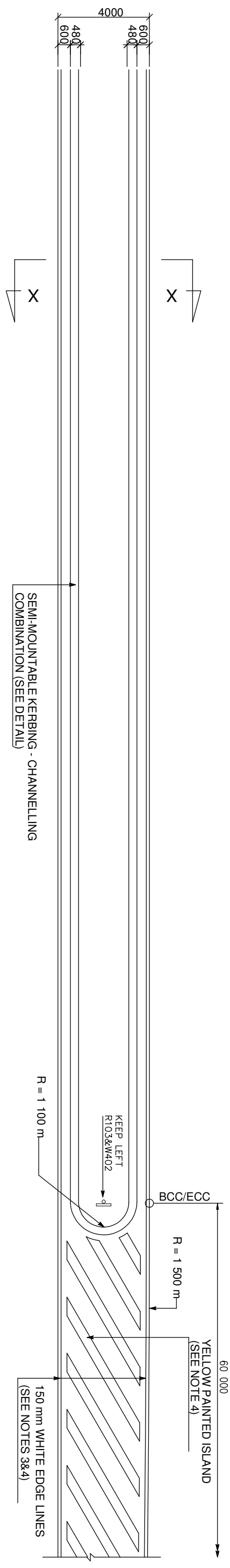
TYPICAL DETAIL OF FILLING STATION ACCESS NOT NEAR AN INTERSECTION

APPROVED BY:		SCALE: AS SHOWN	SHEET: 1 OF 1
			
for HEAD of DEPARTMENT		GTP 16/19	
DATE			



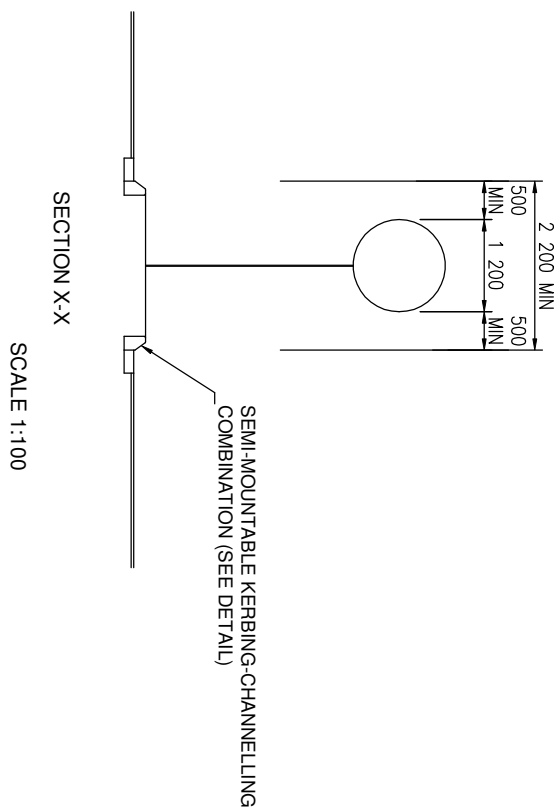
TYPE 1 TRANSITION AND ISLAND NOSE

scale 1:200

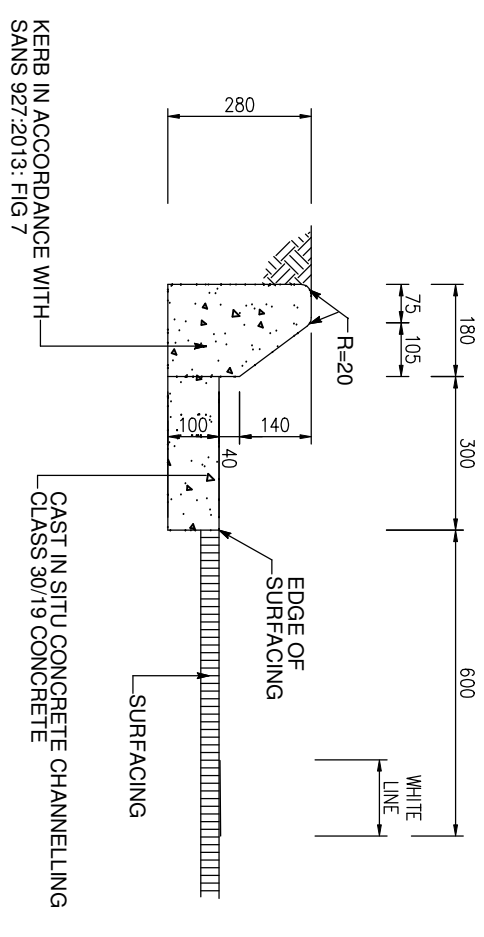


TYPE 2 TRANSITION AND ISLAND NOSE

scale 1:200



1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTTRANS' TYPICAL PLANS FOR ROAD DESIGN.
2. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
3. ROAD STUDS SHALL BE PROVIDED ALONG THE EDGE LINES IN ACCORDANCE WITH THE SADC-RTSM OVER THE FULL LENGTH OF THE TRANSITION AND MEDIAN ISLAND.
4. ROAD MARKINGS SHALL BE REFLECTORIZED COLD PLASTIC ROAD MARKING PAINT OR SIMILAR APPROVED AND THERMO PLASTIC FOR STOP LINES.
5. CONCRETE STRENGTH FOR KERBS AND CHANNELLING TO BE 30MPa MINIMUM.

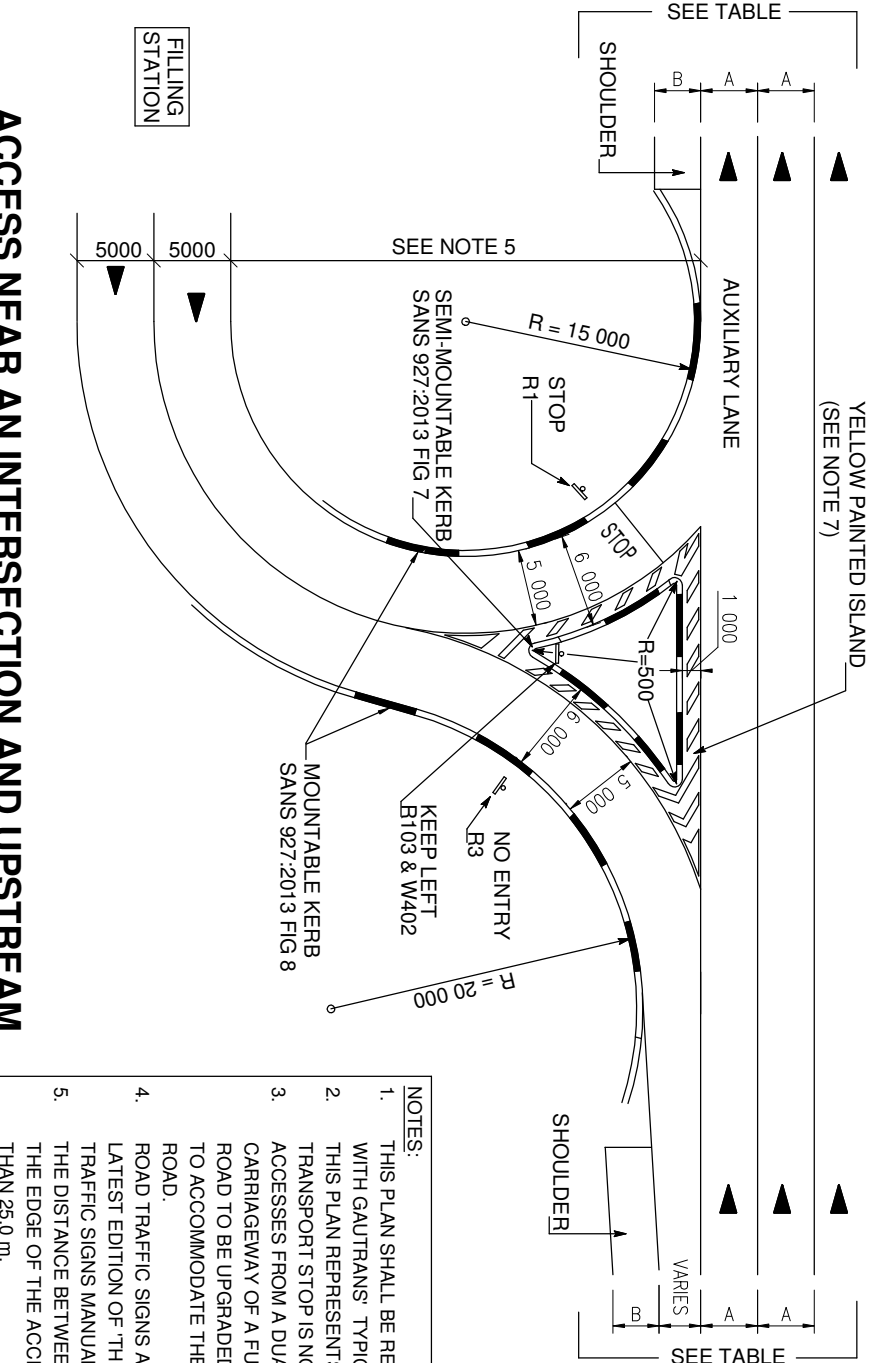


DETAIL OF SEMI-MOUNTABEL KERBING

CHANNELLING COMBINATION

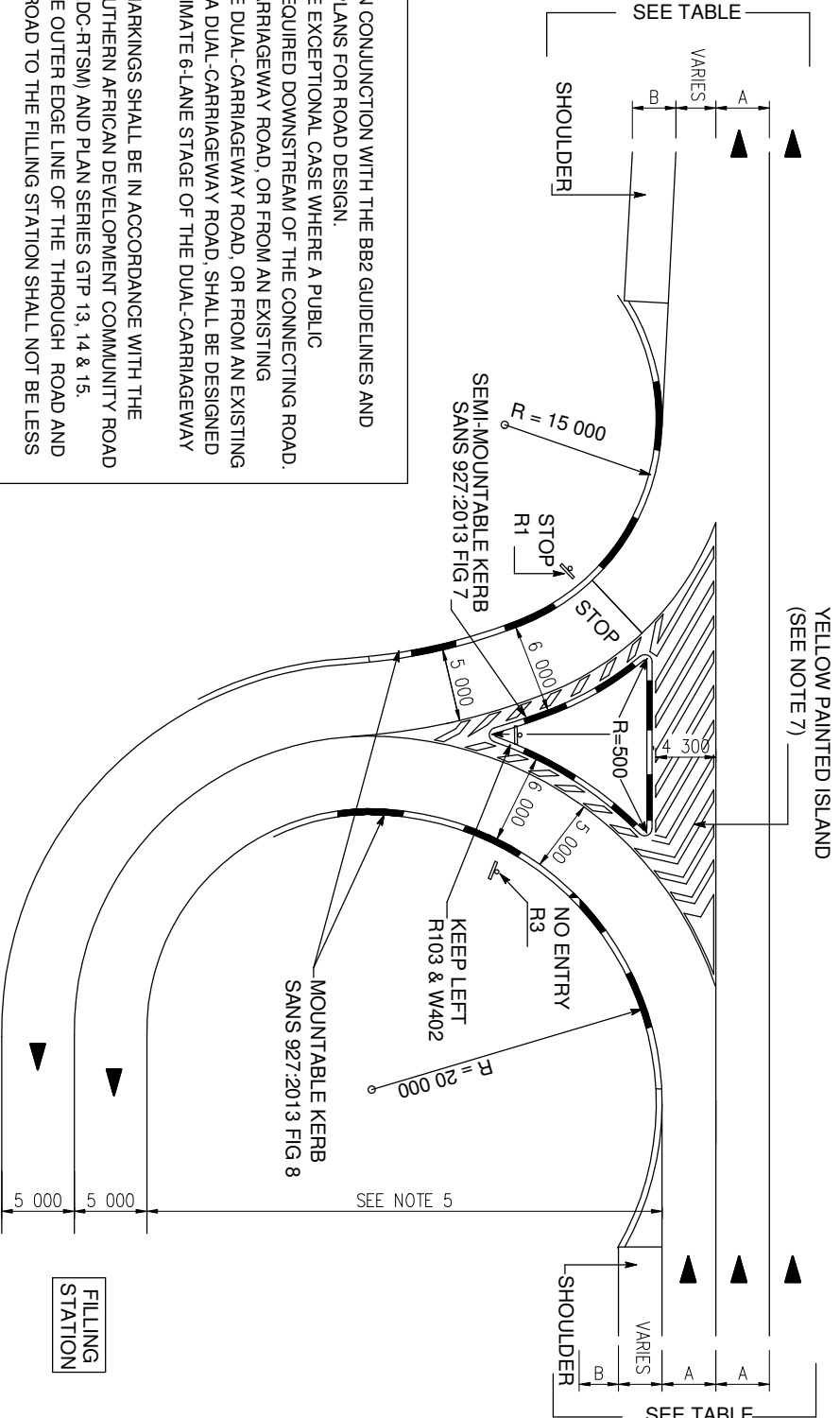
scale 1:15

SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
			
1	2018	SUPERSEDES GTP 16/20 (2003)	
REV. No.	DATE	AMENDMENTS	
 GAUTENG PROVINCE ROADS AND TRANSPORT REPUBLIC OF SOUTH AFRICA GEOMETRIC DETAIL OF TRANSITIONS FOR ROAD WIDENINGS, ISLAND NOSES AND KERBING			
APPROVED BY:		SCALE:	SHEET:
		AS SHOWN	1 OF 1
for HEAD of DEPARTMENT		GTP 16/20	
DATE			

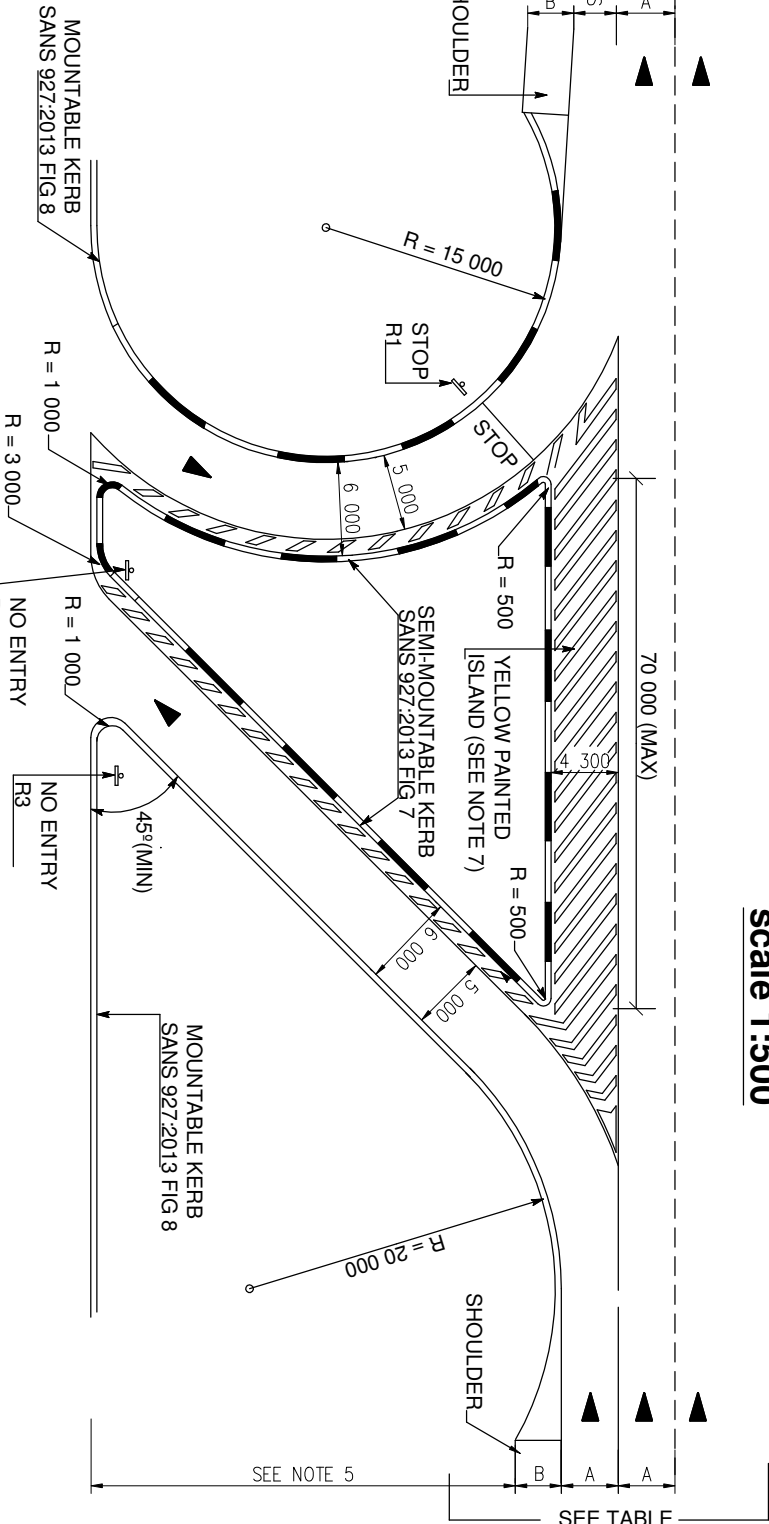
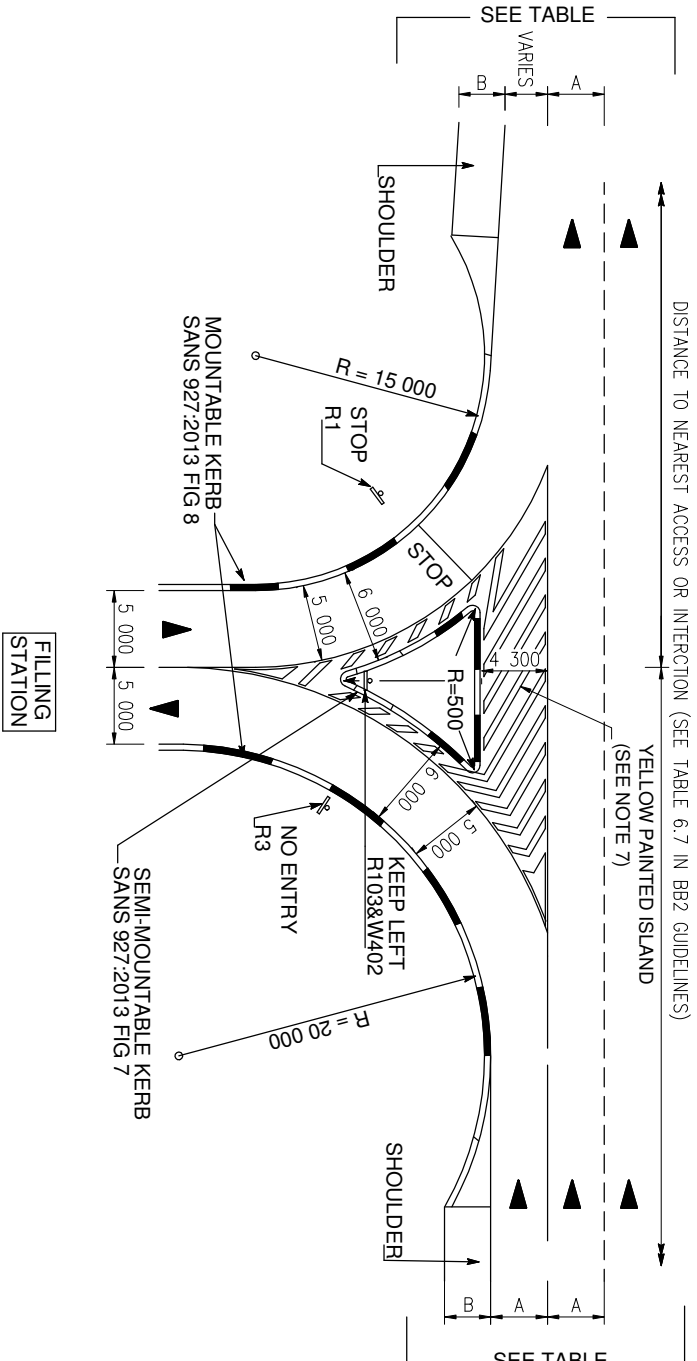


**ACCESS NEAR AN INTERSECTION AND UPSTREAM
OF THE CONNECTING ROAD**
scale 1:500

- NOTES:
1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 2. THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
 3. ACCESSES FROM A DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 4. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
 5. THE DISTANCE BETWEEN THE OUTER EDGE LINE OF THE THROUGH ROAD AND THE EDGE OF THE ACCESS ROAD TO THE FILLING STATION SHALL NOT BE LESS THAN 25.0 m.
 6. CONCRETE STRENGTH FOR KERBS TO BE 30 MPa MINIMUM.
 7. ROAD MARKINGS SHALL BE REFLECTORIZED COLD PLASTIC ROAD MARKING PAINT OR SIMILAR APPROVED AND THERMO PLASTIC FOR STOP LINE.



**ACCESS NEAR AN INTERSECTION AND
DOWNSTREAM OF THE CONNECTING ROAD**
scale 1:500



ACCESS NOT NEAR AN INTERSECTION

scale 1:500

SEPARATE ENTRANCE AND EXIT NOT NEAR AN INTERSECTION

scale 1:500

SCALE ON REDUCED DRAWING

10 mm	50 mm
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1	2018	SUPERSEDES GTP 16/21 (2003)
REV. No.	DATE	AMENDMENTS

USER NOTE:
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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

GEOMETRIC DETAIL OF FILLING STATION
ACCESSES ON DUAL-CARRIAGEWAY ROADS AND
ON SINGLE-CARRIAGEWAY ROADS WHERE
PARTIAL MEDIAN REQUIRED

APPROVED BY:	SCALE:	SHEET:
	AS SHOWN	1 OF 1
DATE	GTP 16/21	

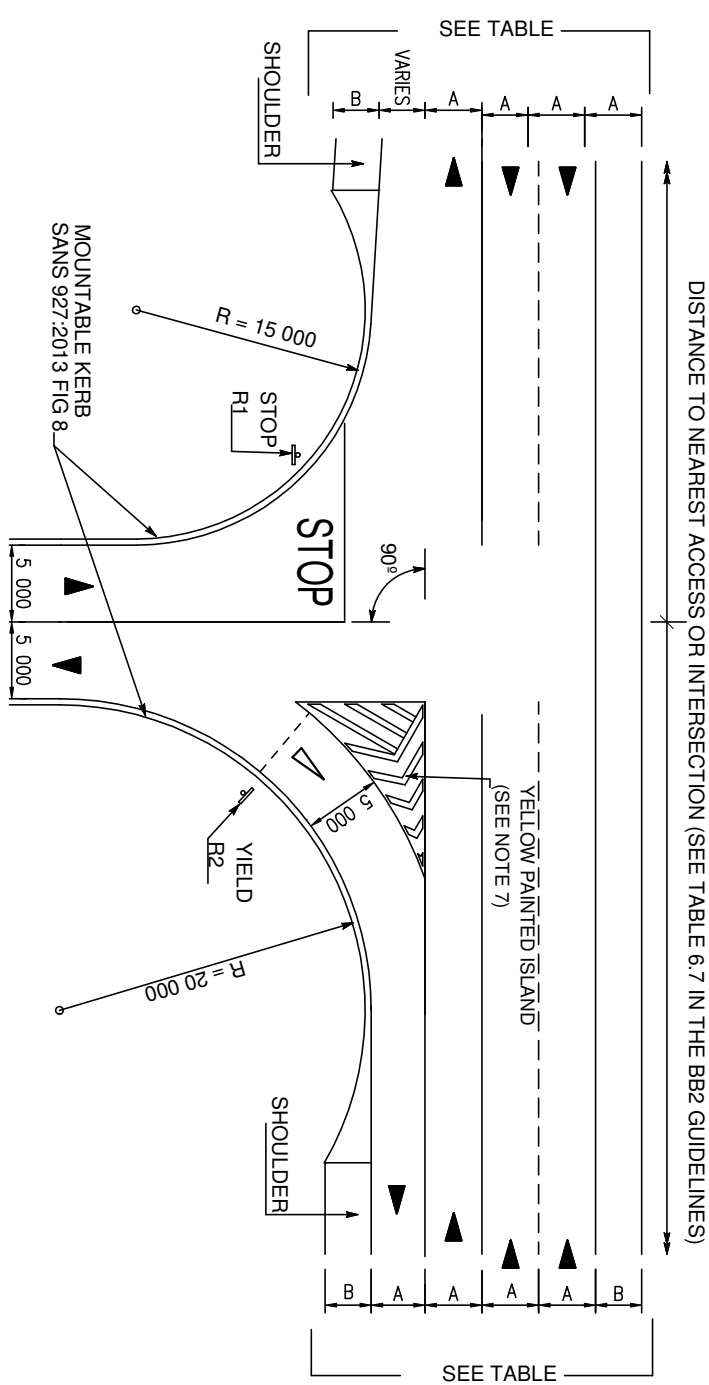
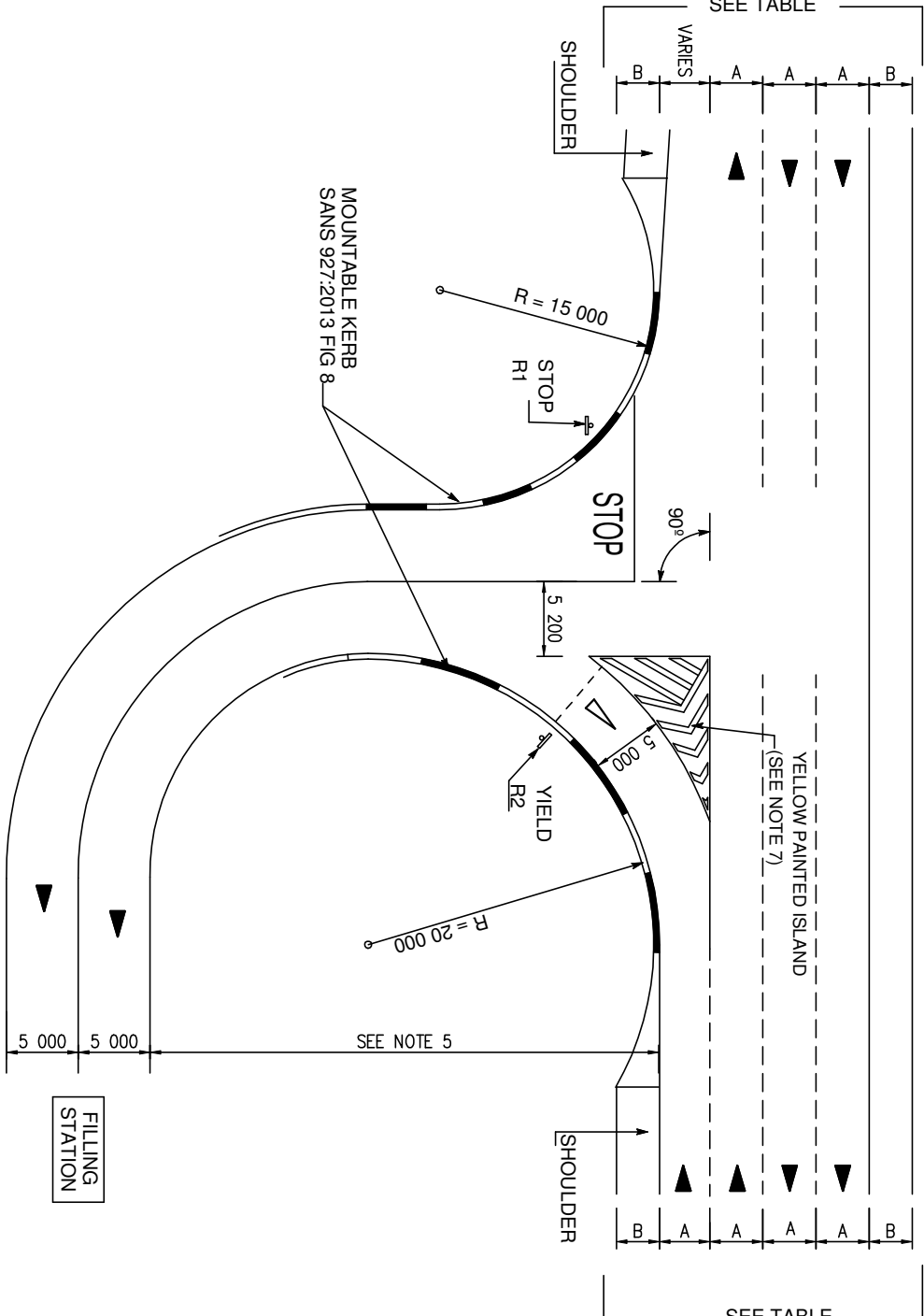
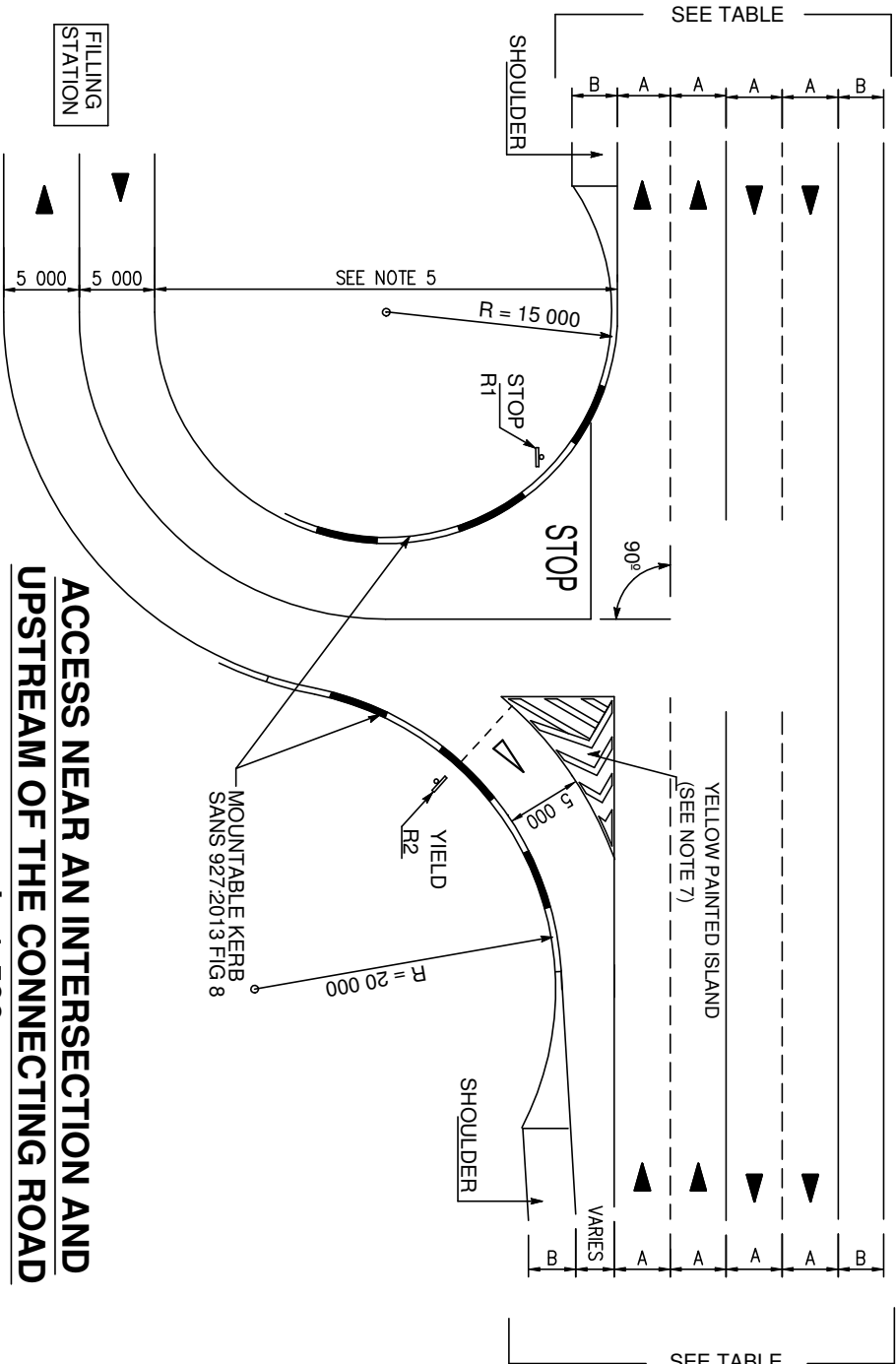


TABLE		
ROAD RESERVE	A	B
≤ 30m	3 500	1 800
≥ 40m	3 700	3 000

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - THIS PLAN REPRESENTS THE EXCEPTIONAL CASE WHERE A PUBLIC TRANSPORT STOP IS NOT REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
 - ACCESSES FROM A DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14 & 15.
 - THE DISTANCE BETWEEN THE OUTER EDGE LINE OF THE THROUGH ROAD AND THE EDGE OF THE ACCESS ROAD TO THE FILLING STATION SHALL NOT BE LESS THAN 25.0 m.
 - CONCRETE STRENGTH FOR KERBS TO BE 30 MPa MINIMUM.
 - ROAD MARKINGS SHALL BE REFLECTORIZED COLD PLASTIC ROAD MARKING PAINT OR SIMILAR APPROVED AND THERMO PLASTIC FOR STOP LINES.

SCALE ON REDUCED DRAWING

USER NOTE:
THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.

GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

GEOMETRIC DETAIL OF FILLING STATION
ACCESSES ON SINGLE-CARRIAGEWAY ROADS
WHERE A PARTIAL MEDIAN IS NOT REQUIRED

APPROVED BY:

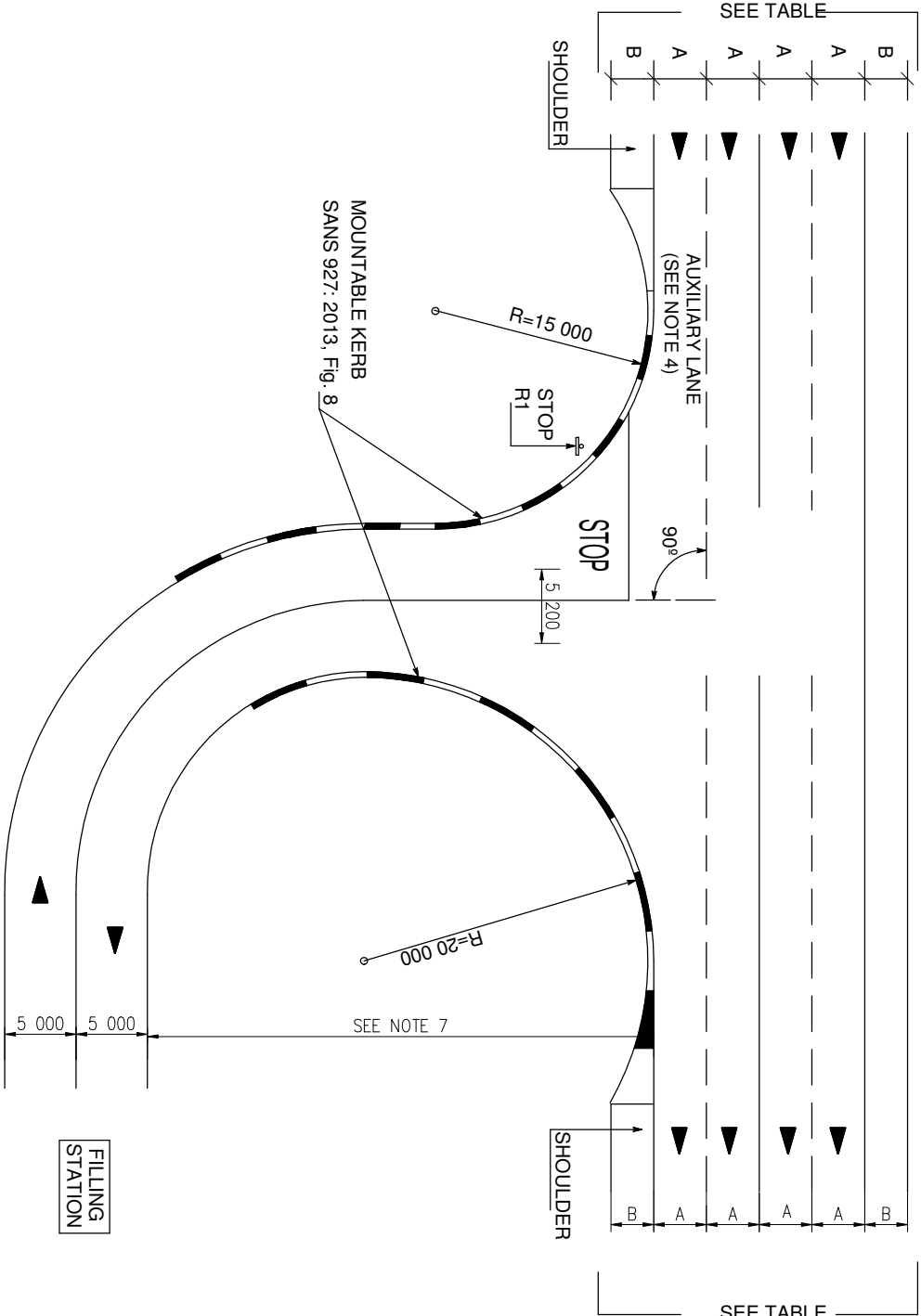
for HEAD of DEPARTMENT

DATE

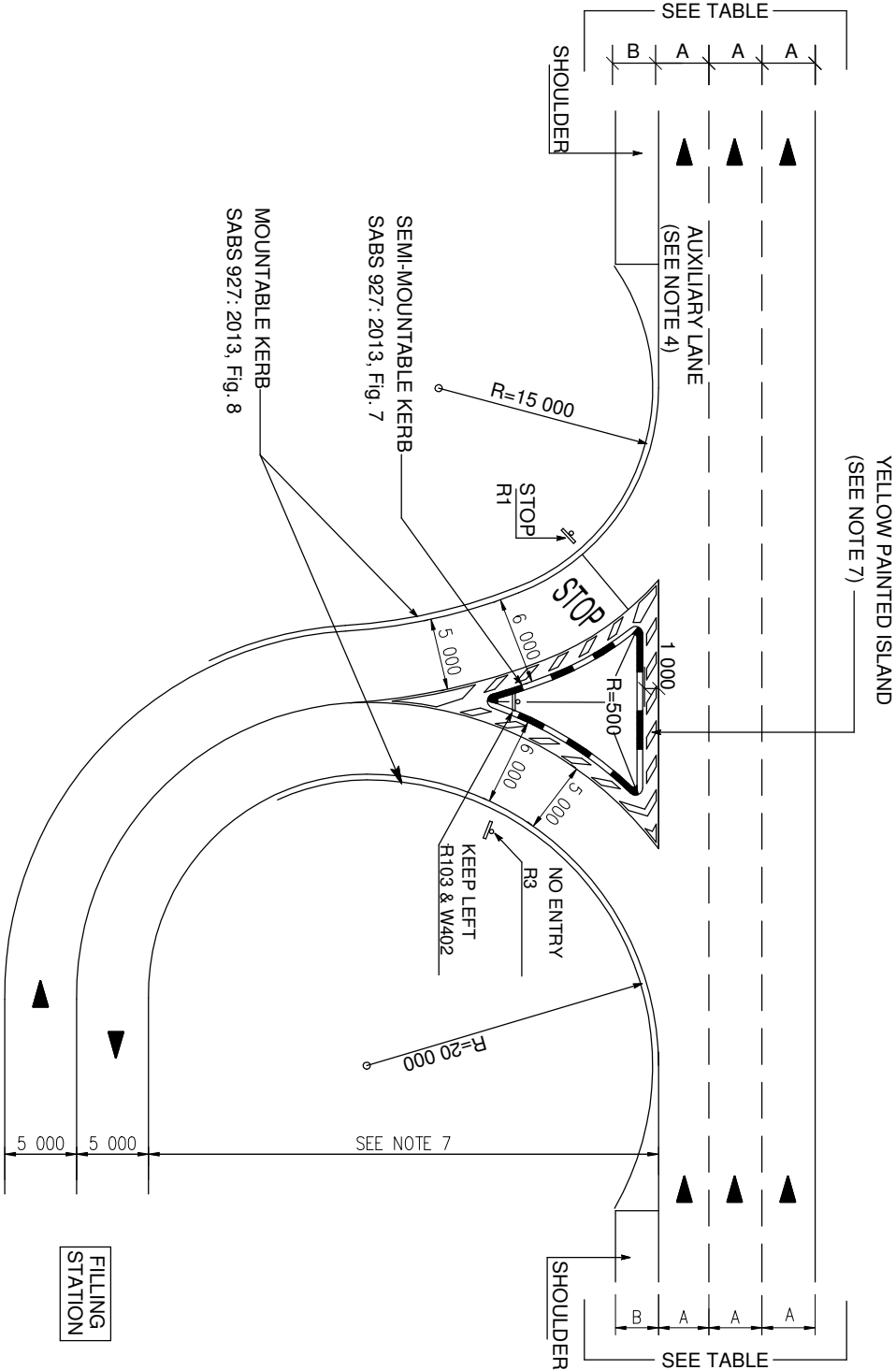
SCALE: AS SHOWN

SHEET: 1 OF 1

GTP 16/22



**SINGLE-CARRIAGEWAY ROADS WITHOUT A PARTIAL
MEDIAN**
scale 1:500



**SINGLE-CARRIAGEWAY ROADS WITH A PARTIAL MEDIAN
AND DUAL-CARRIAEWAY ROADS**
scale 1:500

TABLE		
ROAD RESERVE	A	B
≤ 30m	3 500	1 800
≥ 40m	3 700	3 000

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH THE BB2 GUIDELINES AND WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - THIS PLAN REPRESENTS THE CASE WHERE A PUBLIC TRANSPORT STOP IS REQUIRED DOWNSTREAM OF THE CONNECTING ROAD ON SINGLE-CARRIAGEWAY ROADS (WITH OR WITHOUT A PARTIAL MEDIAN) AND ON DUAL-CARRIAGEWAY ROADS.
 - ACCESSES FROM A DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL CARRIAGEWAY ROAD, SHALL BE DESIGNED TO ACCOMMODATE THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 - THE LENGTH OF THE AUXILIARY LANE DOWNSTREAM OF THE FILLING STATION ACCESS SHALL BE IN ACCORDANCE WITH TABLE 6.12 IN THE BB2 GUIDELINES.
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF 'THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL' (SADC-RTSM) AND PLAN SERIES GTP 13, 14&15.
 - SEE PLAN No GTP 16/18 FOR DETAILS OF THE PUBLIC TRANSPORT STOP.
 - THE DISTANCE BETWEEN THE OUTER EDGE LINE OF THE THROUGH ROAD, AND THE EDGE OF THE ACCESS ROAD TO THE FILLING STATION SHALL NOT BE LESS THAN 25.0m.
 - CONCRETE STRENGTH FOR KERBS TO BE 30 MPa MINIMUM.
 - ROAD MARKINGS SHALL BE REFLECTORIZED COLD PLASTIC ROAD MARKING PAINT OR SIMILAR APPROVED AND THERMO PLASTIC FOR STOP LINES.

SCALE ON REDUCED DRAWING

1:10mm

50mm

REV. No.

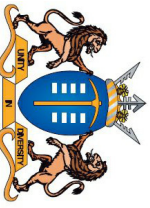
DATE

AMENDMENTS

2018

SUPERSEDES GTP 16/23 (2003)

USER NOTE:
THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.



GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

**GEOMETRIC DETAIL OF FILLING STATION
ACCESSES DOWNSTREAM OF A PUBLIC
TRANSPORT STOP ON SINGLE- AND
DUAL-CARRIAGEWAY ROADS**

APPROVED BY:

for HEAD of DEPARTMENT

DATE

SCALE:

AS SHOWN

SHEET:

1 OF 1

GTP 16/23

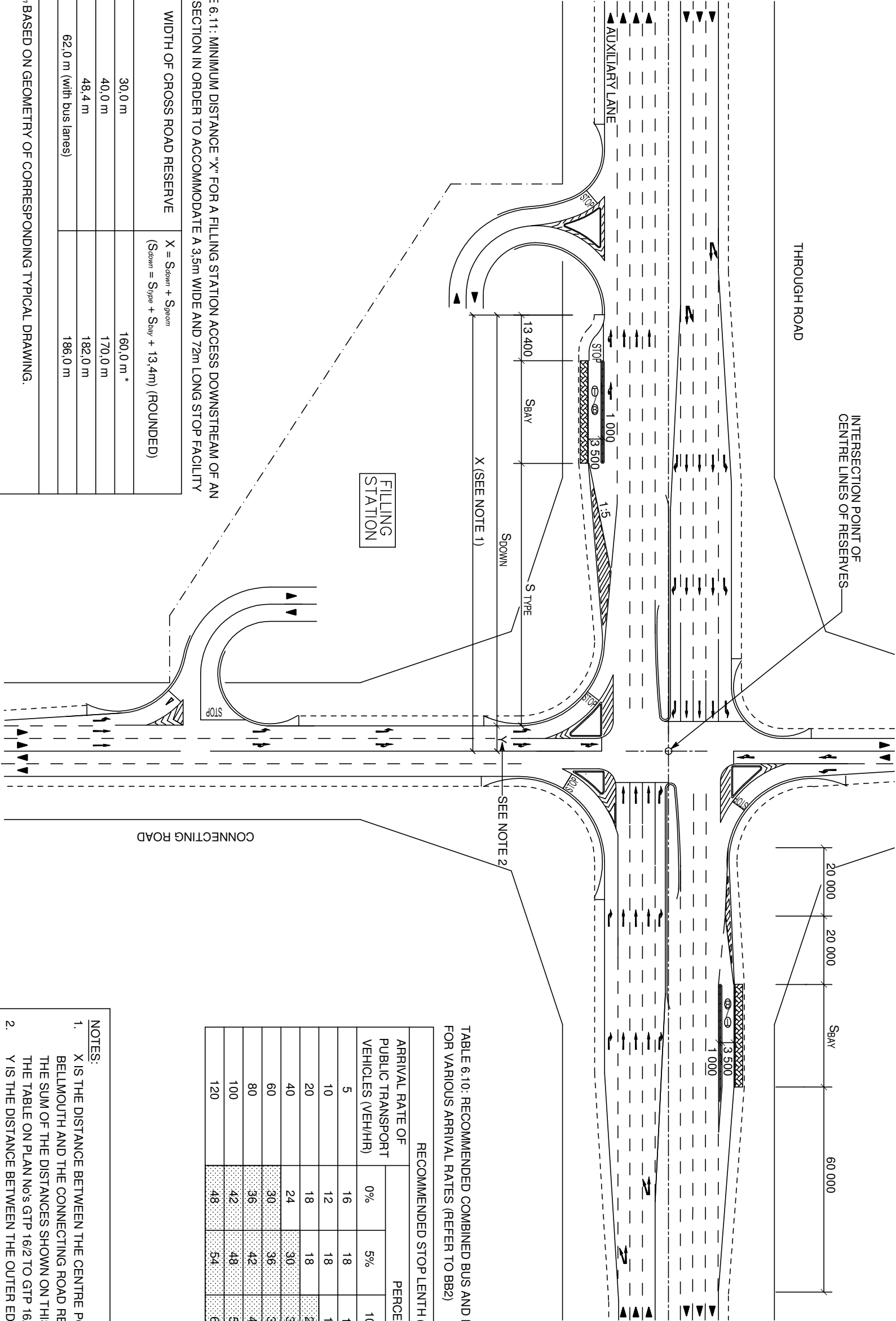


TABLE 6.11: MINIMUM DISTANCE "X" FOR A FILLING STATION ACCESS DOWNSTREAM OF AN INTERSECTION IN ORDER TO ACCOMMODATE A 3,5m WIDE AND 72m LONG STOP FACILITY

WIDTH OF CROSS ROAD RESERVE	X = S _{down} + S _{geom} (S _{down} = S _{type} + S _{bay} + 13,4m) (ROUNDED)
30,0 m	160,0 m *
40,0 m	170,0 m
48,4 m	182,0 m
62,0 m (with bus lanes)	186,0 m

S_{geom} BASED ON GEOMETRY OF CORRESPONDING TYPICAL DRAWING.

* ALLOWS FOR ONE TURNING LANE AND ONE THROUGH LANE AND IS TO BE ADJUSTED SHOULD THERE BE MORE THAN ONE THROUGH LANE OR FOR ROAD GEOMETRY NOT CORRESPONDING TO THE TYPICAL DRAWINGS. A

TABLE 6.10: RECOMMENDED COMBINED BUS AND MIN-BUS TAXI STOP LENGTHS (METRE) FOR VARIOUS ARRIVAL RATES (REFER TO BB2)

ARRIVAL RATE OF PUBLIC TRANSPORT VEHICLES (VEH/HR)	RECOMMENDED STOP LENGTH (METRE) S BAY					
	PERCENTAGE OF BUSES					
	0%	5%	10%	15%	20%	100%
5	16	18	18	18	18	5
10	12	18	18	18	18	36
20	18	18	24	24	24	54
40	24	30	30	30	30	72
60	30	36	36	42	42	N/A
80	36	42	42	48	48	N/A
100	42	48	54	54	60	N/A
120	48	54	60	60	N/A	N/A

- NOTES:
- X IS THE DISTANCE BETWEEN THE CENTRE POINT OF THE FILLING STATION ACCESS BELLMOUTH AND THE CONNECTING ROAD RESERVE CENTRE LINE, AND IS THE GREATER OF THE SUM OF THE DISTANCES SHOWN ON THIS FIGURE OR THE APPLICABLE VALUE GIVEN IN THE TABLE ON PLAN No's GTP 16/2 TO GTP 16/17.
 - Y IS THE DISTANCE BETWEEN THE OUTER EDGE OF THE AUXILIARY LANE AND THE CENTRE OF THE ROAD RESERVE.
 - TABLES 6.10 AND 6.11 MUST BE READ IN CONJUNCTION WITH BB2 "GUIDELINES FOR ACCESS TO FILLING STATIONS".

SCALE ON REDUCED DRAWING

10 mm

50 mm

1

2018

SUPERSEDES FIG.5: (2013)

REV. No.

DATE

AMENDMENTS

USER NOTE:
THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.



FIGURE 5: MEASUREMENT OF CRITICAL DISTANCES FOR COMBINED PUBLIC TRANSPORT STOP AND FILLING STATION ACCESS

APPROVED BY:

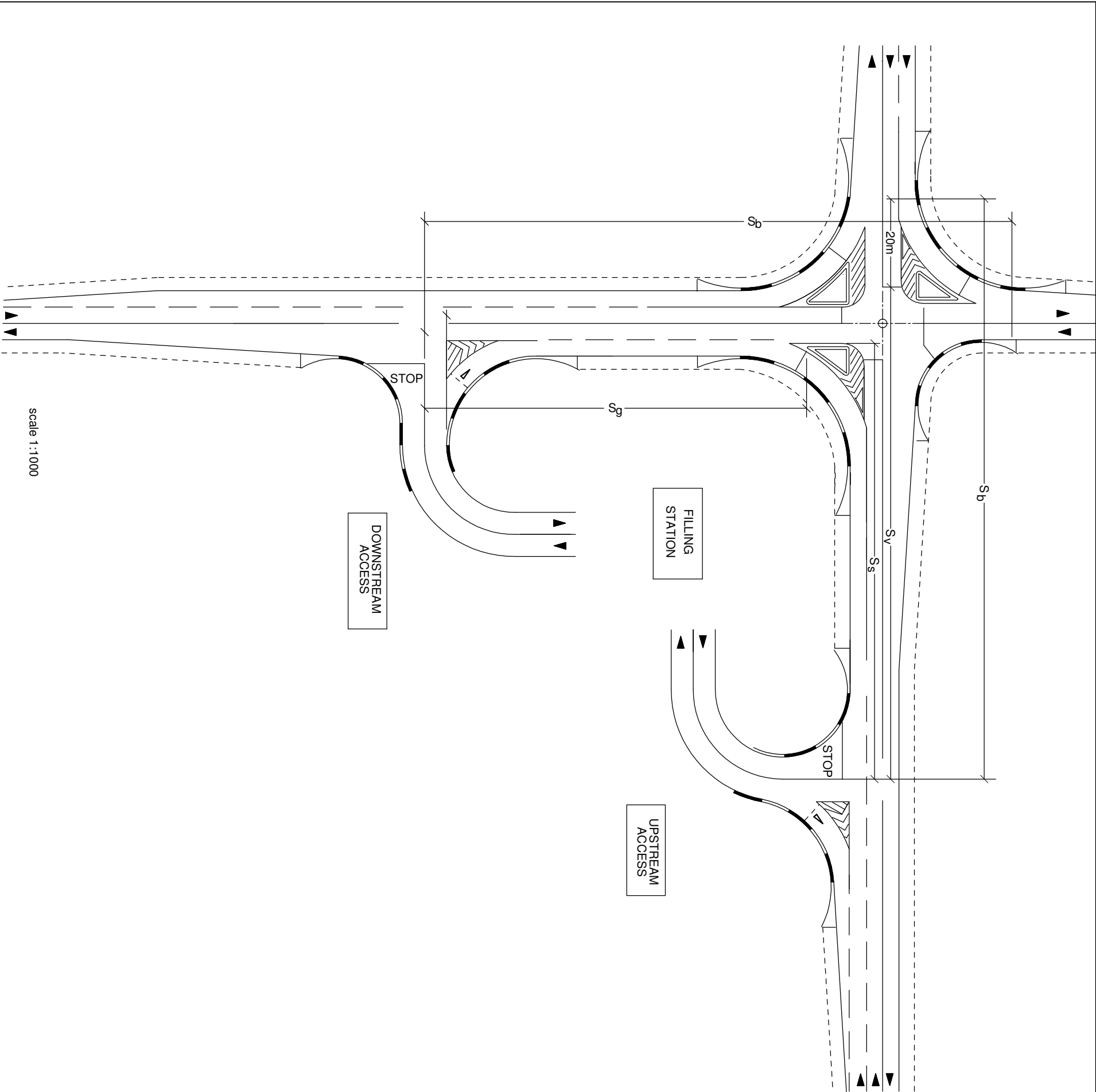
SCALE: AS SHOWN

SHEET: 1 OF 1

for HEAD of DEPARTMENT

DATE

GTP 16/24



- NOTES:
- THIS FIGURE IS NOT APPLICABLE FOR CASES WHERE A PUBLIC TRANSPORT STOP IS REQUIRED DOWNSTREAM OF THE CONNECTING ROAD.
 - SIGHT DISTANCES FOR ACCESSSES FROM AN EXISTING CARRIAGEWAY OF A FUTURE DUAL-CARRIAGEWAY ROAD, OR FROM AN EXISTING ROAD TO BE UPGRADED TO A DUAL-CARRIAGEWAY ROAD, SHALL TAKE COGNISANCE OF THE ULTIMATE 6-LANE STAGE OF THE DUAL-CARRIAGEWAY ROAD.
 - WHERE THE LENGTH OF A SPECIFIC SIGHT DISTANCE IS AFFECTED BY THE INTERSECTING ANGLE eg. S_s , THE LENGTH SHALL BE MEASURED ALONG THE OUTER EDGE OF THE OUTER THROUGH LANE.
 - WHERE TWO FILLING STATION ACCESSSES ARE PROVIDED OPPOSITE EACH OTHER ON A SINGLE-CARRIAGEWAY ROAD, A PARTIAL MEDIAN SHALL BE PROVIDED ON THE CENTRE LINE OF THE ROAD TO PREVENT ANY RIGHT-TURNING MOVEMENTS (SEE TYPICAL PLAN No's GTP 16/7 TO GTP 16/15 FOR DETAILS).

DEFINITIONS:

SYMBOLS FOR SIGHT DISTANCES (SEE TABLE 6.3 FOR VALUE)

- S_s SIGHT DISTANCE NECESSARY TO ENABLE THE DRIVER OF A VEHICLE MOVING ON THE ROAD TO PERCEIVE THE FILLING STATION ACCESS AND THE INTERSECTION AS SEPARATE DECISION-MAKING POINTS.
- S_v SIGHT DISTANCE NECESSARY TO REDUCE SPEED SAFELY IN ORDER TO ENTER THE FILLING STATION ACCESS (S_s AND S_v SHALL NOT BE LESS THAN THE STOPPING SIGHT DISTANCE).
- S_b SIGHT DISTANCE NECESSARY TO ENTER OR CROSS THE TRAFFIC STREAM WITH SAFETY STARTING FROM A STATIONARY POSITION OF THE VEHICLE AT THE EXIT FROM THE FILLING STATION. THIS DISTANCE MUST CORRESPOND TO A MINIMUM GAP ACCEPTANCE PERIOD OF 7 SECONDS.
- S_g SIGHT DISTANCE NECESSARY TO ENTER OR CROSS THE TRAFFIC STREAM WITH SAFETY WITHOUT COLLIDING WITH A VEHICLE MOVING OUT OF A SLIP LANE (MUST NOT BE LESS THAN THE DISTANCE WHICH A VEHICLE LEAVING THE SLIP LANE WOULD TRAVEL WITHIN 7 SECONDS AT A STARTING SPEED OF 20 km/h AND AN ACCELERATION OF 5 km/h/s, i.e. 73 m.)

END POINTS FOR THE MEASUREMENTS OF DISTANCES AT THE INTERSECTION:

- S_s THE LEFT-HAND SIDE OF THE OUTER THROUGH LANE AT THE INTERSECTION.
- S_v THE STOP LINE OR THE POINT WHERE THE STOP LINE WOULD NORMALLY BE PLACED.
- S_g AS FOR S_s WHERE THERE IS NO SLIP LANE AND, IN THE CASE OF A SLIP LANE, THE RIGHT-HAND END OF THE STOP OR YIELD LINE OF THE SLIP LANE.

AT THE FILLING STATION ACCESS:

- S_b DIRECTLY OPPOSITE THE RIGHT-HAND END POINT OF THE STOP LINE AT THE FILLING STATION EXIT.
- S_v DIRECTLY OPPOSITE THE TANGENT POINT OF A TANGENT TO THE CIRCULAR CURVE ON THE LEFT-HAND SIDE OF THE FILLING STATION ENTRANCE, AND PERPENDICULAR TO THE DIRECTION OF THE ROAD EXCEPT ON THE UPSTREAM SIDE OF A SINGLE-CARRIAGEWAY ROAD WHERE IT IS MEASURED DIRECTLY OPPOSITE THE RIGHT-HAND SIDE OF THE STOP LINE.

SCALE ON REDUCED DRAWING

10 mm

50 mm

USER NOTE:

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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

FIGURE 9: DEFINITION OF THE SIGHT DISTANCES DETERMINING THE LOCATION OF FILLING STATION ACCESSSES ON SINGLE-CARRIAGEWAY ROADS

APPROVED BY:

SCALE: AS SHOWN

SHEET: 1 OF 1

for HEAD of DEPARTMENT

DATE

GTP 16/26

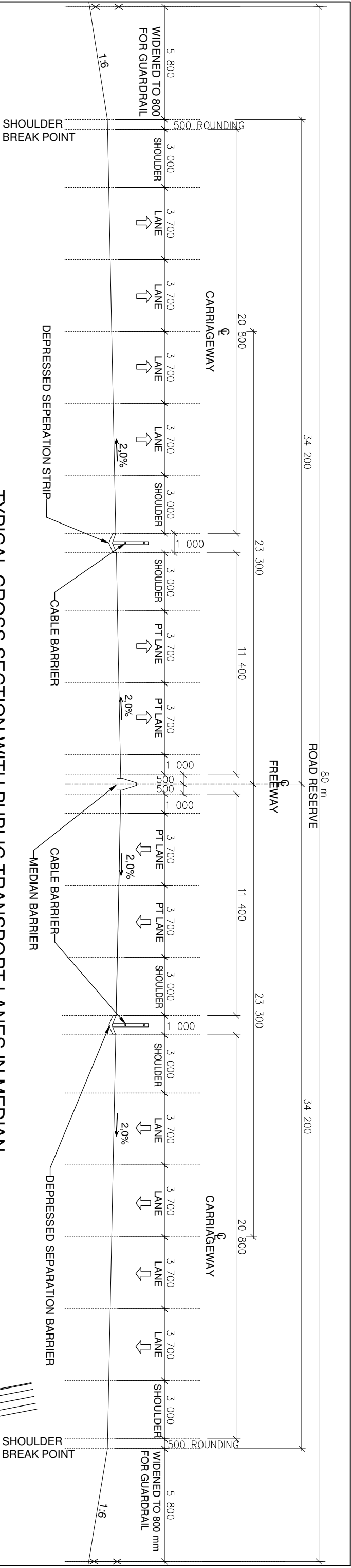
REV. No.

DATE

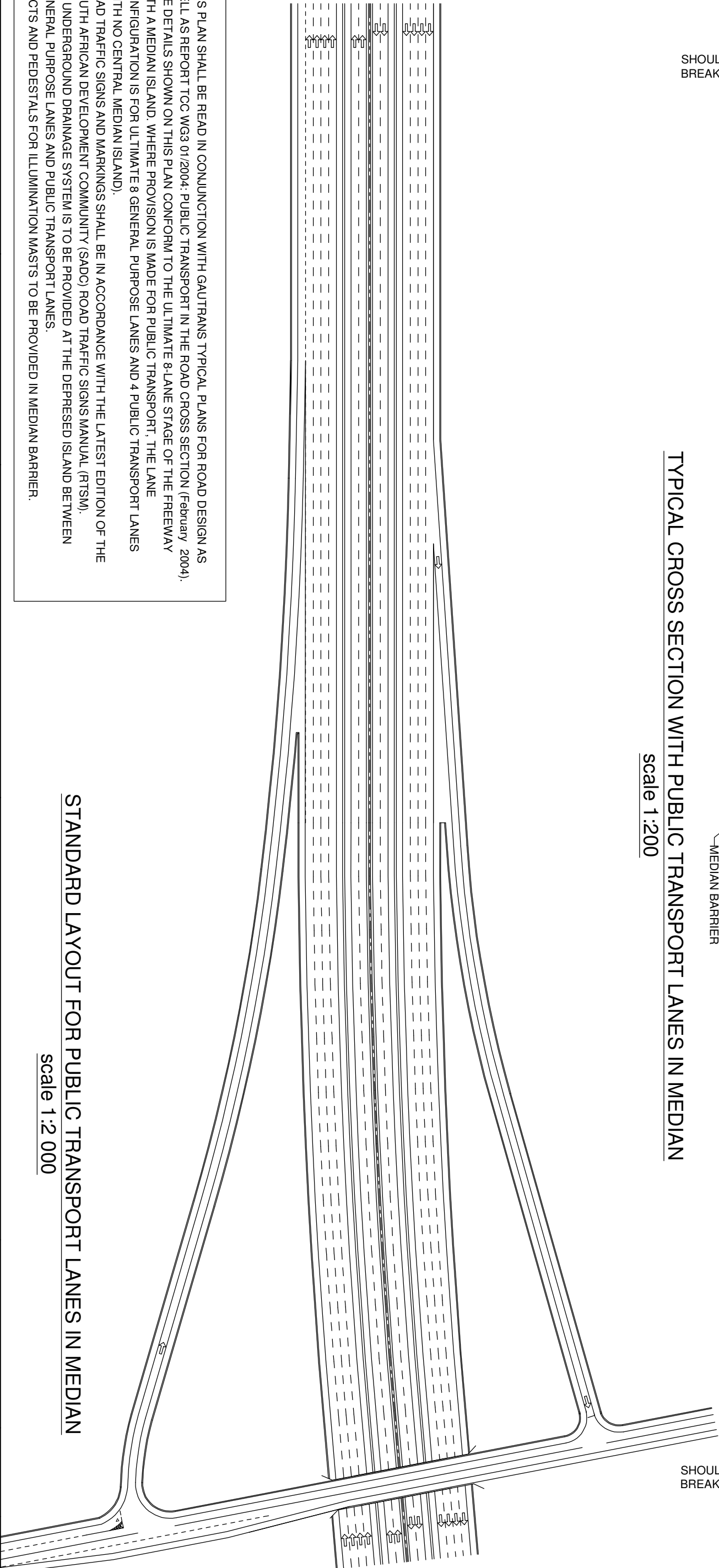
AMENDMENTS

2018

SUPERSEDES FIG 9 (NOV 2003)



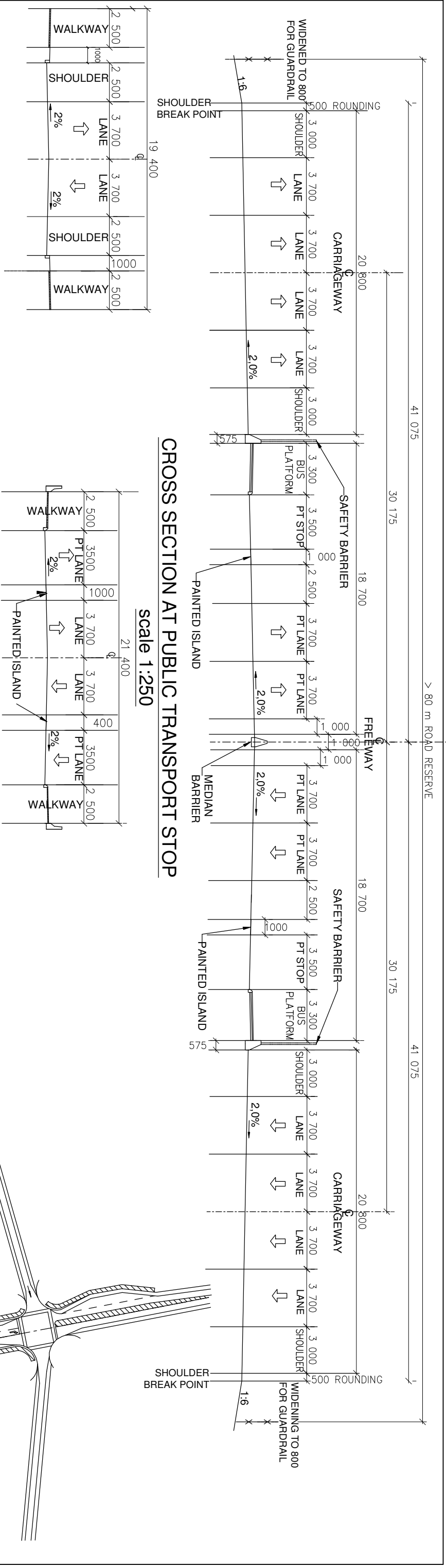
TYPICAL CROSS SECTION WITH PUBLIC TRANSPORT LANES IN MEDIAN
scale 1:200



STANDARD LAYOUT FOR PUBLIC TRANSPORT LANES IN MEDIAN
scale 1:2 000

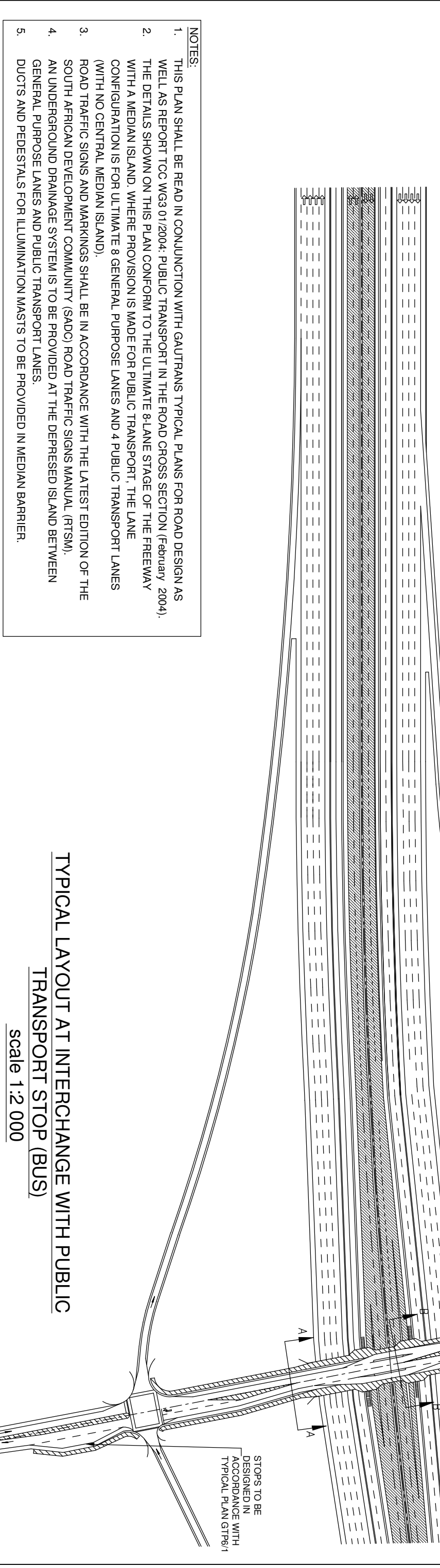
- NOTES:
1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 2. THE DETAILS SHOWN ON THIS PLAN CONFORM TO THE ULTIMATE 8-LANE STAGE OF THE FREEWAY WITH A MEDIAN ISLAND. WHERE PROVISION IS MADE FOR PUBLIC TRANSPORT, THE LANE CONFIGURATION IS FOR ULTIMATE 8 GENERAL PURPOSE LANES AND 4 PUBLIC TRANSPORT LANES (WITH NO CENTRAL MEDIAN ISLAND).
 3. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTH AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 4. AN UNDERGROUND DRAINAGE SYSTEM IS TO BE PROVIDED AT THE DEPRESSED ISLAND BETWEEN GENERAL PURPOSE LANES AND PUBLIC TRANSPORT LANES.
 5. DUCTS AND PEDESTALS FOR ILLUMINATION MASTS TO BE PROVIDED IN MEDIAN BARRIER.

SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
1 2018 SUPERSEDES PT1/1		TYPICAL PUBLIC TRANSPORT FACILITIES IN THE MEDIAN OF A FREEWAY IN A 80 m RESERVE	
REV. No. DATE AMENDMENTS		STANDARD CROSS SECTION	
		APPROVED BY: 08/03/2019	
		SCALE: AS SHOWN	
		SHEET: 1 OF 4	
		GTP 17/1-1	
		for HEAD of DEPARTMENT DATE	



CROSS SECTION ADJACENT TO PUBLIC TRANSPORT STOP (A-A) (ON CROSS ROAD)

CROSS SECTION ADJACENT TO PUBLIC TRANSPORT STOP (B-B) (ON CROSS ROAD)



- NOTES:
1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 2. THE DETAILS SHOWN ON THIS PLAN CONFORM TO THE ULTIMATE 8-LANE STAGE OF THE FREEWAY WITH A MEDIAN ISLAND. WHERE PROVISION IS MADE FOR PUBLIC TRANSPORT, THE LANE CONFIGURATION IS FOR ULTIMATE 8 GENERAL PURPOSE LANES AND 4 PUBLIC TRANSPORT LANES (WITH NO CENTRAL MEDIAN ISLAND).
 3. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTH AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 4. AN UNDERGROUND DRAINAGE SYSTEM IS TO BE PROVIDED AT THE DEPRESSED ISLAND BETWEEN GENERAL PURPOSE LANES AND PUBLIC TRANSPORT LANES.
 5. DUCTS AND PEDESTALS FOR ILLUMINATION MASTS TO BE PROVIDED IN MEDIAN BARRIER.

SCALE ON REDUCED DRAWING

10.0mm

50.0mm

USER NOTE:

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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

TYPICAL PUBLIC TRANSPORT FACILITIES IN THE MEDIAN OF A FREEWAY IN A 80m RESERVE - LAYOUT OF STOPS IN INTERCHANGE STANDARD CROSS SECTION

APPROVED BY:

SCALE: AS SHOWN

SHEET: 2 OF 4

1

2018

SUPERSEDES PT1/2

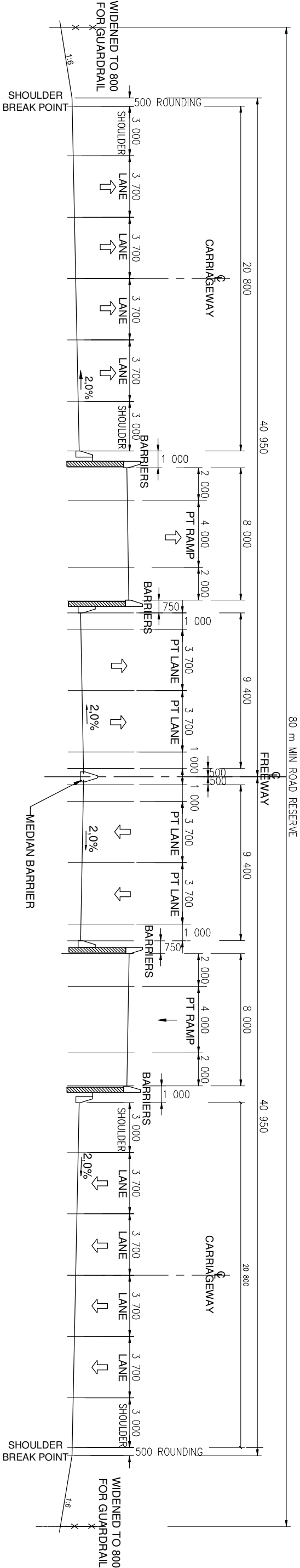
DATE

AMENDMENTS

for HEAD of DEPARTMENT

DATE

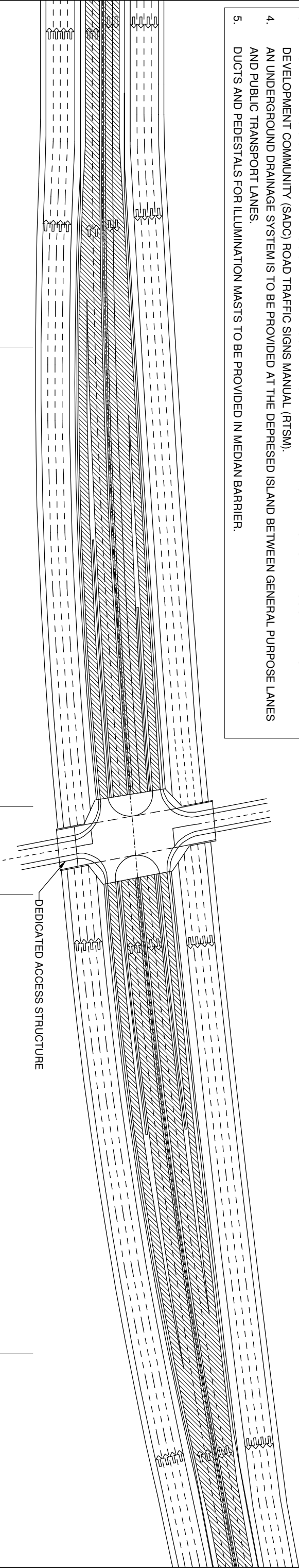
GTP 17/1-2



TYPICAL CROSS SECTION FOR GRADE SEPARATION AT DEDICATED PUBLIC TRANSPORT ENTRANCE AND EXIT TO CROSSROAD

scale 1:250

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS TYICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - THE DETAILS SHOWN ON THIS PLAN CONFORM TO THE ULTIMATE 8-LANE STAGE OF THE FREEWAY WITH A MEDIAN ISLAND, WHERE PROVISION IS MADE FOR PUBLIC TRANSPORT, THE LANE CONFIGURATION IS FOR ULTIMATE 8 GENERAL PURPOSE LANES AND 4 PUBLIC TRANSPORT LANES (WITH NO CENTRAL MEDIAN ISLAND).
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTH AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - AN UNDERGROUND DRAINAGE SYSTEM IS TO BE PROVIDED AT THE DEPRESSED ISLAND BETWEEN GENERAL PURPOSE LANES AND PUBLIC TRANSPORT LANES.
 - DUCTS AND PEDESTALS FOR ILLUMINATION MASTS TO BE PROVIDED IN MEDIAN BARRIER.

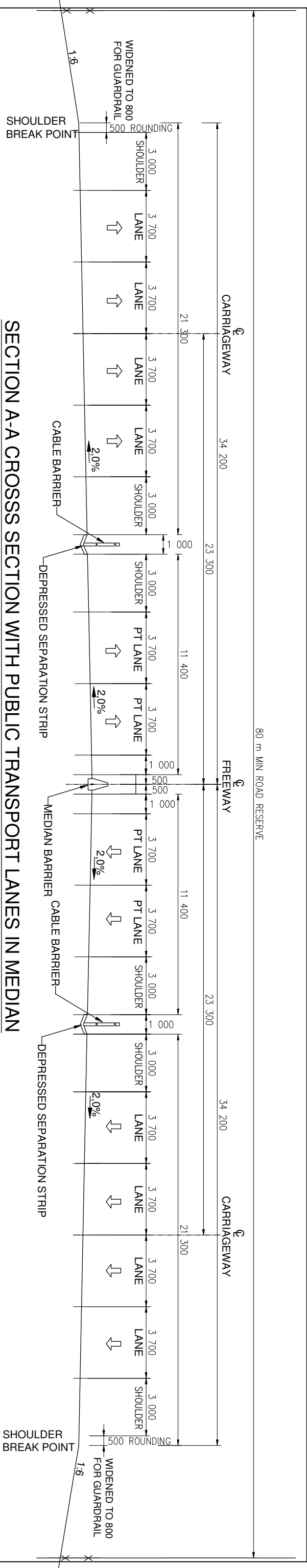


STANDARD LAYOUT FOR GRADE SEPARATION AT DEDICATED PUBLIC TRANSPORT

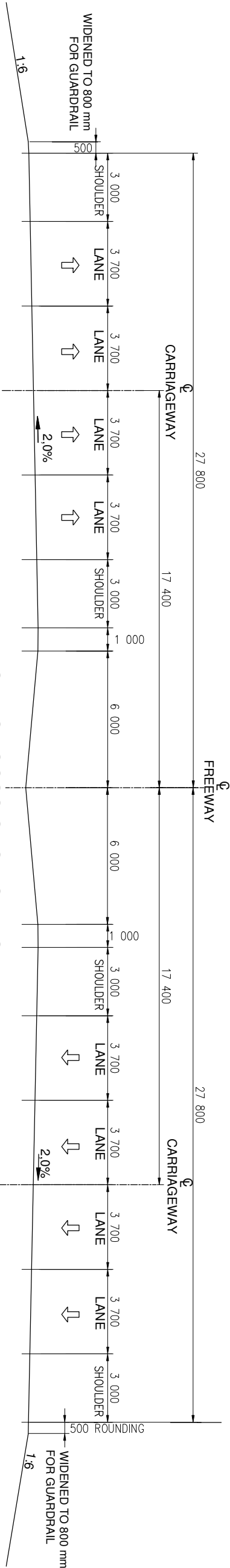
ENTRANCE AND EXIT TO CROSSROAD

scale 1:2500

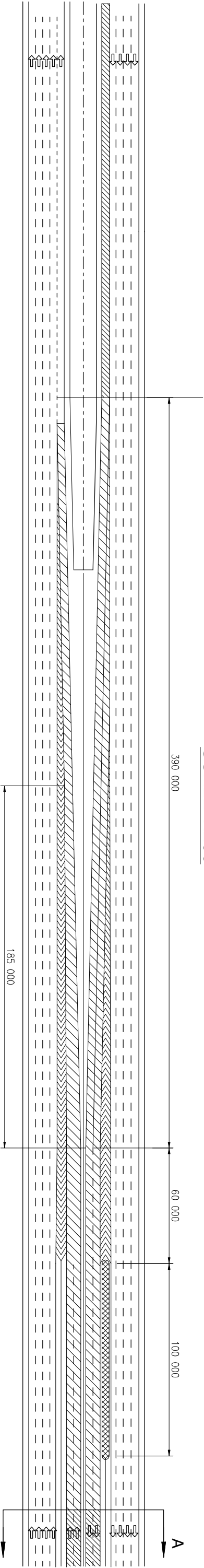
SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
1. 2018 SUPERSEDES PT1/3		TYPICAL PUBLIC TRANSPORT FACILITIES IN THE MEDIAN OF A FREEWAY IN A 80 m RESERVE - GRADE SEPARATED DEDICATED ACCESS TO MEDIAN LANES: STANDARD CROSS SECTION	
REV. No.	DATE	AMENDMENTS	
APPROVED BY:		SCALE:	SHEET:
		AS SHOWN	3 OF 4
for HEAD of DEPARTMENT		GTP 17/1-3	



SECTION A-A CROSS SECTION WITH PUBLIC TRANSPORT LANES IN MEDIAN
scale 1:200



TYPICAL CROSS SECTION FOR URBAN FREEWAY
SCALE 1:200

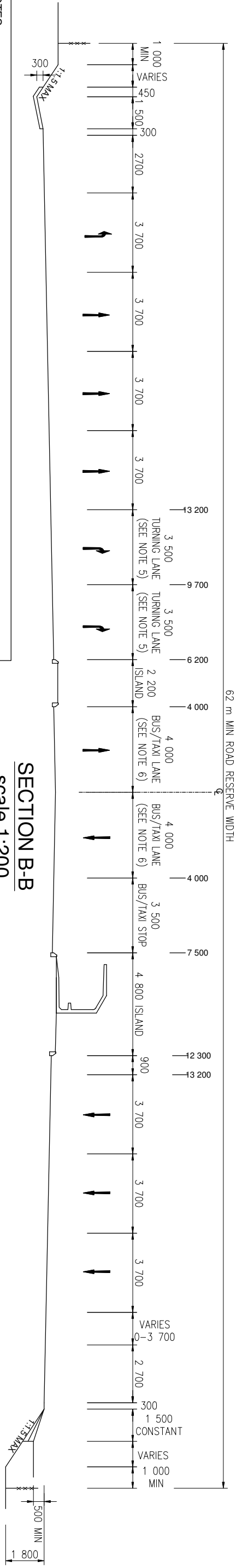
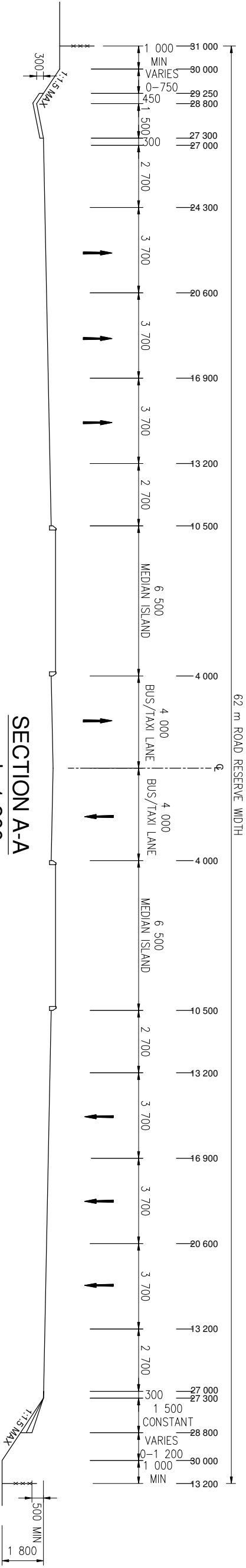


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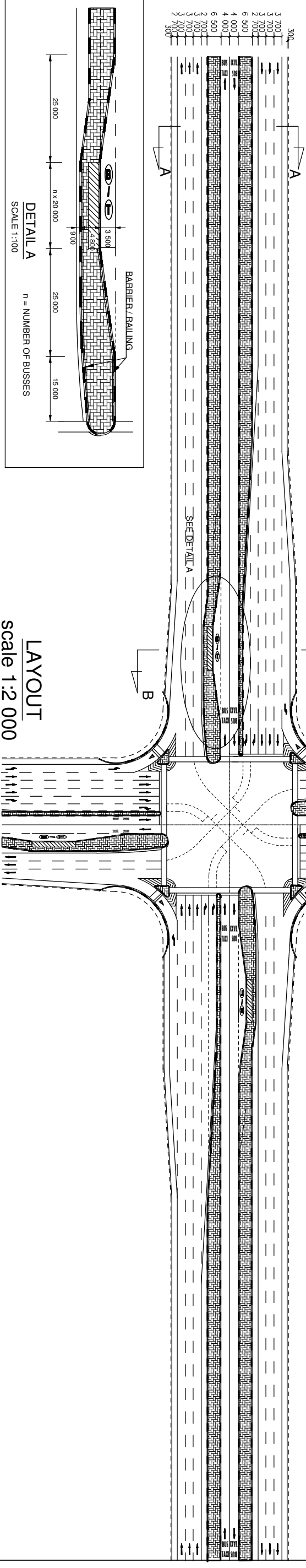
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
- THE DETAILS SHOWN ON THIS PLAN CONFORM TO THE ULTIMATE 8-LANE STAGE OF THE FREEWAY WITH A MEDIAN ISLAND, WHERE PROVISION IS MADE FOR PUBLIC TRANSPORT. THE LANE CONFIGURATION IS FOR ULTIMATE 8 GENERAL PURPOSE LANES AND 4 PUBLIC TRANSPORT LANES (WITH NO CENTRAL MEDIAN ISLAND).
- ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTH AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
- AN UNDERGROUND DRAINAGE SYSTEM IS TO BE PROVIDED AT THE DEPRESSED ISLAND BETWEEN GENERAL PURPOSE LANES AND PUBLIC TRANSPORT LANES.
- DUCTS AND PEDESTALS FOR ILLUMINATION MASTS TO BE PROVIDED IN MEDIAN BARRIER.

TYPICAL AT GRADE ENTRANCE AND EXIT TO PUBLIC TRANSPORT LANES
USING STANDARD TAPERS
scale 1:2 500

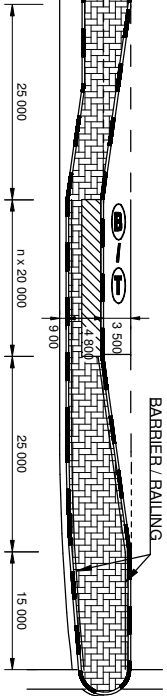
SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
10 mm	50 mm	 GAUTENG PROVINCE ROADS AND TRANSPORT REPUBLIC OF SOUTH AFRICA	
1	2018		
REV. No.	DATE		
	AMENDMENTS		
APPROVED BY:		SCALE: AS SHOWN	SHEET: 4 OF 4
for HEAD of DEPARTMENT		GTP 17/1-4	



- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004, 'PUBLIC TRANSPORT IN THE ROAD CROSS SECTION' (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 62 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 - 5 AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 - 6 PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.



DETAIL A
SCALE 1:100



SCALE ON REDUCED DRAWING

10 mm
50 mm

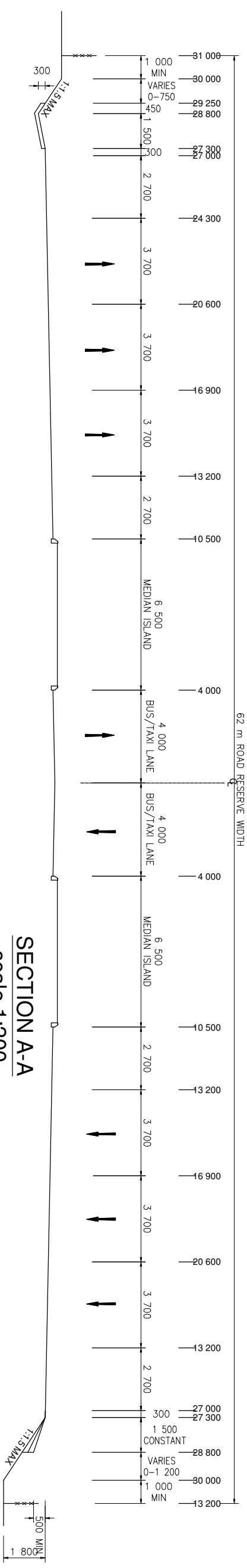
USER NOTE:
THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.



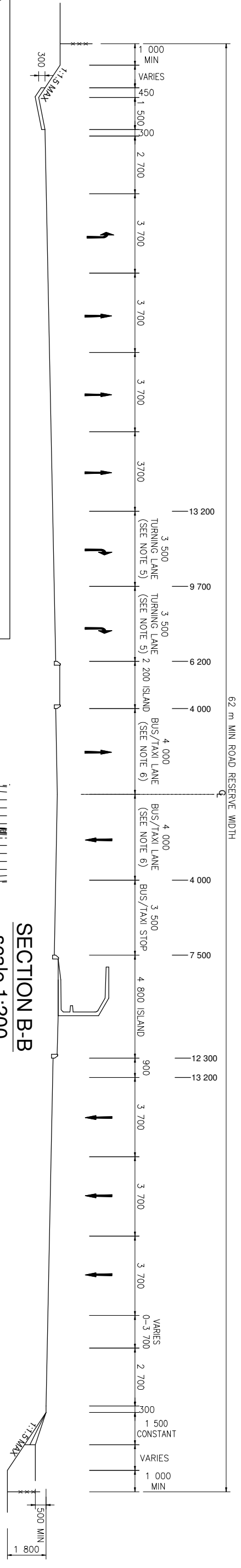
GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

BUS LANES IN THE MEDIAN OF A 62 m DUAL-CARRIAGEWAY ROAD: 6 LANES INTERSECTIONS WITH A DUAL-CARRIAGEWAY ROAD WITH BUS STOPS IN MEDIAN

APPROVED BY:	SCALE: AS SHOWN	SHEET: 1 OF 1
for HEAD of DEPARTMENT	DATE	GTP 17/2-1

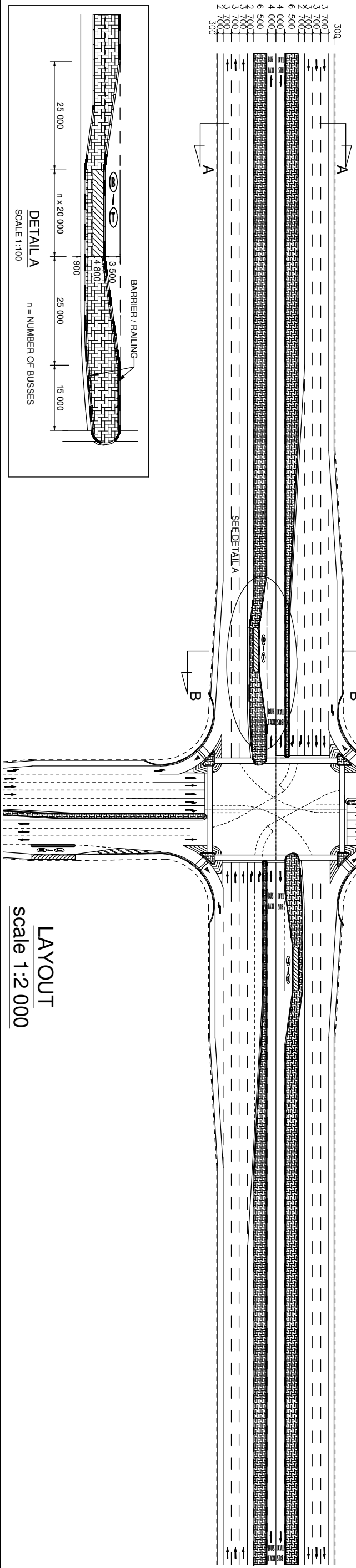


SECTION A-A
scale 1:200



SECTION B-B
scale 1:200

- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 62 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 5. AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 6. PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.



LAYOUT
scale 1:2 000

SCALE ON REDUCED DRAWING

10 mm

50 mm

USER NOTE:
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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

BUS LANES IN THE MEDIAN OF A 62 m DUAL-CARRIAGEWAY ROAD: 6 LANES INTERSECTIONS WITH A DUAL-CARRIAGEWAY ROAD WITH MIXED TRAFFIC (OUTSIDE BUS STOPS)

APPROVED BY:

SCALE: AS SHOWN

SHEET: 1 OF 1

for HEAD of DEPARTMENT

DATE

GTP 17/2-2

REV. No.

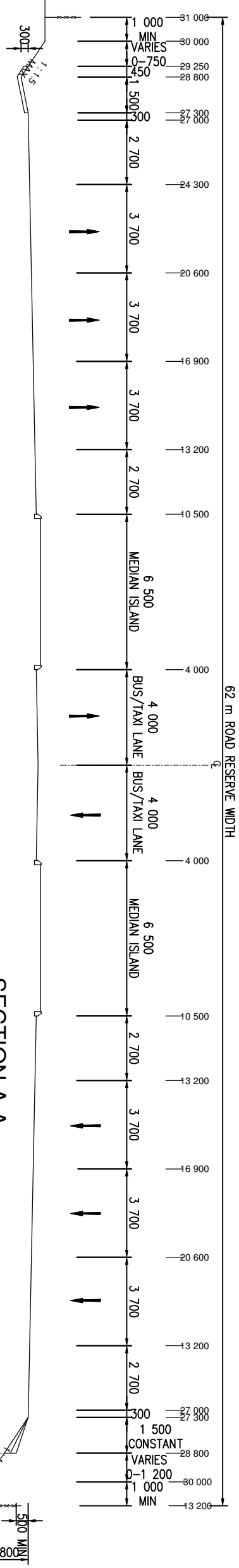
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AMENDMENTS

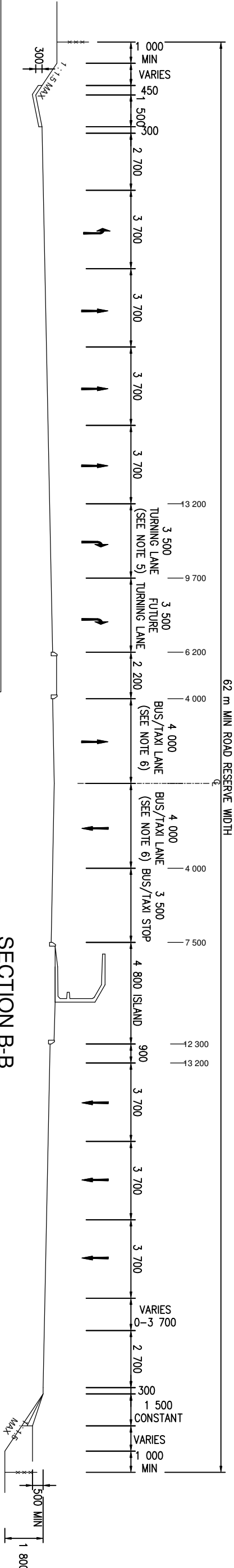
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2018

SUPERSEDES PT2/2

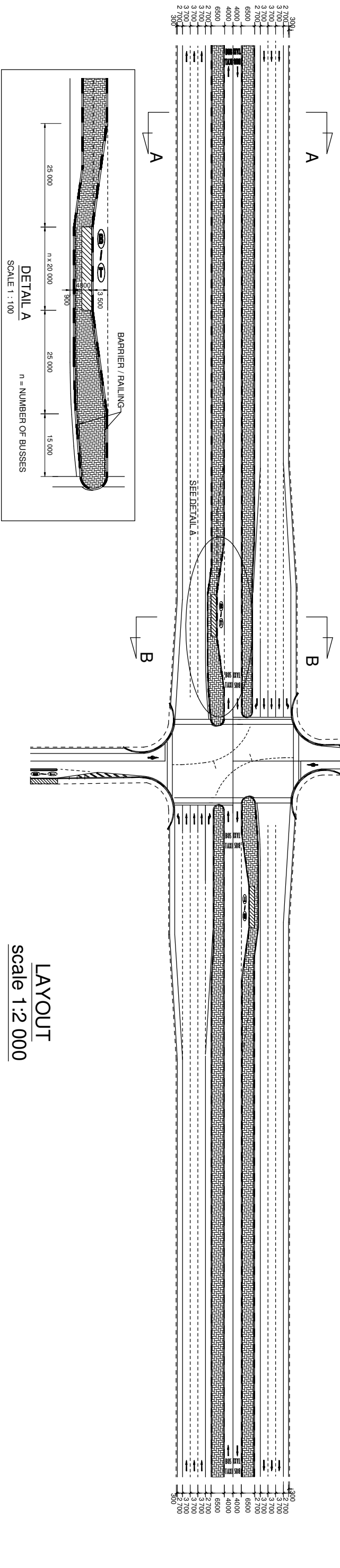


SECTION A-A
scale 1:200



SECTION B-B
scale 1:200

- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 62 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 5. AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 6. PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.



LAYOUT
scale 1:2 000

SCALE ON REDUCED DRAWING

10 mm

50 mm

USER NOTE:

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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

BUS LANES IN THE MEDIAN OF A 62 m DUAL-CARRIAGEWAY ROAD: 6 LANES INTERSECTIONS WITH A SINGLE-CARRIAGEWAY ROAD

APPROVED BY:

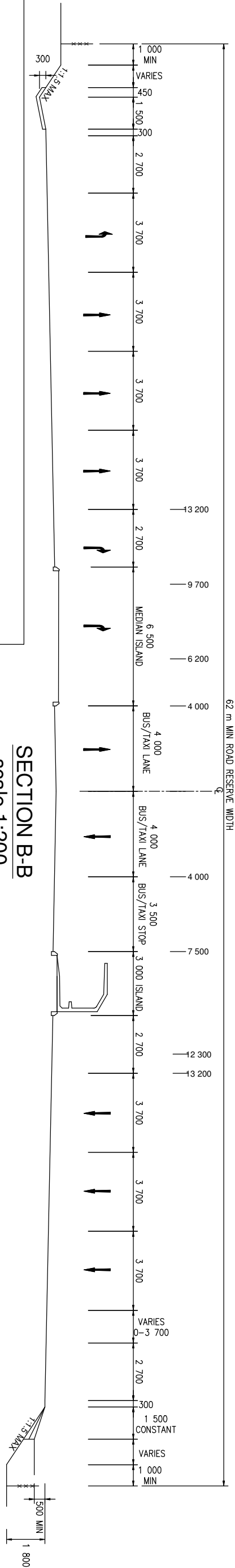
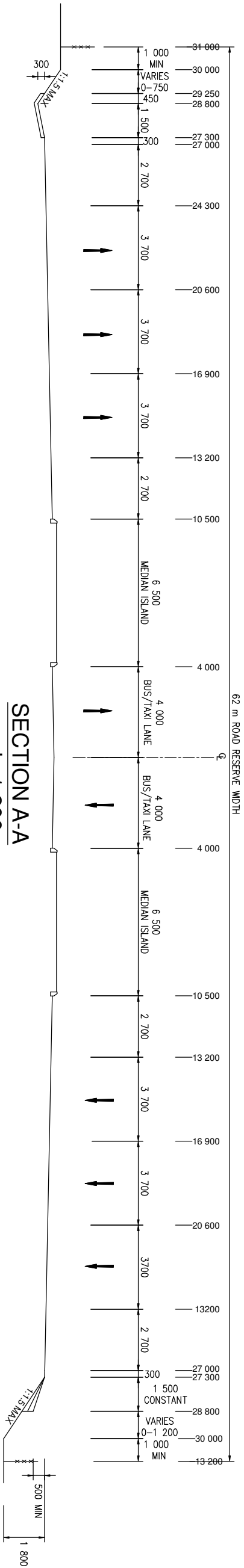
SCALE: AS SHOWN

for HEAD of DEPARTMENT

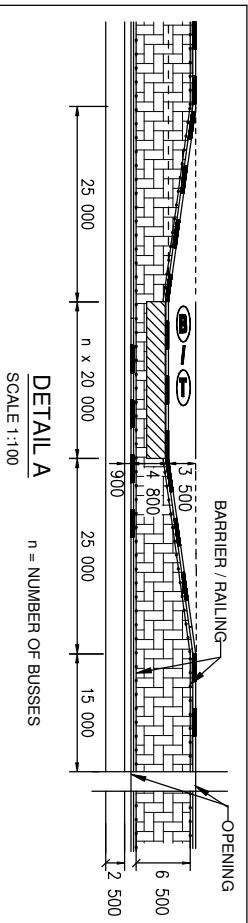
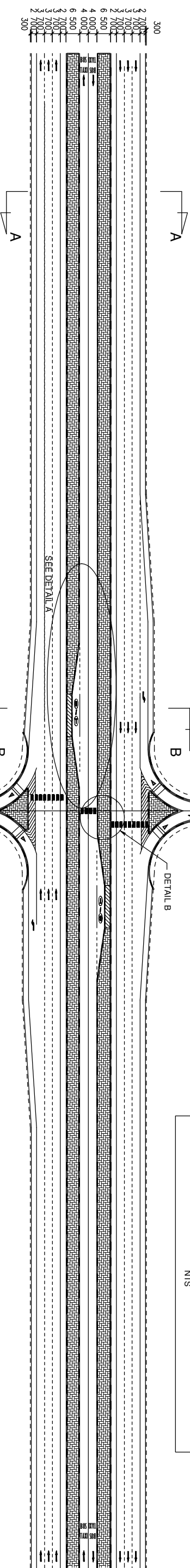
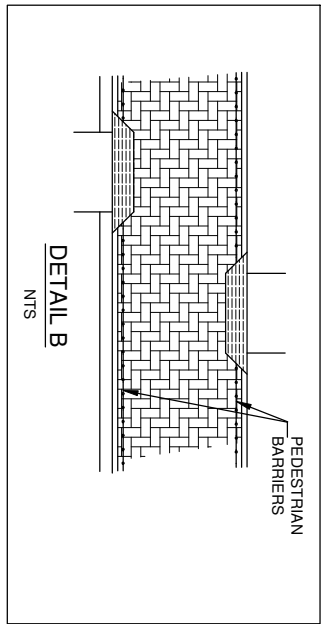
DATE

SHEET: 1 OF 1

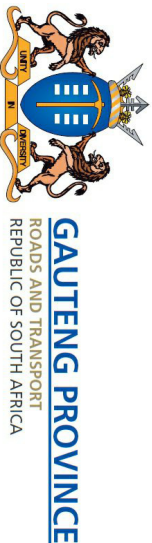
GTP 17/2-3



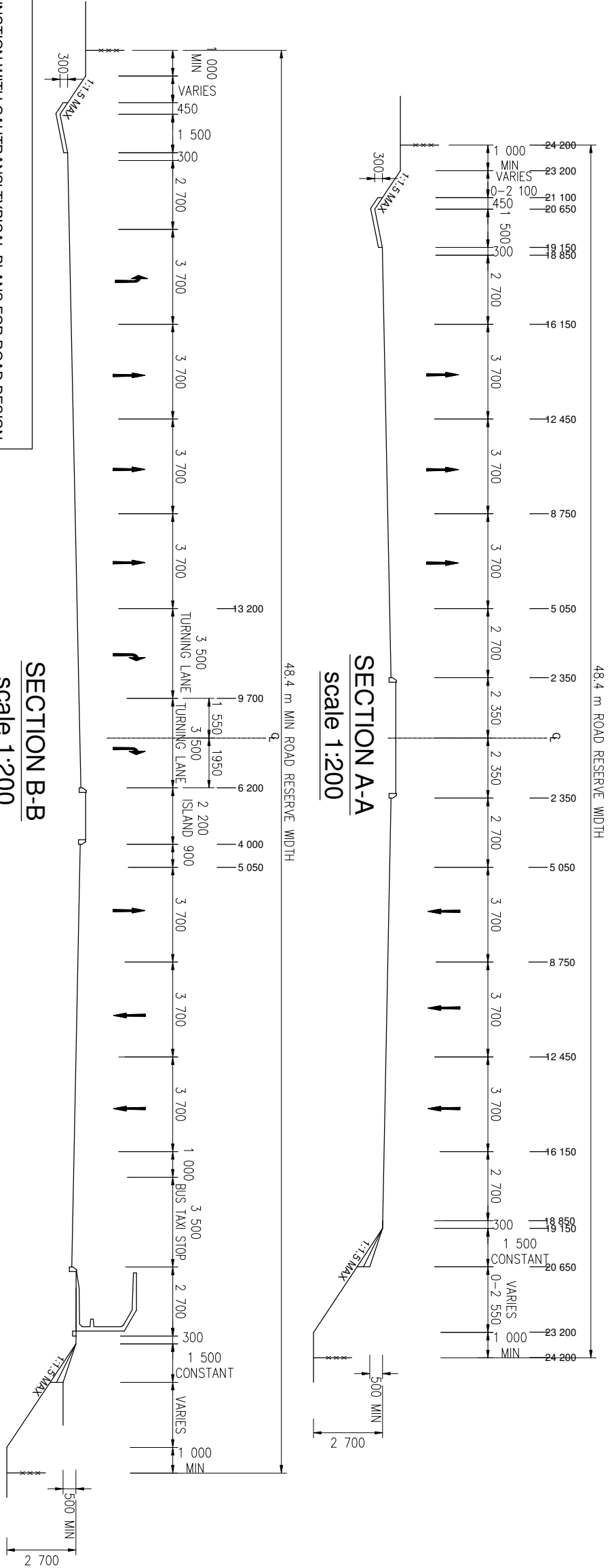
- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC. WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 62 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 - 5 PUBLIC TRANSPORT STOPS LOCATED BETWEEN TWO INTERSECTIONS SHOULD BE AVOIDED.
 - 6 PEDESTRIAN CROSSINGS SHOULD BE SIGNALISED AND CO-ORDINATED.
 7. IN 6 LANE STAGE CROSSING MUST BE PROVIDED WITH PEDESTRIAN BRIDGE.



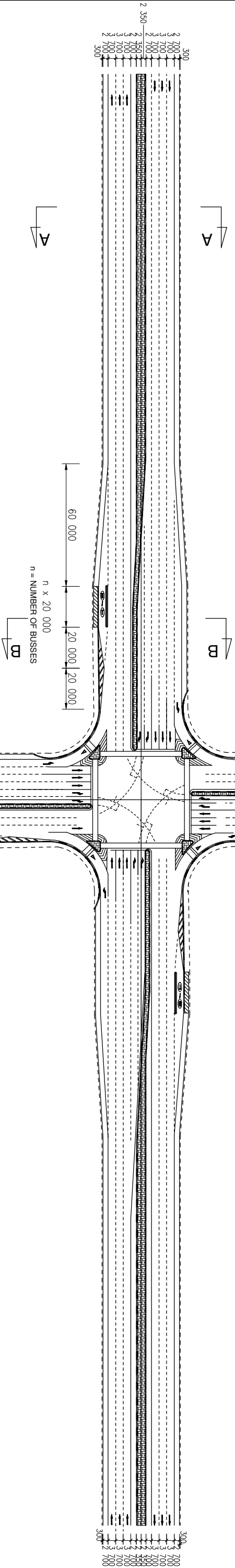
SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
1	2018	SUPERSEDES PT12/4	
REV. No.	DATE	AMENDMENTS	
APPROVED BY:		SCALE:	SHEET:
for HEAD of DEPARTMENT		AS SHOWN	1 OF 1
DATE		GTP 17/2-4	



BUS LANES IN THE MEDIAN OF A 62 m
DUAL-CARRIAGEWAY ROAD: 6 LANES
MARGINAL ACCESS (MID-BLOCK BUS STOP)

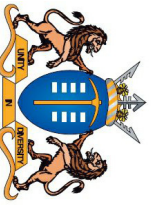


- NOTES:**
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.



SCALE ON REDUCED DRAWING	
1	2018
REV. No.	DATE

USER NOTE:
THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.



GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

BUS STOPS ON A 48.4 m DUAL-CARRIAGEWAY ROAD: 6 LANES INTERSECTION WITH A DUAL-CARRIAGEWAY ROAD WITH MIXED TRAFFIC (OUTSIDE BUS STOPS)

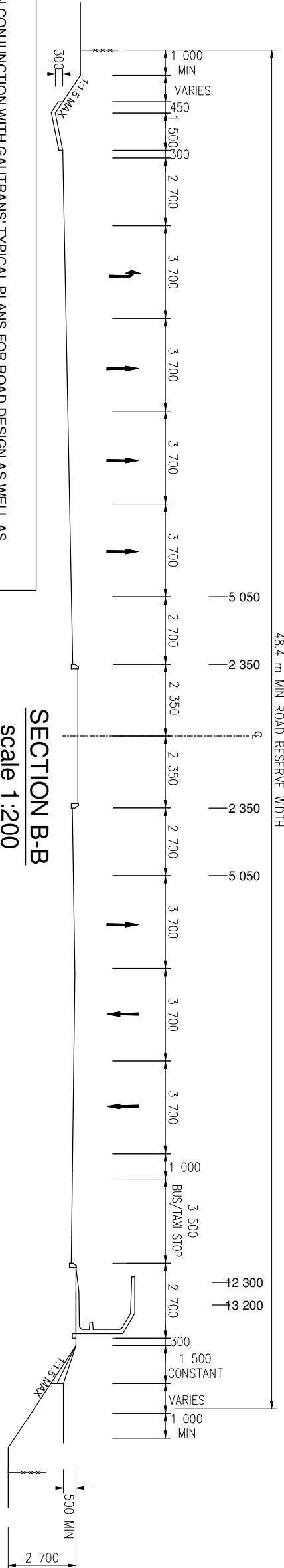
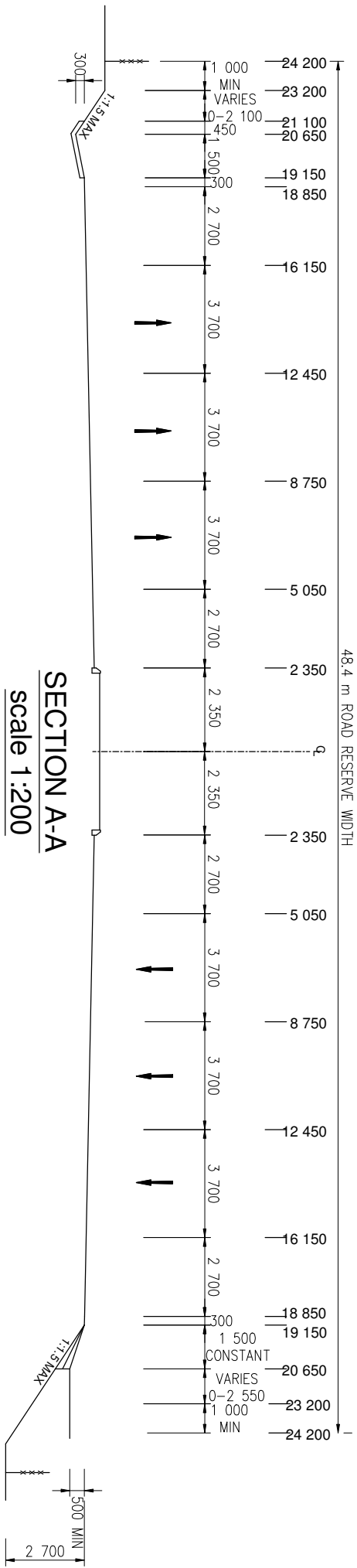
APPROVED BY:

08/03/2019
for HEAD of DEPARTMENT

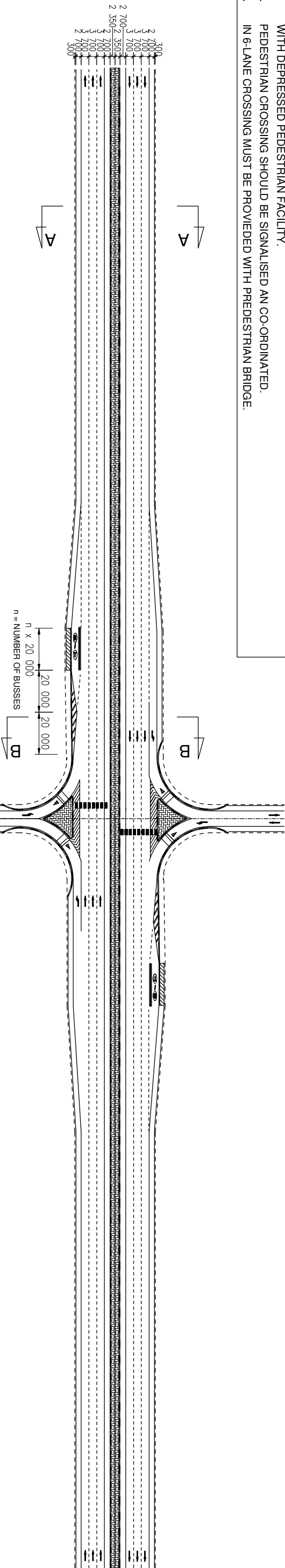
SCALE:
AS SHOWN

SHEET:
1 OF 1

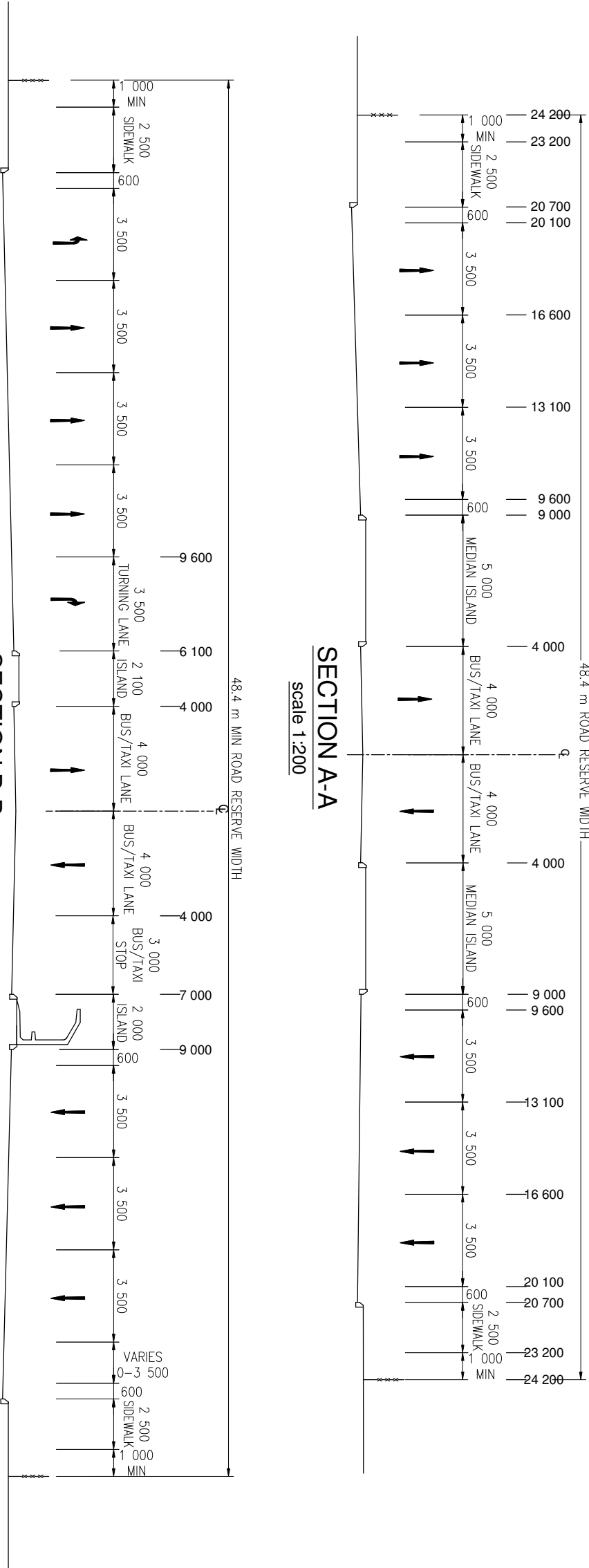
GTP 17/2-5



- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES WITH DEPRESSED PEDESTRIAN FACILITY.
 - 5 PEDESTRIAN CROSSING SHOULD BE SIGNALISED AN CO-ORDINATED.
 6. IN 6-LANE CROSSING MUST BE PROVIDED WITH PREDESTRIAN BRIDGE.

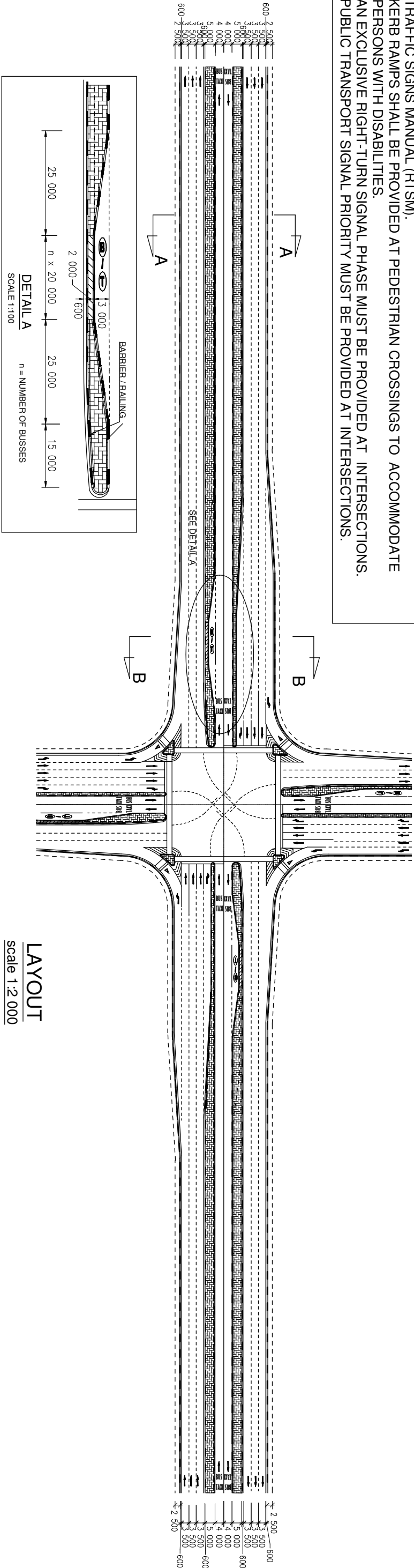


SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
10mm		50mm	
1		2018	
REV. No.		DATE	
AMENDMENTS		SUPERSEDES PT 2/7	
GAUTENG PROVINCE ROADS AND TRANSPORT REPUBLIC OF SOUTH AFRICA		BUS STOPS ON A 48.4 m DUAL-CARRIAGEWAY ROAD: 6 LANES MARGINAL ACCESS (OUTSIDE BUS STOPS)	
APPROVED BY:		SCALE: AS SHOWN	
for HEAD of DEPARTMENT		SHEET: 1 OF 1	
DATE		GTP17/2-7	

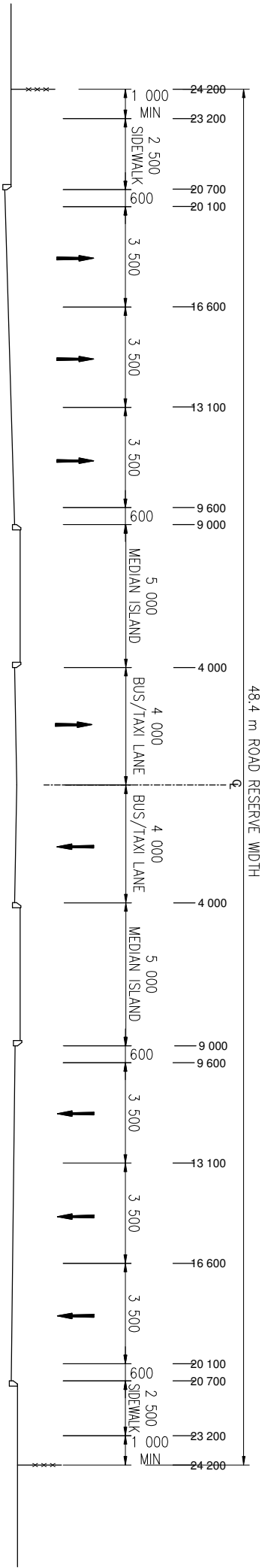


SECTION B-B
scale 1:200

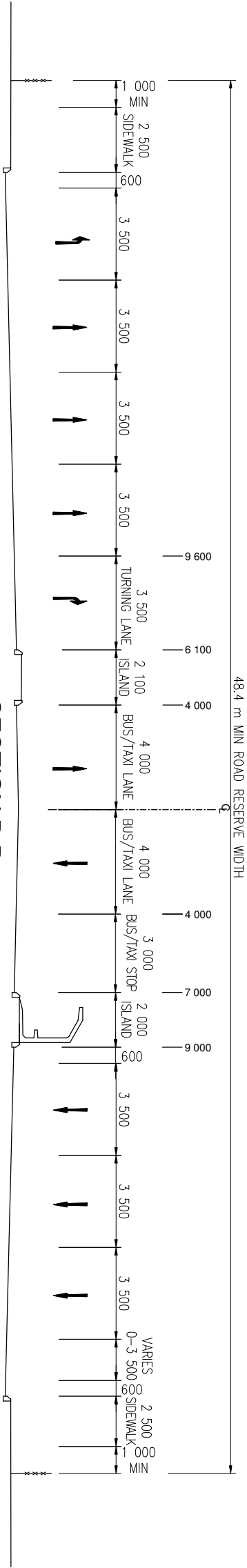
- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 - 5 AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 6. PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.



SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
1	2018	SUPERSEDES PT2/8	
REV. No.	DATE	AMENDMENTS	
APPROVED BY:		SCALE:	SHEET:
for HEAD of DEPARTMENT		AS SHOWN	1 OF 1
DATE		GTP17/2-8	

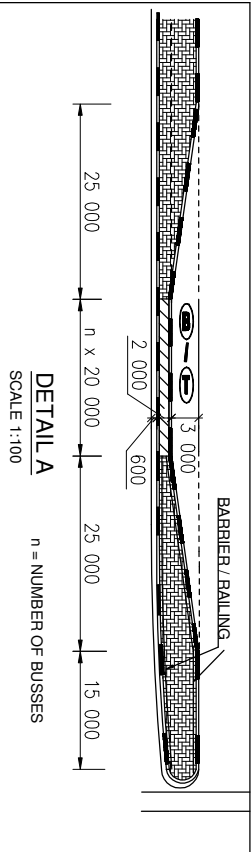
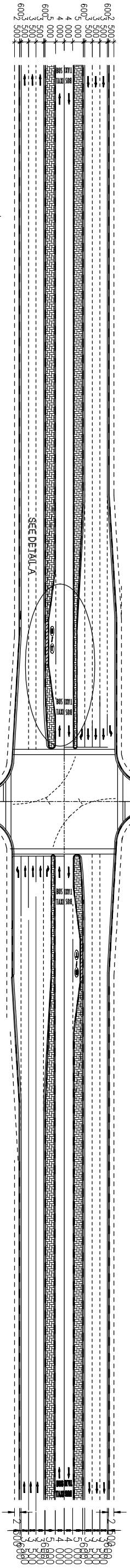


SECTION A-A
scale 1:200



SECTION B-B
scale 1:200

- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 6-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD. THE FOUR INSIDE LANES ARE CONSTRUCTED INITIALLY.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 - 5 AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 6. PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.



LAYOUT
scale 1:2 000

SCALE ON REDUCED DRAWING	
10 mm	50 mm
1	
20165	SUPERSEDES PT2/10
REV. No.	DATE
AMENDMENTS	

USER NOTE:
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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

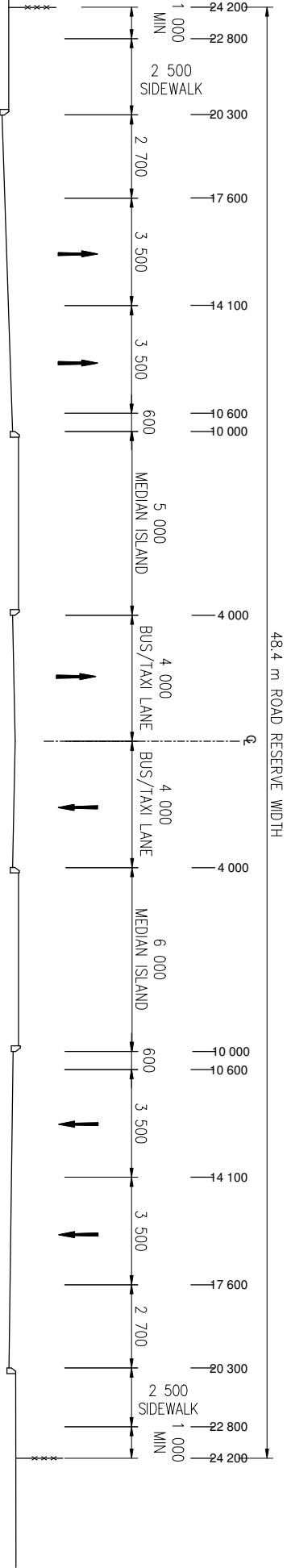
RETROFIT: BUS LANES IN THE MEDIAN OF A 48.4 m
DUAL-CARRIAGEWAY ROAD: 6 LANES
INTERSECTION WITH A SINGLE-CARRIAGEWAY
ROAD

APPROVED BY:	
for HEAD of DEPARTMENT	DATE

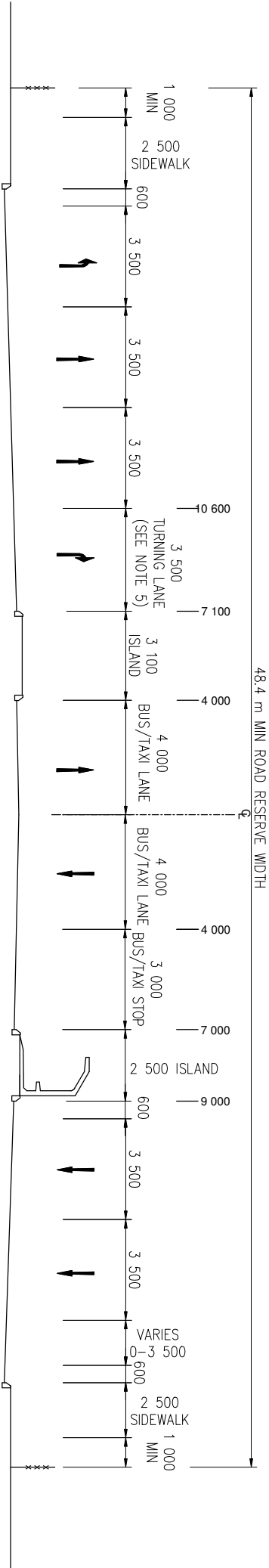
SCALE:
AS SHOWN

SHEET:
1 OF 1

GTP17/2-10

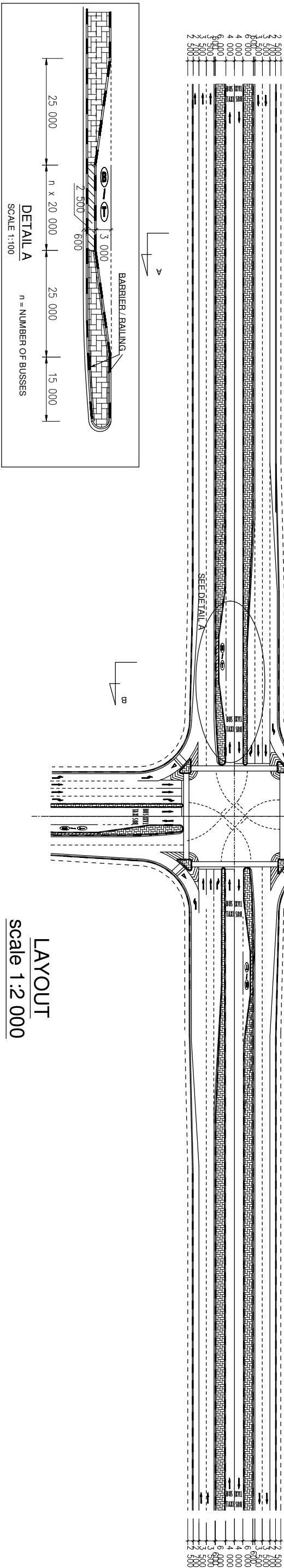


SECTION A-A
scale 1:200



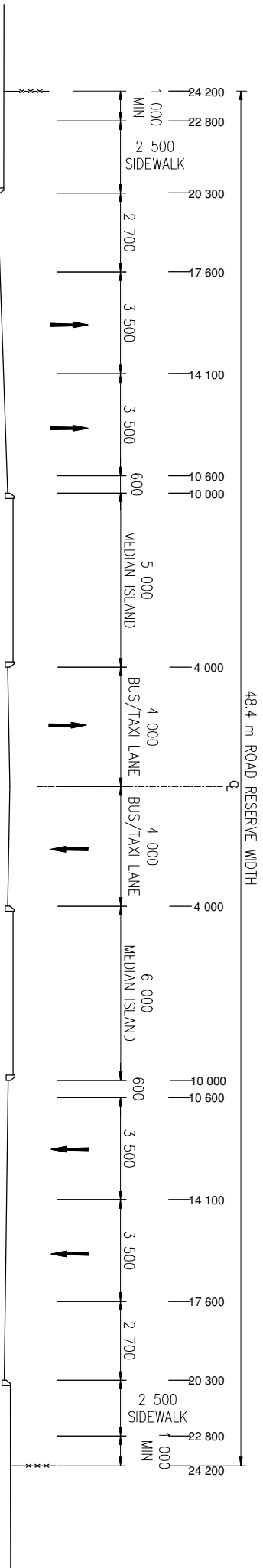
SECTION B-B
scale 1:200

- NOTES:
- THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 4-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD.
 - ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 - AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 - PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.

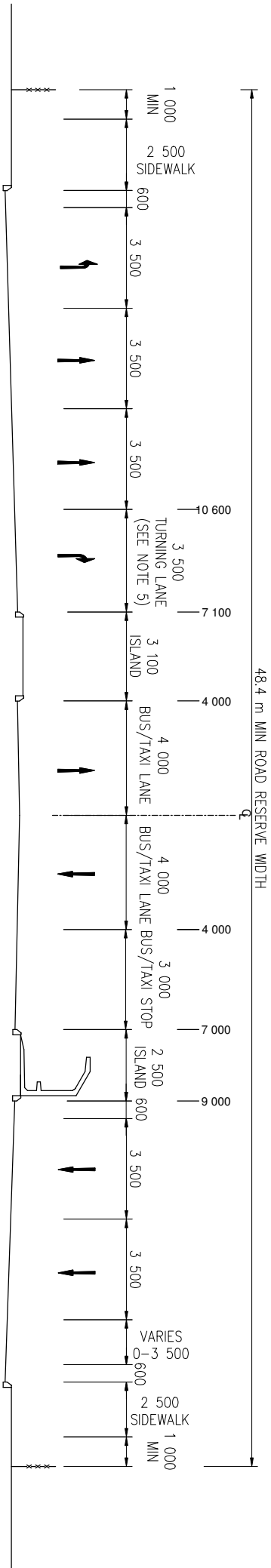


LAYOUT
scale 1:2 000

SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
10 mm	50 mm	GAUTENG PROVINCE ROADS AND TRANSPORT REPUBLIC OF SOUTH AFRICA	RETROFIT: BUS LANES & STOPS IN THE MEDIAN OF A 48.4 m DUAL-CARRIAGEWAY ROAD: 4 LANES INTERSECTION WITH A DUAL-CARRIAGEWAY ROAD WITH BUS LANES AND STOPS IN THE MEDIAN
1	2018	SUPERSEDES PT/2/11	
REV. No.	DATE	AMENDMENTS	
APPROVED BY:		SCALE:	SHEET:
for HEAD of DEPARTMENT		AS SHOWN	1 OF 1
DATE		GTP17/2-11	

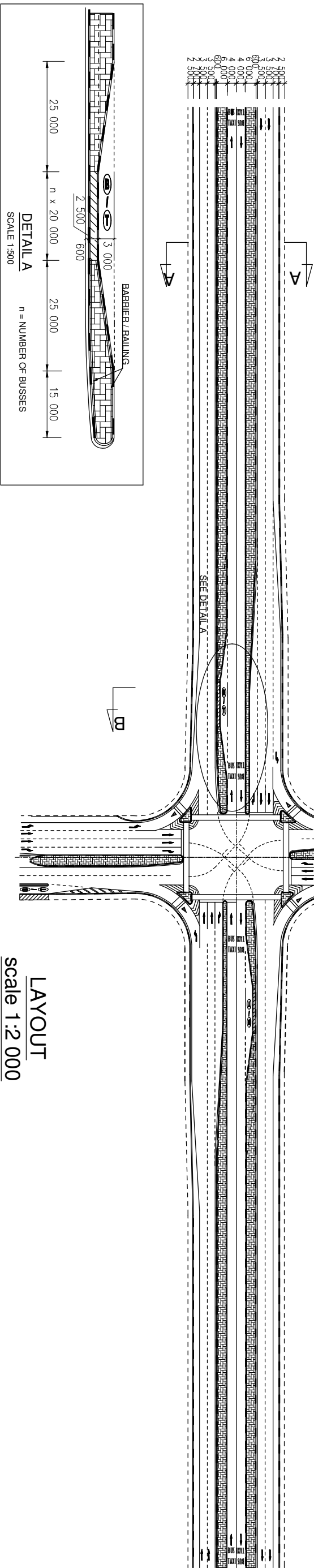


SECTION A-A
scale 1:200



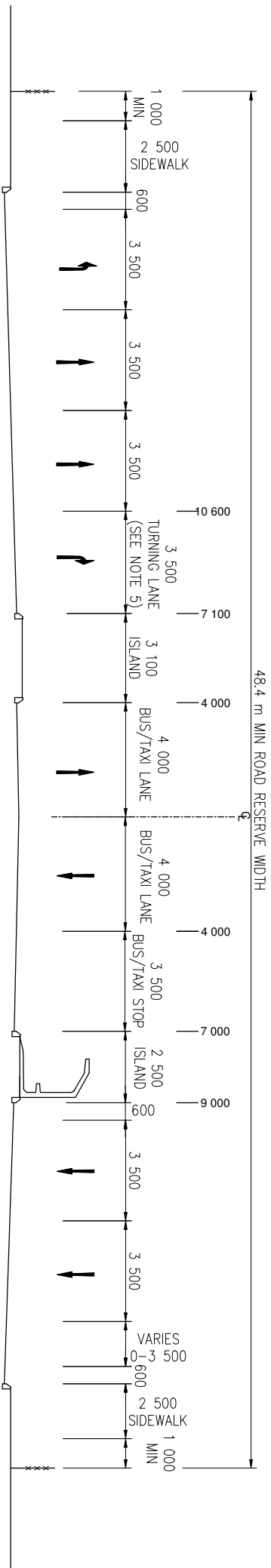
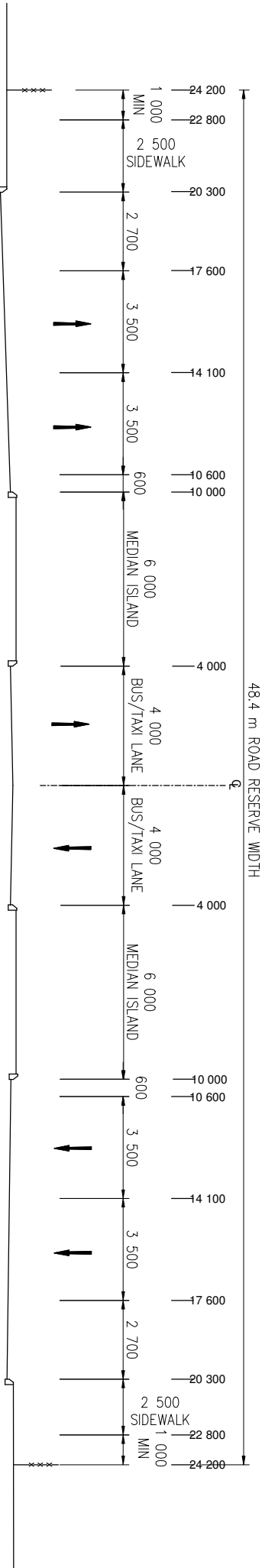
SECTION B-B
scale 1:200

- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 4-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
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 - 6 PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.

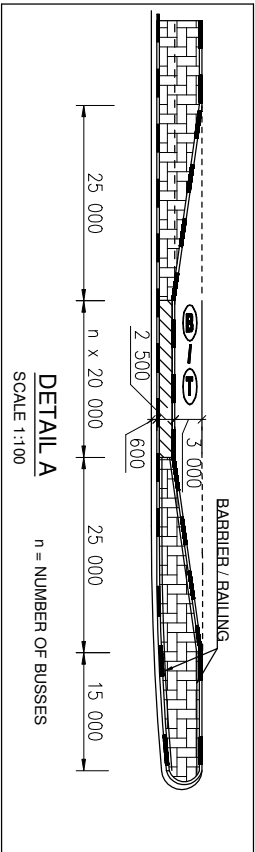
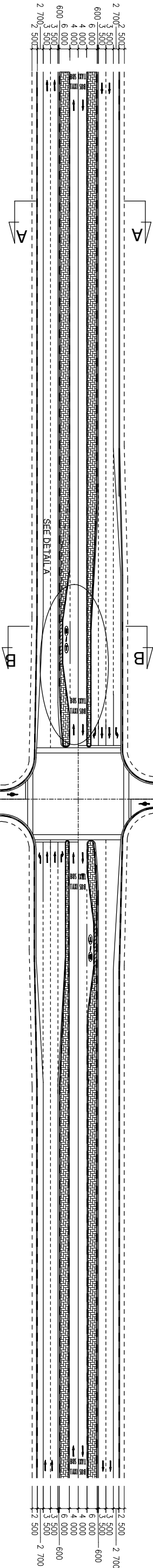


LAYOUT
scale 1:2 000

SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
1	2018	SUPERSEDES PT 2/12	
REV. No.	DATE	AMENDMENTS	
APPROVED BY:		SCALE:	SHEET:
for HEAD of DEPARTMENT		AS SHOWN	1 OF 1
DATE		GTP 17/2-12	



- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN AS WELL AS REPORT TCC WG3 01/2004: PUBLIC TRANSPORT IN THE ROAD CROSS SECTION (February 2004).
 - 2 THE DETAILS SHOWN ON THIS PLAN ARE FOR THE ULTIMATE 4-LANE STAGE OF THE 48.4 m DUAL-CARRIAGEWAY ROAD.
 - 3 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 - 4 KERB RAMPS SHALL BE PROVIDED AT PEDESTRIAN CROSSINGS TO ACCOMMODATE PERSONS WITH DISABILITIES.
 - 5 AN EXCLUSIVE RIGHT-TURN SIGNAL PHASE MUST BE PROVIDED AT INTERSECTIONS.
 6. PUBLIC TRANSPORT SIGNAL PRIORITY MUST BE PROVIDED AT INTERSECTIONS.



SCALE ON REDUCED DRAWING
10 mm
50 mm
1
2018
DATE
AMENDMENTS

USER NOTE:
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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

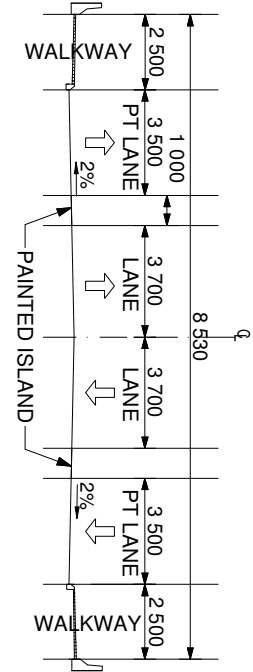
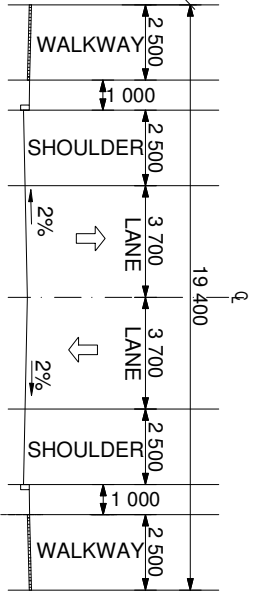
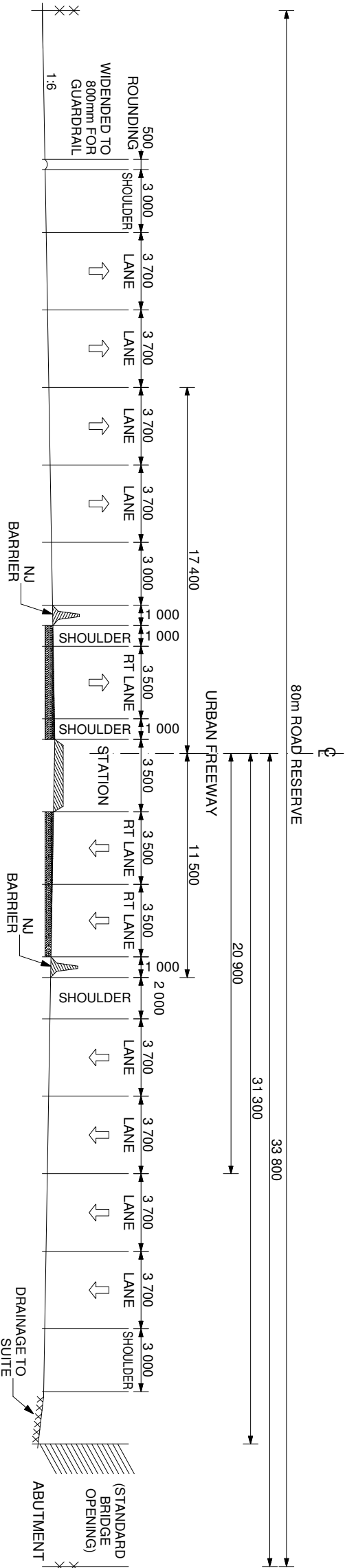
RETROFIT: BUS LANES & STOPS IN THE MEDIAN OF
A 48.4 m DUAL-CARRIAGEWAY ROAD: 4 LANES
INTERSECTION WITH A SINGLE-CARRIAGEWAY
ROAD

APPROVED BY:
for HEAD of DEPARTMENT
DATE

SCALE:
AS SHOWN

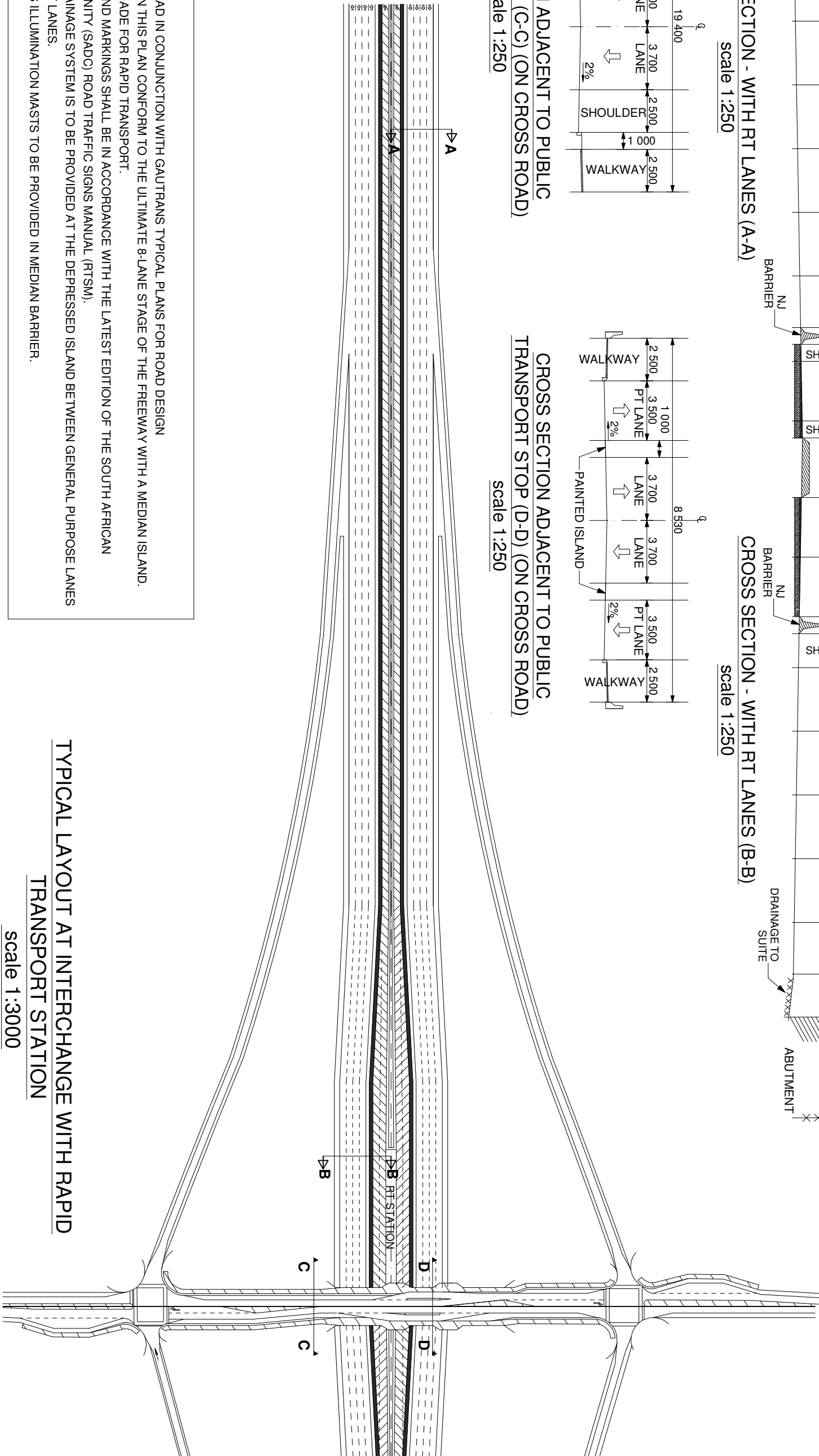
SHEET:
1 OF 1

GTP 17/2-13



CROSS SECTION ADJACENT TO PUBLIC
TRANSPORT STOP (C-C) (ON CROSS ROAD)
scale 1:250

CROSS SECTION ADJACENT TO PUBLIC
TRANSPORT STOP (D-D) (ON CROSS ROAD)
scale 1:250



- NOTES:**
1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS TYPICAL PLANS FOR ROAD DESIGN
 2. THE DETAILS SHOWN ON THIS PLAN CONFORM TO THE ULTIMATE 8-LANE STAGE OF THE FREEWAY WITH A MEDIAN ISLAND.
 3. WHERE PROVISION IS MADE FOR RAPID TRANSPORT.
 4. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SOUTH AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM).
 5. AN UNDERGROUND DRAINAGE SYSTEM IS TO BE PROVIDED AT THE DEPRESSED ISLAND BETWEEN GENERAL PURPOSE LANES AND RAPID TRANSPORT LANES.
 6. DUCTS AND PEDESTALS ILLUMINATION MASTS TO BE PROVIDED IN MEDIAN BARRIER.

TYPICAL LAYOUT AT INTERCHANGE WITH RAPID
TRANSPORT STATION
scale 1:3000

SCALE ON REDUCED DRAWING

10 mm

50 mm

USER NOTE:

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GAUTENG PROVINCE

ROADS AND TRANSPORT

REPUBLIC OF SOUTH AFRICA

TYPICAL RAPID TRANSPORT STATION IN THE MEDIAN OF A FREEWAY IN A 80 m RESERVE

STANDARD CROSS SECTION

APPROVED BY:



08/03/2019

SCALE:

AS SHOWN

SHEET:

1 OF 1

REV. NO.

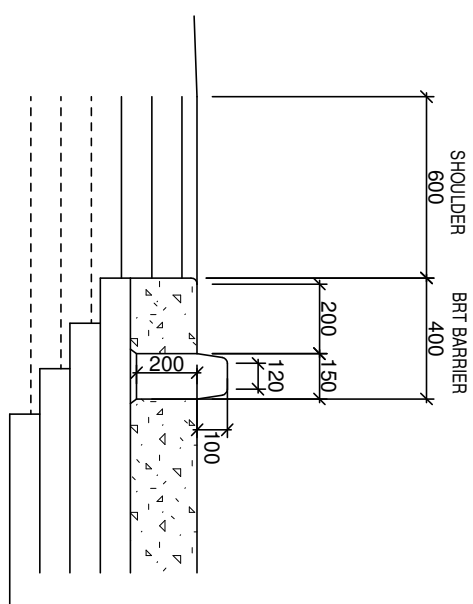
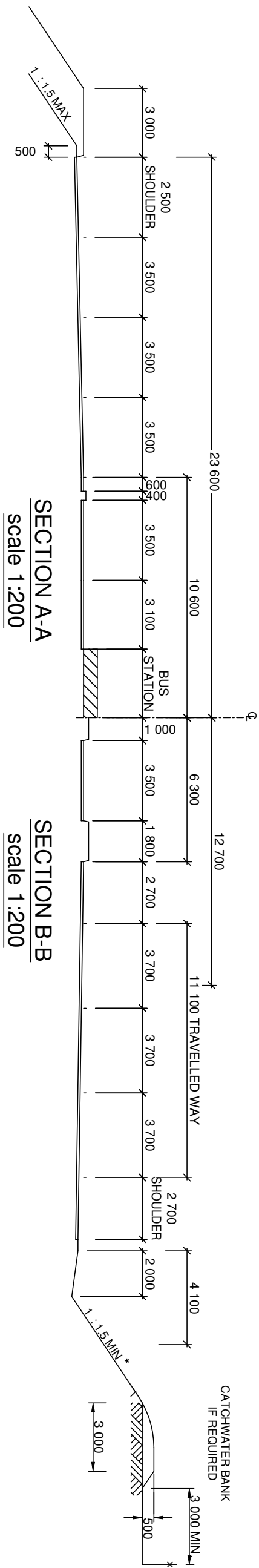
DATE

AMENDMENTS

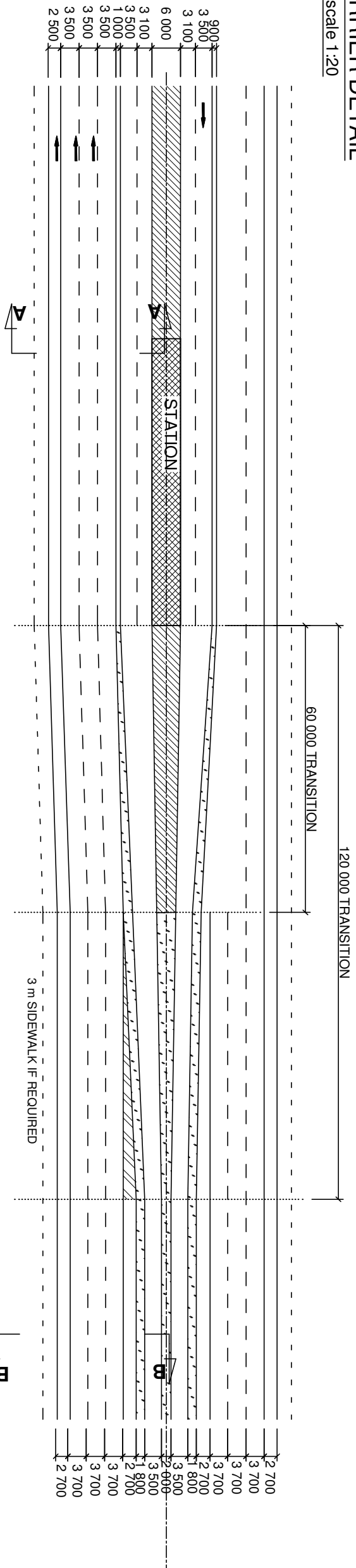
for HEAD of DEPARTMENT

DATE

GTP 17/3-1



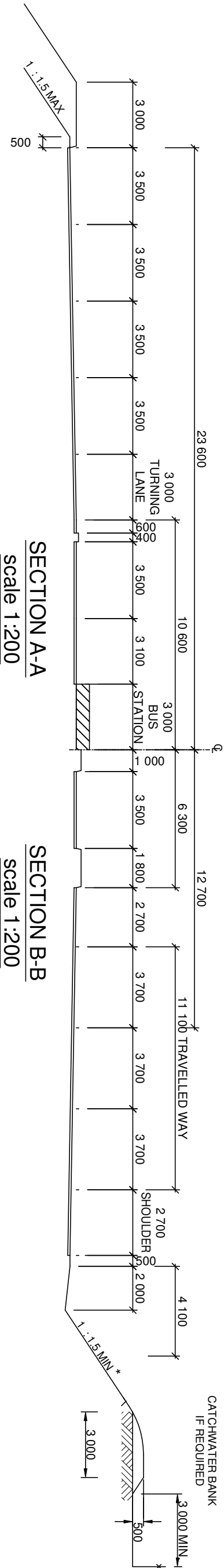
BRT BARRIER DETAIL
scale 1:20



LAYOUT
scale 1:1000

- NOTES:
- 1 THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 - 2 ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANC WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM) AND SARTSM.
 - 3 MINIMUM ROAD RESERVE REQUIRED IS 62 m.
 - 4 THE PLAN ONLY INDICATES ROAD DESIGN - PEDESTRIAN MANAGEMENT PLAN TO BE DRAFTED FOR FINAL DESIGN.
 - 5 PEDESTRIAN MANAGEMENT PLAN TO BE DRAFTED AND SHOULD INCLUDE A PEDESTRIAN BRIDGE.

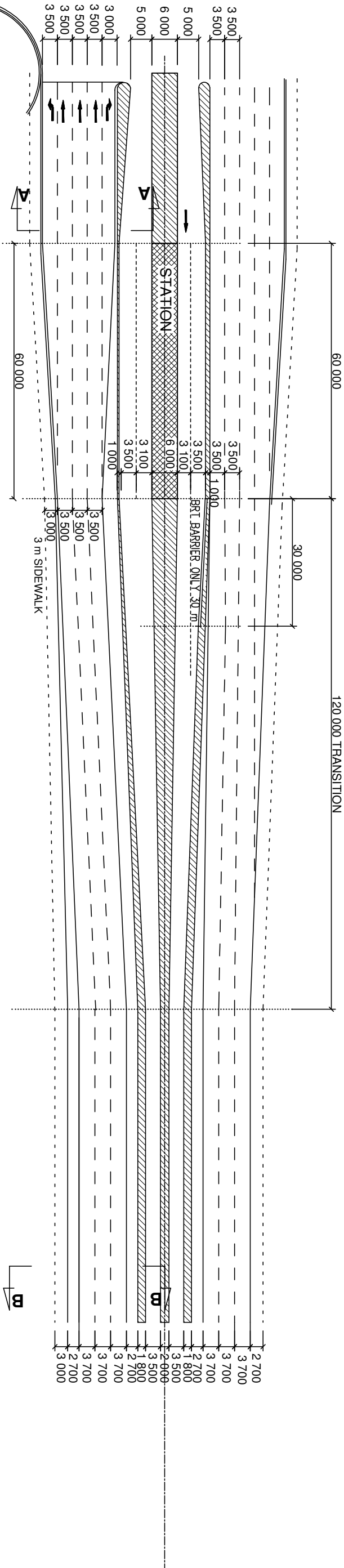
SCALE ON REDUCED DRAWING		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.	
REV. No.		DATE	
AMENDMENTS			
APPROVED BY:		SCALE:	
		AS SHOWN	
08/03/2019		SHEET: 1 OF 1	
for HEAD of DEPARTMENT		DATE	
		GTP 17/4-1	



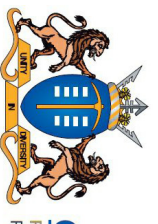
SECTION A-A
scale 1:200

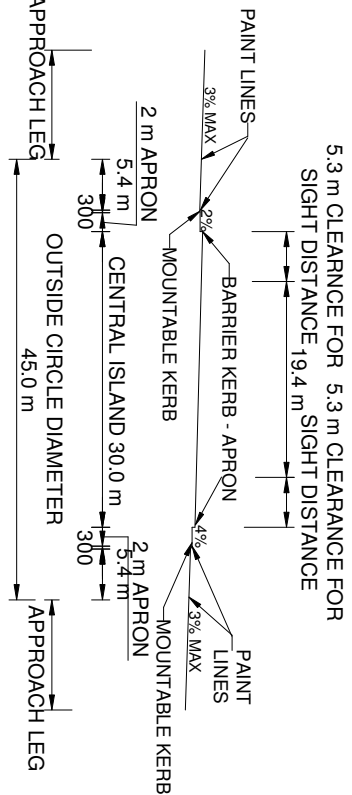
SECTION B-B
scale 1:200

- NOTES:
1. THIS PLAN SHALL BE READ IN CONJUNCTION WITH GAUTRANS' TYPICAL PLANS FOR ROAD DESIGN.
 2. ROAD TRAFFIC SIGNS AND MARKINGS SHALL BE IN ACCORDANC WITH THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) ROAD TRAFFIC SIGNS MANUAL (RTSM) AND SARTSM.
 3. MINIMUM ROAD RESERVE REQUIRED IS 62 m.
 4. THE PLAN ONLY INDICATES ROAD DESIGN - PEDESTRIAN MANAGEMENT PLAN TO BE DRAFTED FOR FINAL DESIGN.
 5. PEDESTRIAN MANAGEMENT PLAN TO BE DRAFTED AND SHOULD INCLUDE A PEDESTRIAN BRIDGE.



LAYOUT
scale 1:1 000

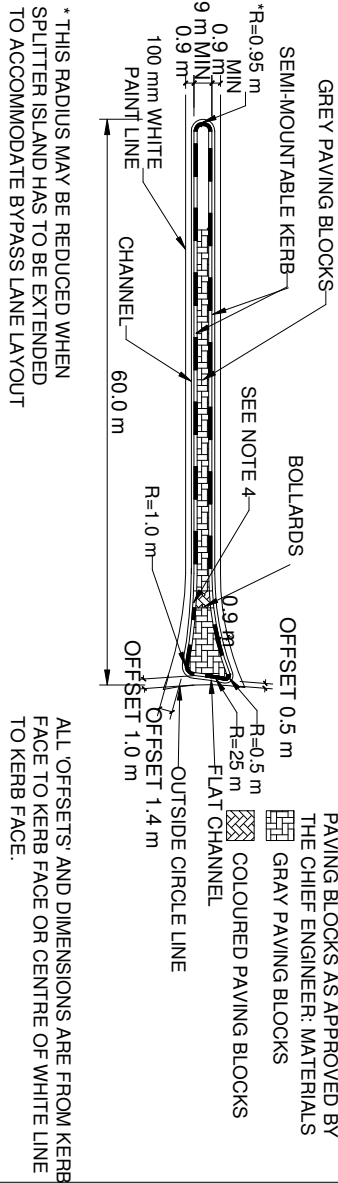
SCALE ON REDUCED DRAWING 10 mm 50 mm		USER NOTE: THESE DRAWINGS CONTAIN PROPOSED GUIDELINES ONLY. CONSULTING ENGINEERS ARE NOT RELIEVED OF THEIR DESIGN RESPONSIBILITY WHEN DETAILS FROM THE DRAWINGS ARE USED. THE DEPARTMENT DOES NOT ACCEPT ANY LEGAL LIABILITY OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING BY THE USE OF THESE DRAWINGS.		 GAUTENG PROVINCE ROADS AND TRANSPORT REPUBLIC OF SOUTH AFRICA		RAPID PUBLIC TRANSPORT LANES IN THE MEDIAN IN A 62m RESERVE AT A 6 LANE INTERSECTION WITH A DUAL CARRIAGEWAY ROAD WITH MIXED TRAFFIC		APPROVED BY:  08/03/2019		SCALE: AS SHOWN		SHEET: 1 OF 1	
REV. No.	DATE	AMENDMENTS						for HEAD of DEPARTMENT		DATE		GTP 17/4-2	



- IF POSSIBLE, THE CIRCULATORY ROADWAY SHOULD SLOPE AWAY FROM THE CENTRAL ISLAND AT 2%. THE MAIN REASONS FOR THIS IS:
 - IT PROMOTES SAFETY BY RAISING THE CENTRAL ISLAND IMPROVING ITS VISIBILITY
 - IT PROMOTES LOWER CIRCULATORY SPEEDS
 - IT MINIMISES BREAKS IN THE CROSS SLOPES OF ENTRY AND EXIT LANES
 - DRAINS SURFACE WATER TO THE OUTSIDE OF THE ROUNDABOUT
- AT LOCATION WHERE A CONSTANT GRADE HAS TO BE MAINTAINED THROUGH THE INTERSECTION, THE CIRCULATORY ROADWAY MAY BE CONSTRUCTED ON THE CONSTANT GRADE. THIS GRADE SHOULD HOWEVER NOT EXCEED 3%.

LONGITUDINAL PROFILE THROUGH ROUNDABOUT

Scale 1:400

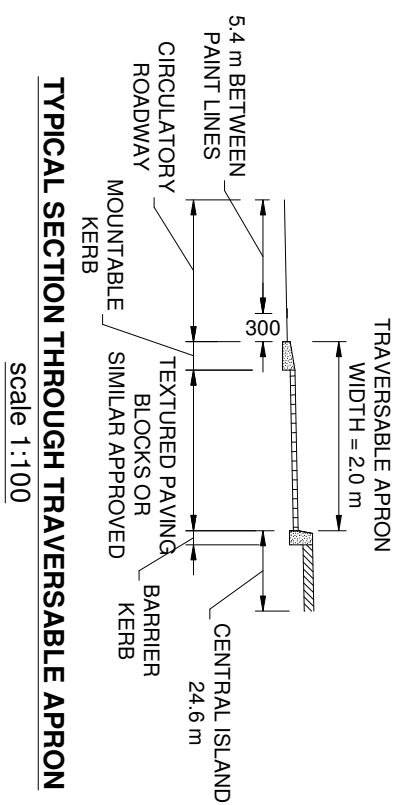


INSET 1: SPLITTER ISLAND DETAILS

Scale 1:400

NOTE:
REFER TO BB12 - GUIDELINES FOR
ROUNDABOUTS ON PROVINCIAL ROADS

*RADII FOR APPROACH LEG AT ROUNDABOUT ENTRY	
DEFLECTION ANGLE	INSIDE ENTRY RADIUS
= 7°	50.0 m
>7° <10°	40.0 m
= 10° UP TO 15°	35.0 m

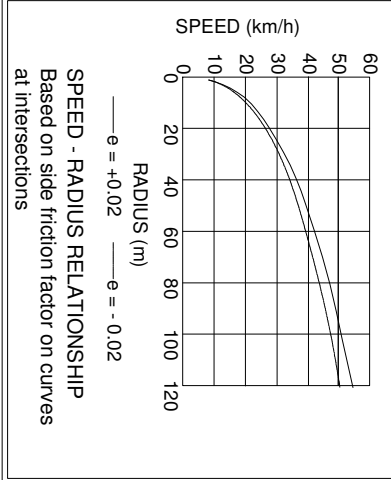


ROUNDABOUT ON INTERSECTION OF SINGLE CARRIAGEWAY (TWO-LANE) PROVINCIAL ROADS		
DEFLECTION ANGLE OF APPROACH LEGS	OUTSIDE DIAMETER	LEFT-TURN BYPASS LANE
0° TO 3°	40.0 m	NO
>3° TO <7°	45.0 m	NO
7° TO 15°	45.0 m	YES

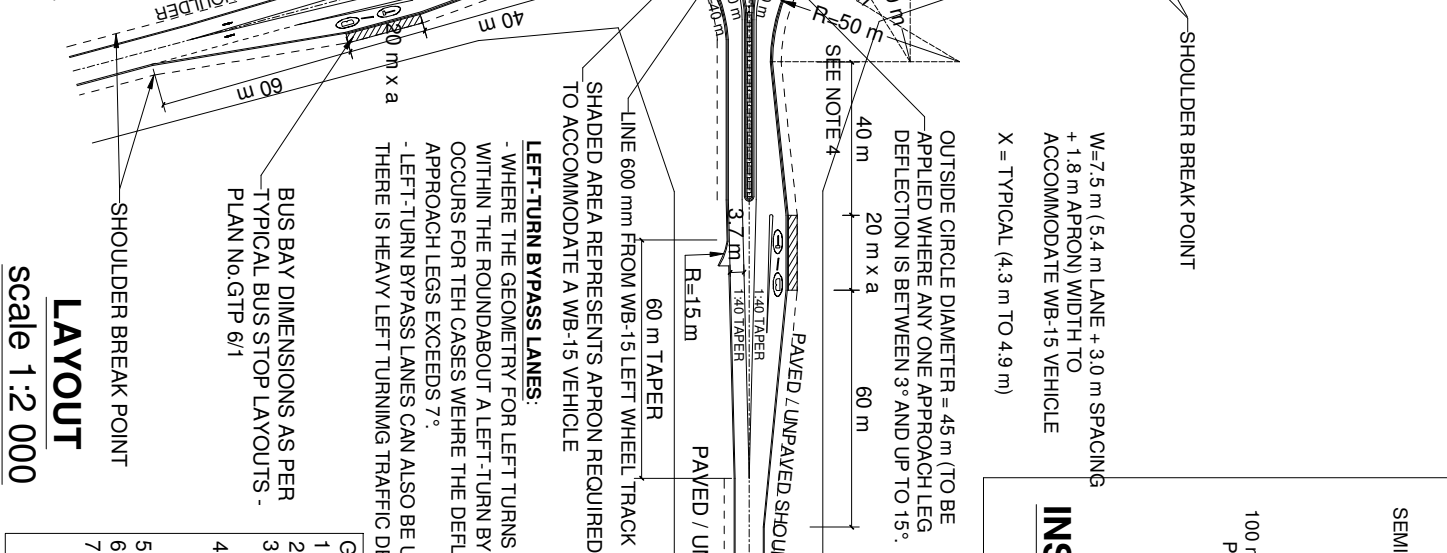
LAYOUT

Scale 1:2 000

- GENERAL NOTES:
- SINGEL LANE ROUNDABOUT ENTRY DESIGN SPEED = 40 km/h.
 - DESIGN VEHICLE : WB-15 SEMI-TRAILER.
 - ROAD RESERVE SPLAYS AS PER GAUTRANS TYPICAL PLAN No. GTP 5/1 - TYPICAL DETAILS OF ROAD RESERVE SPLAYS AT INTERSECTIONS.
 - ON THE SPLITTER ISLANDS AT THE PEDESTRIAN CROSSINGS, THE CONCRETE EDGE BEAM IS TO BE PLACED OVER THE FULL 2 m WIDTH OF THE CROSSING TO THE SAME LEVEL AS THE ROAD TO ALLOW ACCESS FOR WHEEL CHAIRS, ETC.
 - a = NUMBER OF BUSES PROVIDED FOR AT BUS STOP.
 - SBP = SHOULDER BREAK POINT.
 - KERB TYPES TO BE USED:
BARRIER KERB - FIG.3 (SANS 927:2013)
MOUNTABLE KERB - FIG.8(c) (SANS 927:2013)
SEMI-MOUNTABLE KERB - FIG.7 (SANS 927:2013)

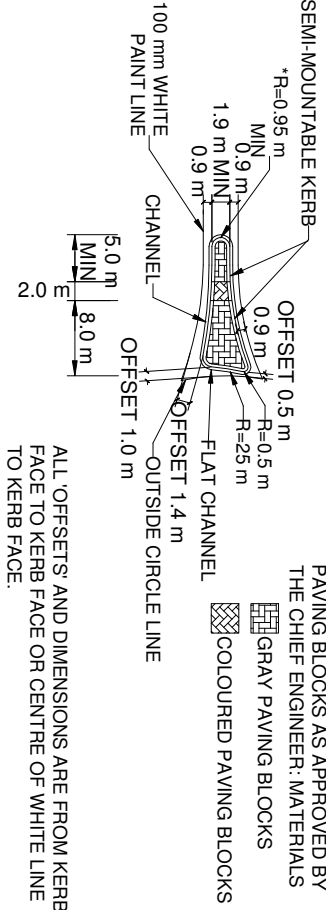


SPEED - RADIUS RELATIONSHIP
Based on side friction factor on curves
at intersections



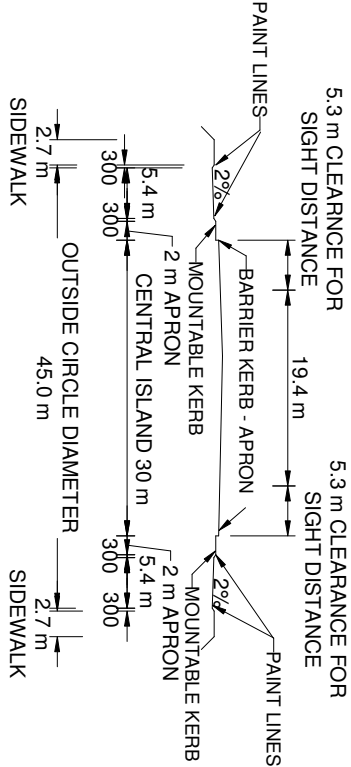
INSET 2: SPLITTER ISLAND DETAILS

Scale 1:400



TYPICAL CROSS SECTION THROUGH ROUNDABOUT

Scale 1:400



SCALE ON REDUCED DRAWING	
10.0 mm	50.0 mm
1	2018
REV. No.	DATE

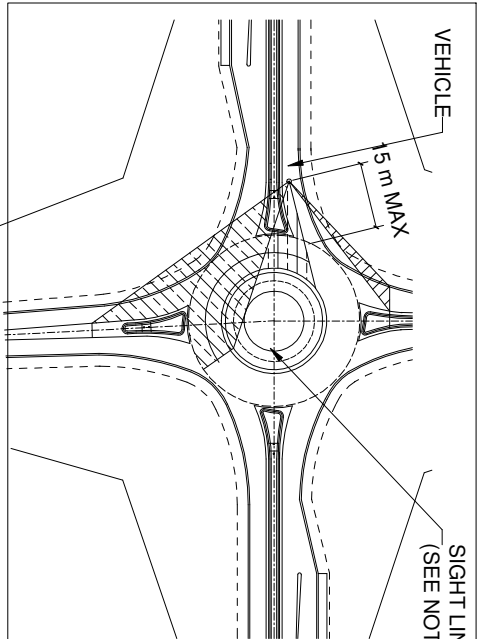
USER NOTE:
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ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

ROUNDABOUT ON INTERSECTION OF SINGLE CARRIAGEWAY (TWO LANE) PROVINCIAL ROADS - GEOMETRIC LAYOUTS

APPROVED BY:		SCALE:	
AS SHOWN	SHEET: 1 OF 1	GTP18/1-2A	
for HEAD of DEPARTMENT	DATE		



SIGHT DISTANCE TO CROSSWALK ON EXIT.

INTERSECTION SIGHT DISTANCE.

D1 = 63,5 m (ENTERING STREAM DISTANCE)

D2 = 49,5 m (CIRCULATION STREAM DISTANCE)

DRIVER'S EYE HEIGHT = 1,05 m FOR MOTORCARS AND 1,8 m FOR ALL OTHER VEHICLES.

OBJECT HEIGHT = 1,3 m

ENSURE THAT NO OBJECTS OBSCURE THE LINE OF SIGHTS
eg: ROAD SIGNS, LAMP POSTS, VEGETATION, ETC.

WHERE OUTSIDE CIRCLE DIAMETER = 40 m

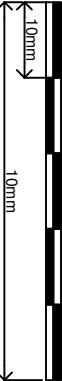
INTERSECTION SIGHT DISTANCE

not to scale

NOTE:
REFER TO BB12 - GUIDELINES FOR
ROUNDBOUTS ON PROVINCIAL ROADS

- NOTES:
- ROAD SIGNS, ROAD STUDS, PAINT MARKINGS AND THEIR POSITIONS TO BE ACCORDING TO THE 'SADC ROAD TRAFFIC SIGNS MANUAL' 3rd EDITION OR AMENDMENTS THEREAFTER.
 - AS A MINIMUM REQUIREMENT, THE CENTRAL ISLAND SHOULD BE COVERED WITH A MAINTENANCE-FREE MATERIAL OVER THE AREA BETWEEN THE ROADWAY AND THE SIGHT LINES.
 - SBP = SHOULDER BREAK POINT.
 - SIGN PLACEMENT: CENTRED ON AND PERPENDICULAR TO APPROACH LEG AND PLACED 1,5 m BEHIND KERB FACE.

SCALE ON REDUCED DRAWING



SCALE ON REDUCED DRAWING		
		
1	2018	SUPECEDES 1-1 (1998)
REV. No.	DATE	AMENDMENTS

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GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

ROUNDBOUT ON INTERSECTION OF SINGLE
CARRIAGEWAY
(TWO LANE) PROVINCIAL ROADS -
ROAD SIGNS AND ROAD PAINT MARKINGS

LAYOUT
Scale 1:2000

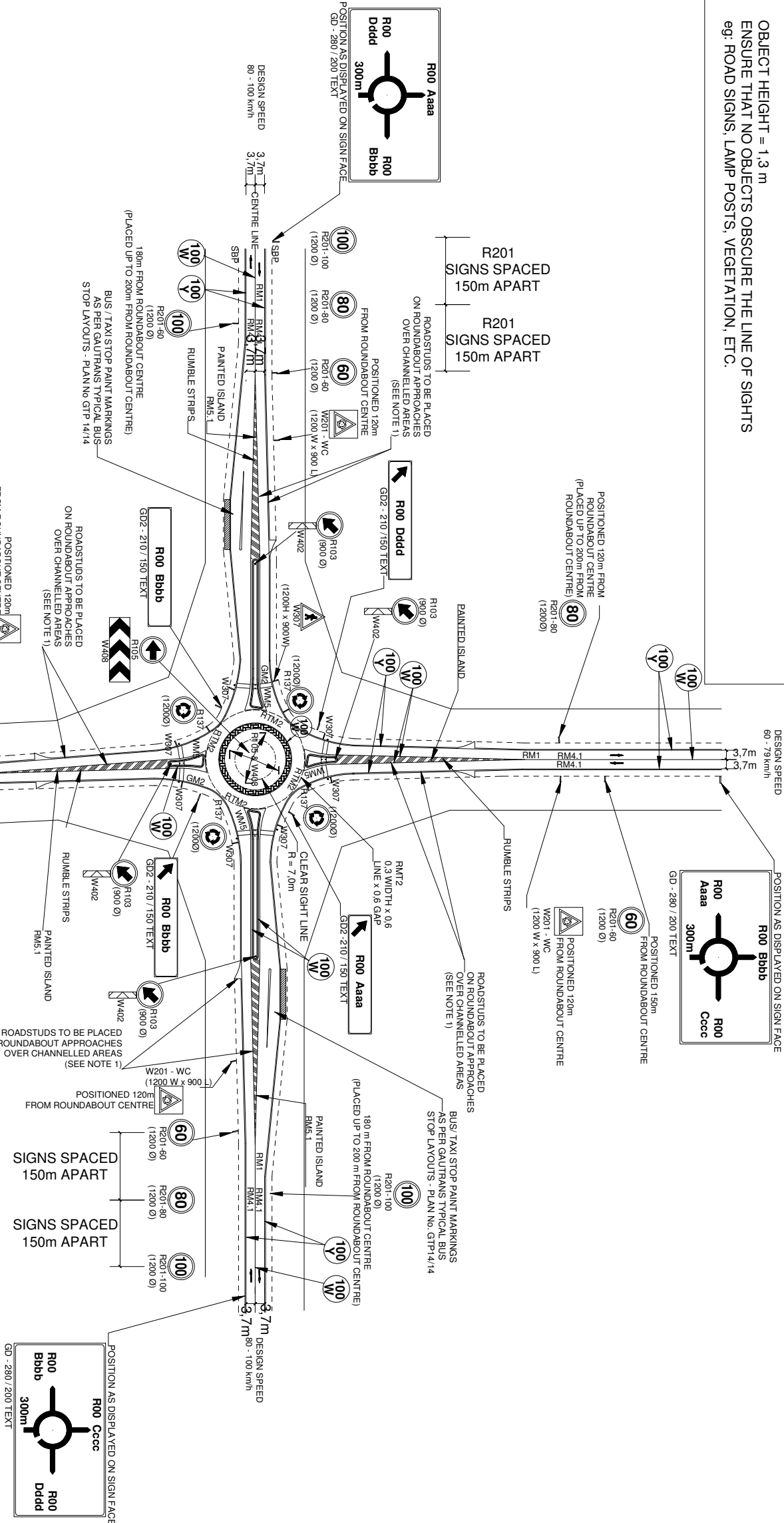
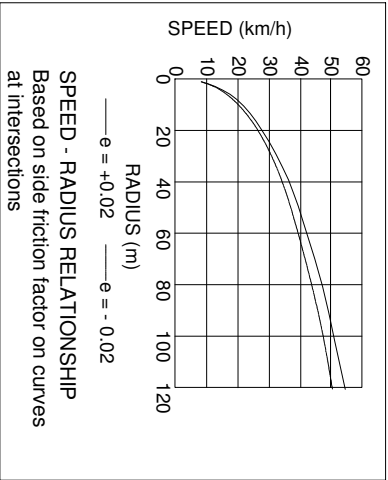
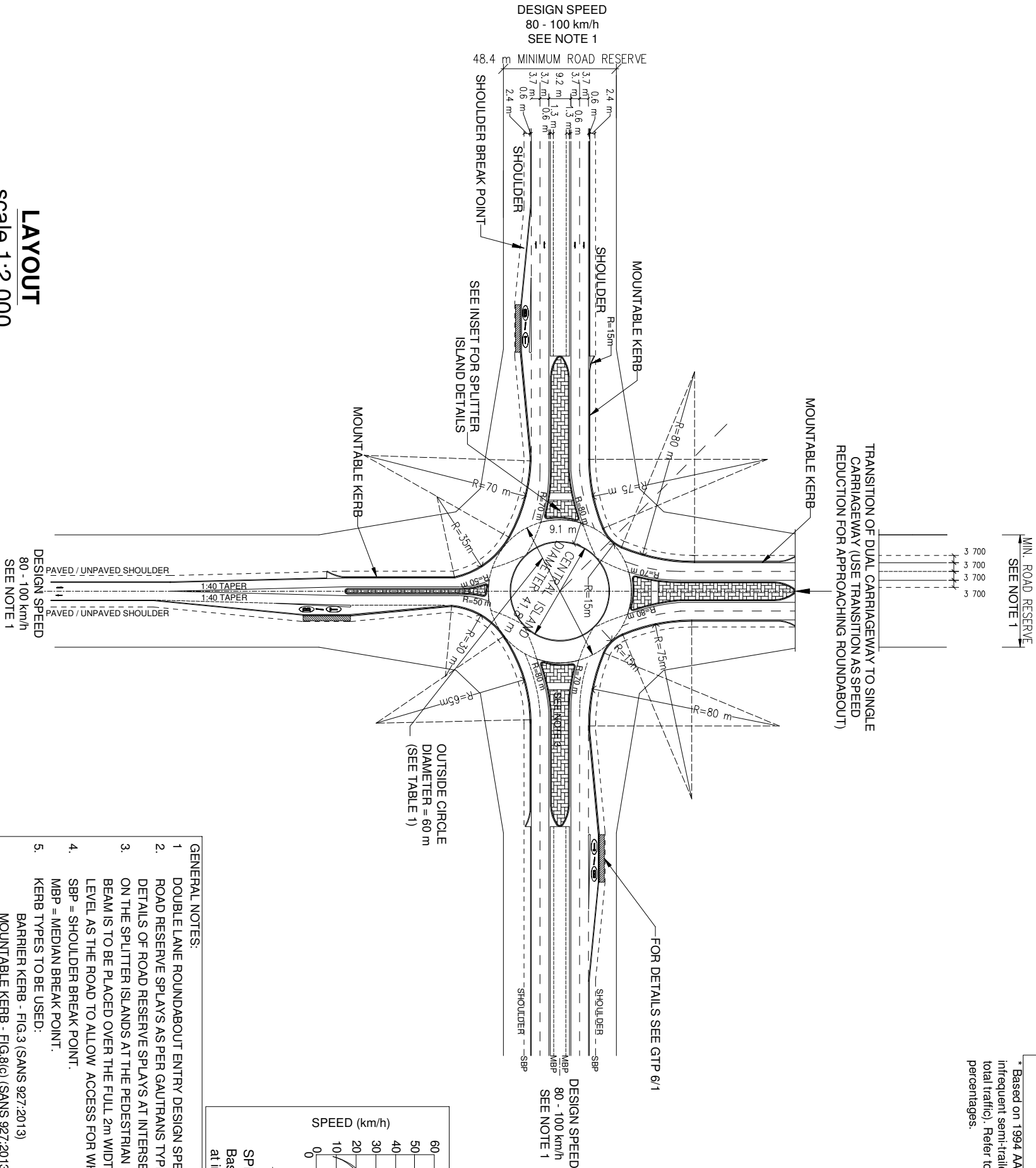


TABLE 1		
CIRCULATORY LANE WIDTH FOR DUAL CARRIAGEWAY ROUNDABOUTS		
OUTSIDE CIRCULATORY DIAMETER	CIRCULATORY LANE WIDTH*	CENTRAL ISLAND DIAMETER
60.0 m	9.1 m	41.6 m

* Based on 1994 AASHTO Table III-20, Case III(A). Assumes infrequent semi-trailer use (typically less than 5 percent of the total traffic). Refer to AASHTO for cases with higher truck percentages.



- GENERAL NOTES:**
1. DOUBLE LANE ROUNDABOUT ENTRY DESIGN SPEED = 50 km/h.
 2. ROAD RESERVE SPLAYS AS PER GAUTRANS TYPICAL PLAN No. GTP5/1 - TYPICAL DETAILS OF ROAD RESERVE SPLAYS AT INTERSECTIONS.
 3. ON THE SPLITTER ISLANDS AT THE PEDESTRIAN CROSSINGS, THE CONCRETE EDGE BEAM IS TO BE PLACED OVER THE FULL 2m WIDTH OF THE CROSSING TO THE SAME LEVEL AS THE ROAD TO ALLOW ACCESS FOR WHEEL CHAIRS, ETC.
 4. SBP = SHOULDER BREAK POINT.
 5. KERB TYPES TO BE USED:
 - BARRIER KERB - FIG.3 (SANS 927:2013)
 - MOUNTABLE KERB - FIG.8(c) (SANS 927:2013)
 - SEMI-MOUNTABLE KERB - FIG.7 (SANS 927:2013)

NOTE:
REFER TO BR12 - GUIDELINES FOR
ROUNDABOUTS ON PROVINCIAL ROADS

LAYOUT
Scale 1:2 000

SCALE ON REDUCED DRAWING	
10 mm	50 mm
1	2018
REV. No.	DATE
AMENDMENTS	

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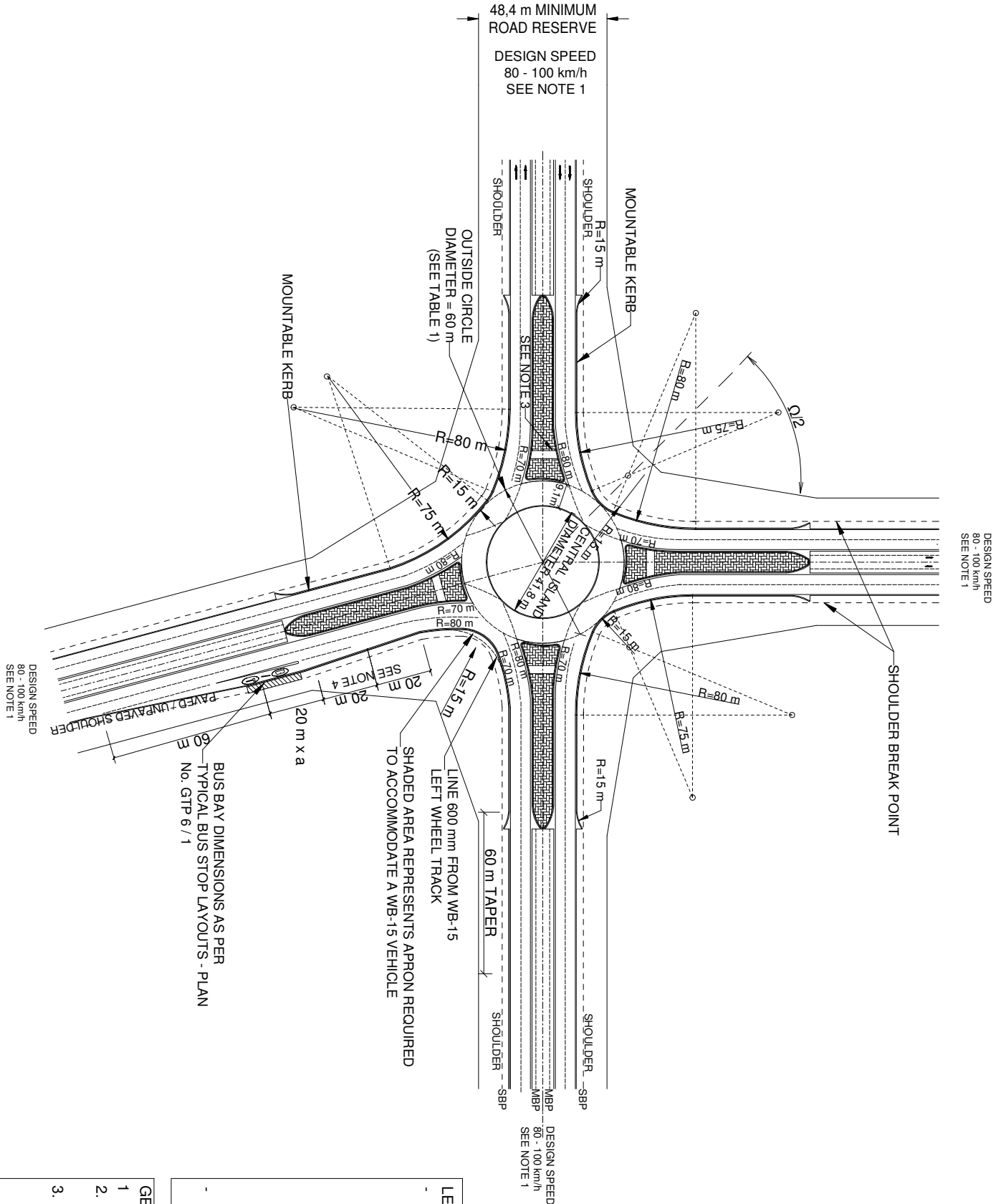
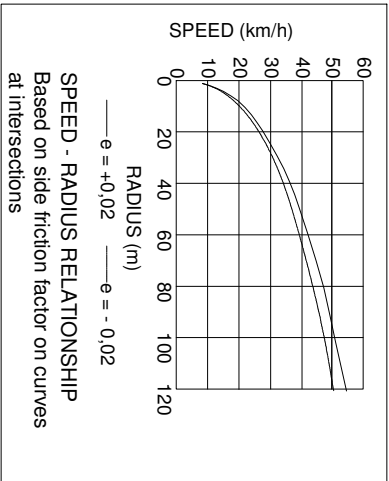


GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

ROUNDABOUT ON INTERSECTION OF DUAL AND
SINGLE CARRIAGEWAY ROADS - GEOMETRIC
LAYOUTS

APPROVED BY:	SCALE:	SHEET:
AS SHOWN	1 OF 1	
for HEAD of DEPARTMENT	DATE	GTP 18/2-2

TABLE 1		
CIRCULATORY LANE WIDTH FOR DUAL CARRIAGWAY ROUNDABOUTS		
OUTSIDE DIAMETER	CIRCULATORY LANE WIDTH	CENTRAL ISLAND DIAMETER
60,0 m	9,1 m	41,6 m



LEFT-TURN BYPASS LANES

- WHERE THE GEOMETRY FOR LEFT TURNS IS TOO TIGHT TO ALLOW TRUCKS TO TURN WITHIN THE ROUNDABOUT, A LEFT-TURN BYPASS MUST BE INTRODUCED. THIS OCCURS FOR THE CASES WHERE THE DEFLECTION ANGLE OF ONE OF THE APPROACH LEGS EXCEEDS 7°. THE MAXIMUM PERMISSABLE DEFLECTION IS 15°.

FOR A DEFLECTION ANGLE GREATER THAN 15°, THE DESIGN OF THE PARTICULAR APPROACH LEG MUST BE RECONSIDERED.

DEFLECTION ANGLE = Ω - 90° (FOR $\Omega > 90^\circ$)

- LEFT-TURN BYPASS LANES CAN ALSO BE USED TO IMPROVE CAPACITY WHERE THERE IS HEAVY LEFT TURNING TRAFFIC DEMAND.

- GENERAL NOTES:**
- 1 DOUBLE LANE ROUNDABOUT ENTRY DESIGN SPEED = 50 km/h.
 2. ROAD RESERVE SPLAYS AS PER GAUTRANS TYPICAL PLAN No. GTP5/1 - TYPICAL DETAILS OF ROAD RESERVE SPLAYS AT INTERSECTIONS.
 3. ON THE SPLITTER ISLANDS AT THE PEDESTRIAN CROSSINGS, THE CONCRETE EDGE BEAM IS TO BE PLACED OVER THE FULL 2 m WIDTH OF THE CROSSING TO THE SAME LEVEL AS THE ROAD TO ALLOW ACCESS FOR WHEEL CHAIRS, ETC.
 4. SBP = SHOULDER BREAK POINT.
 5. MBP = MEDIAN BREAK POINT.
- BARRIER KERB - FIG.3 (SANS 927:2013)
MOUNTABLE KERB - FIG.8(c) (SANS 927:2013)
BATTERED KERB - FIG.7 (SANS 927:2013)

SCALE ON REDUCED DRAWING	
1	2018
REV. No.	DATE
AMENDMENTS	

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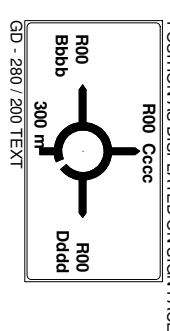
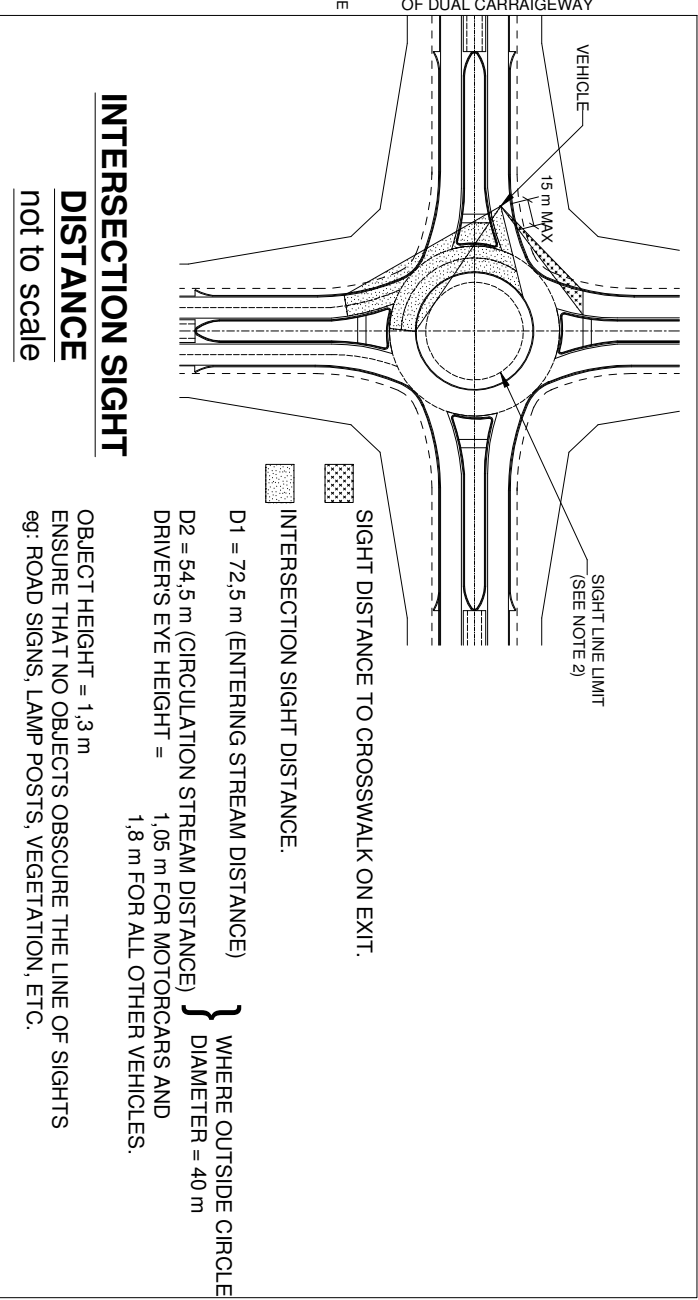
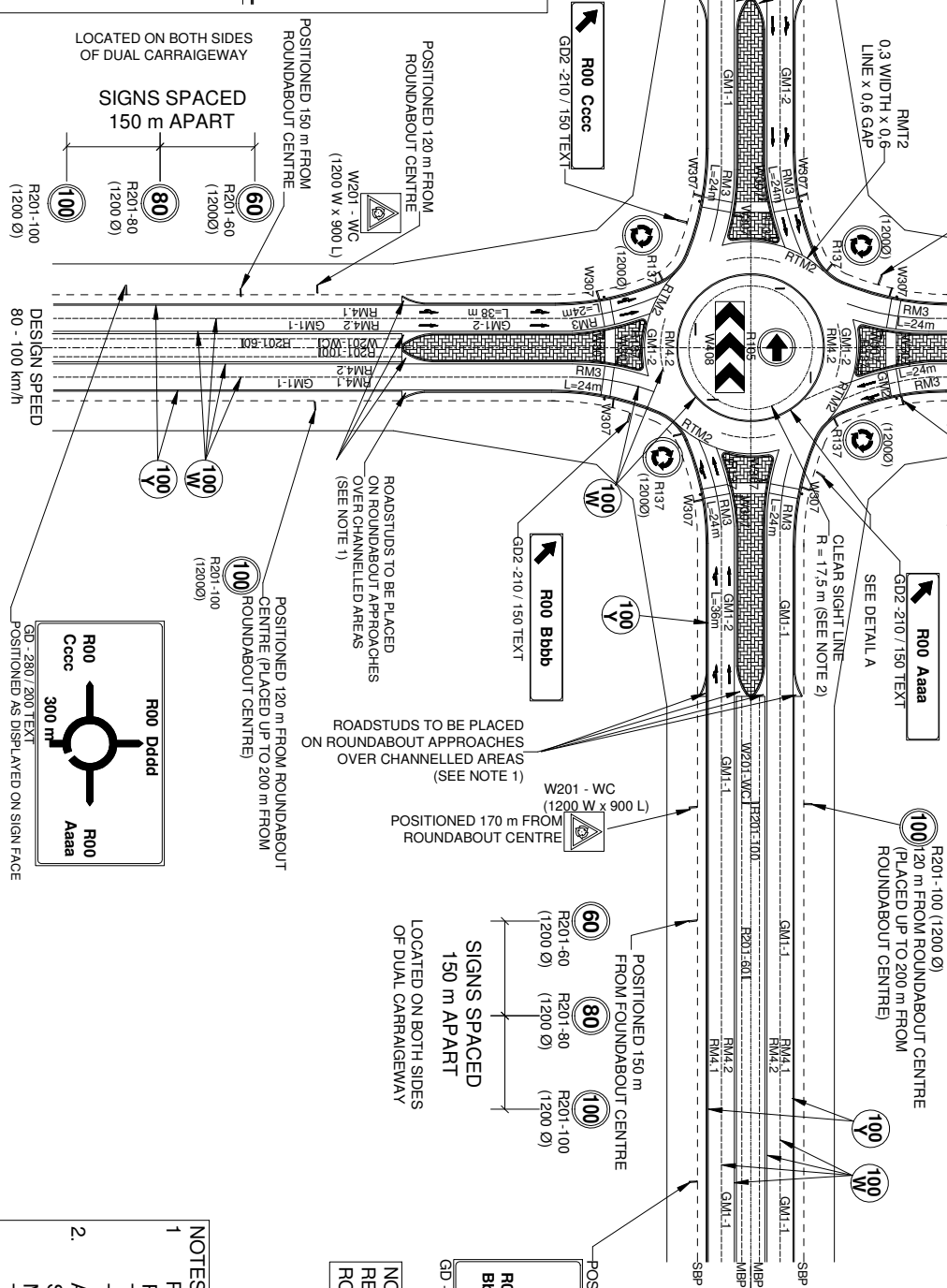
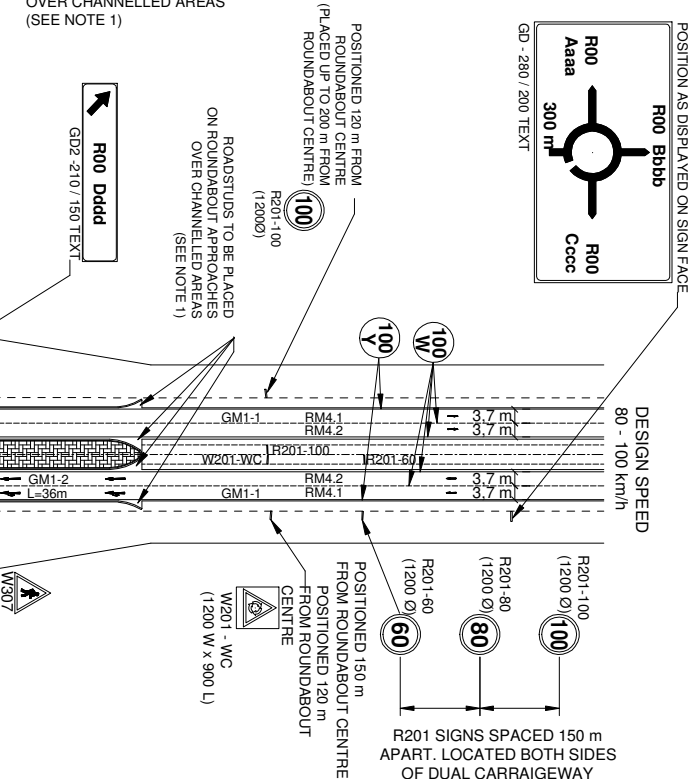
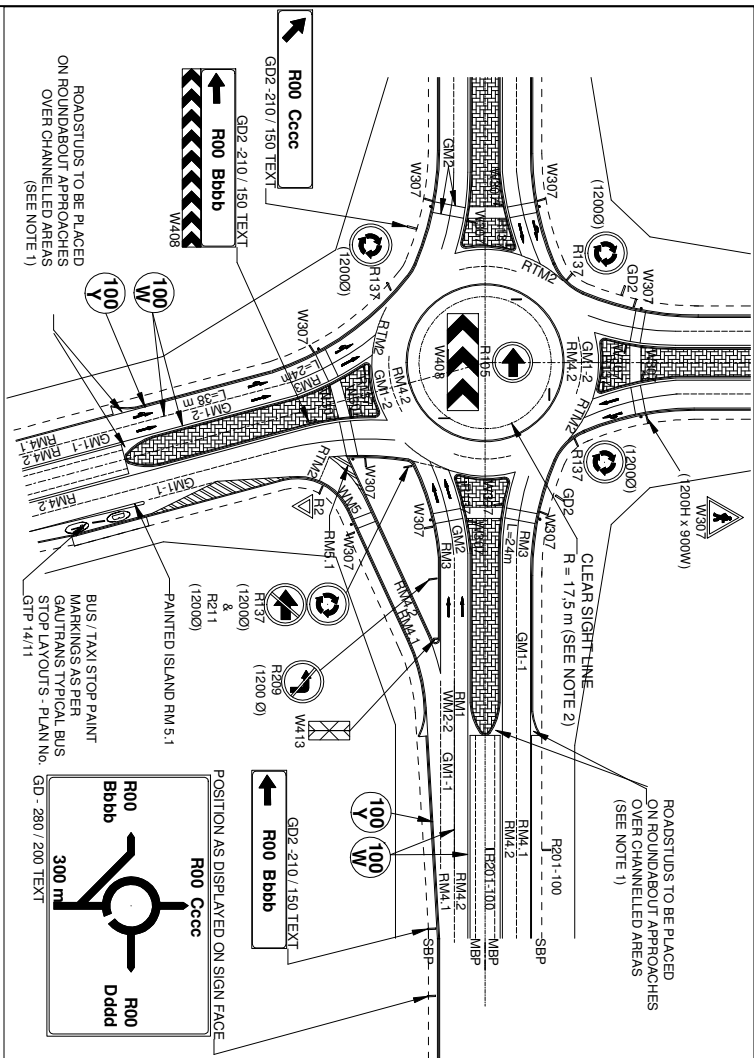
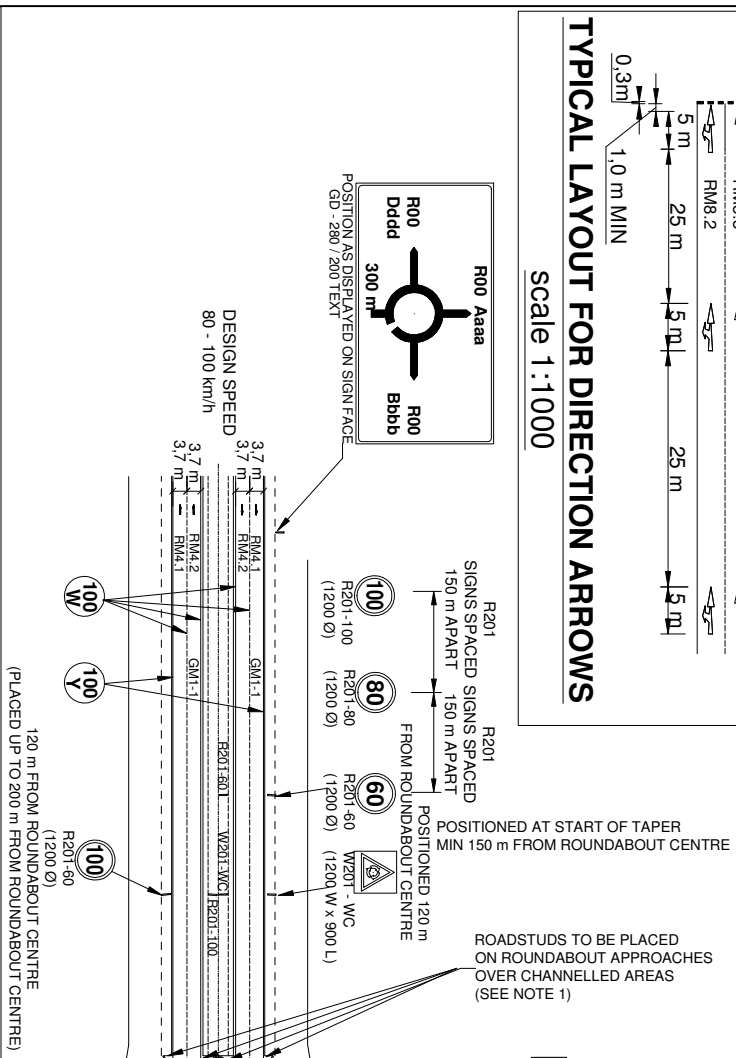
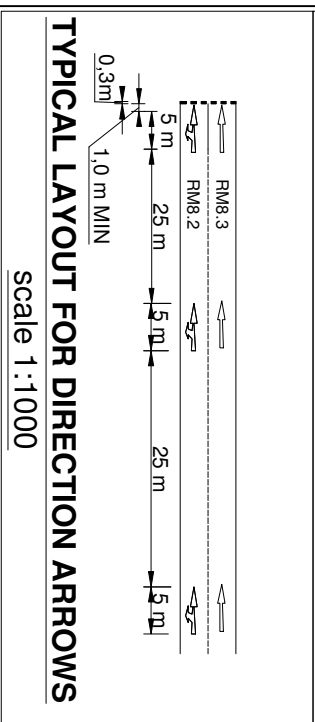
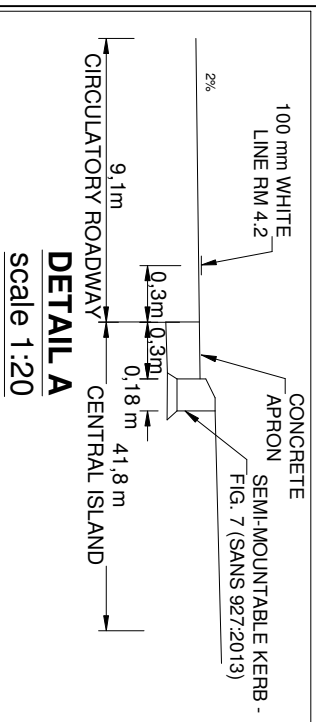
GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

LAYOUT

Scale 1:2000

ROUNDABOUT ON INTERSECTION OF DUAL CARRIAGEWAY - GEOMETRIC LAYOUTS

APPROVED BY:		SCALE:	SHEET:
		AS SHOWN	1 OF 1
for HEAD of DEPARTMENT		DATE	GTP18/2-3A



NOTE:
REFER TO BB12 - GUIDELINES FOR
ROUNDBOUTS ON PROVINCIAL ROADS

1. ROAD SIGNS, ROAD STUDS, PAINT MARKINGS AND THEIR POSITIONS TO BE ACCORDING TO THE SADC ROAD TRAFFIC SIGNS MANUAL 3rd EDITION OR AMENDMENTS THEREAFTER.
2. AS A MINIMUM REQUIREMENT, THE CENTRAL ISLAND SHOULD BE COVERED WITH A MAINTENANCE FREE MATERIAL OVER THE AREA BETWEEN THE ROADWAY AND THE SIGHT LINES.
3. SBP = SHOULDER BREAK POINT.
MBP = MEDIAN BREAK POINT.
4. SIGN PLACEMENT: CENTRED ON AND PERPENDICULAR TO APPROACH LEG AND PLACED INSIDE AND IMMEDIATELY ADJACENT TO SIGHT LINE

SCALE ON REDUCED DRAWING			
1	2018	SUCSEDES PLAN 2-4 (FEB 2005)	
REV. No.	DATE	AMENDMENTS	

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DRAWINGS ARE USED. THE DEPARTMENT DOES
NOT ACCEPT ANY LEGAL LIABILITY OF ANY
KIND FROM WHATSOEVER CAUSE OR HOWSOEVER
ARISING BY THE USE OF THESE DRAWINGS.



GAUTENG PROVINCE
ROADS AND TRANSPORT
REPUBLIC OF SOUTH AFRICA

ROUNDABOUT ON INTERSECTION OF DUAL CARRIAGEWAY PROVINCIAL ROADS ROAD SIGNS AND ROAD PAINT MARKINGS

APPROVED BY:		SCALE:	SHEET: 1 OF 1
 08/03/2019		AS SHOWN	
for HEAD of DEPARTMENT		DATE	
		GTP18/2-4	