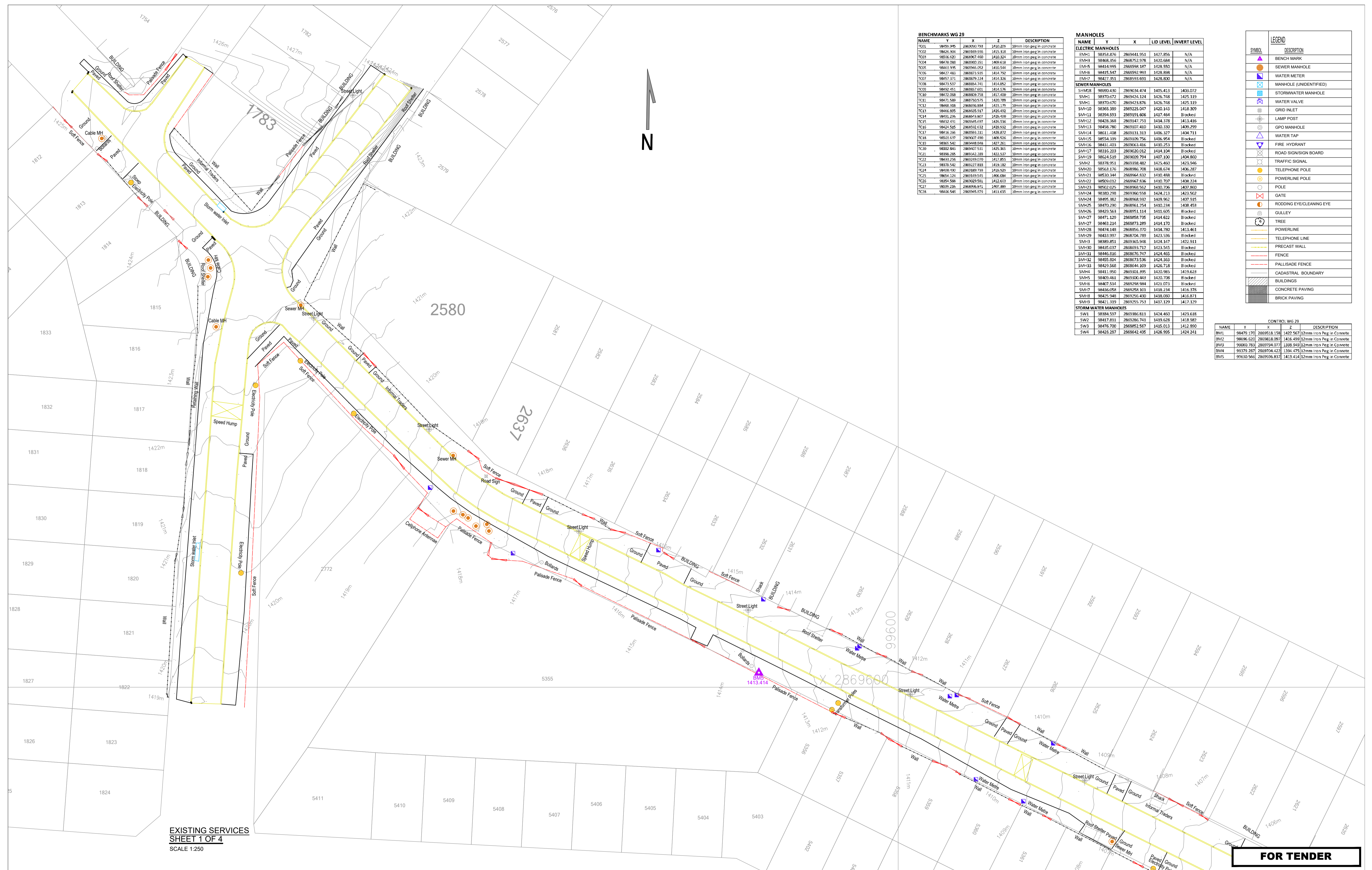


LIST OF DRAWINGS		
DRAWING NUMBER	DRAWING DESCRIPTION	REVISION
LIST OF DRAWINGS		
2021-014-TN-RD-001	LOCALITY PLAN, KEY PLAN AND LIST OF DRAWINGS	REV 0
ROADS		
2021-014-TN-RD-002	EXISTING SERVICES SHEET 1 OF 4	REV 0
2021-014-TN-RD-003	EXISTING SERVICES SHEET 2 OF 4	REV 0
2021-014-TN-RD-004	EXISTING SERVICES SHEET 3 OF 4	REV 0
2021-014-TN-RD-005	EXISTING SERVICES SHEET 4 OF 4	REV 0
2021-014-TN-RD-006	JB MARKS GEOMETRIC LAYOUT SHEET 1 OF 4	REV 0
2021-014-TN-RD-007	JB MARKS GEOMETRIC LAYOUT SHEET 2 OF 4	REV 0
2021-014-TN-RD-008	JB MARKS GEOMETRIC LAYOUT SHEET 3 OF 4	REV 0
2021-014-TN-RD-009	JB MARKS GEOMETRIC LAYOUT SHEET 4 OF 4	REV 0
2021-014-TN-RD-010	JB MARKS UNIVERSAL ACCESS LAYOUT SHEET 1 OF 3	REV 0
2021-014-TN-RD-011	JB MARKS UNIVERSAL ACCESS LAYOUT SHEET 2 OF 3	REV 0
2021-014-TN-RD-012	JB MARKS UNIVERSAL ACCESS LAYOUT SHEET 3 OF 3	REV 0
2021-014-TN-RD-013	JB MARKS TEMPORARY BRIDGE RAMP	REV 0
2021-014-TN-RDLS-001	JB MARKS ROAD LONGITUDINAL SECTION	REV 0
2021-014-TN-RDCS-001	JB MARKS ROAD CROSS SECTION	REV 0
STORMWATER		
2021-014-TN-SW-001	STORMWATER LAYOUT SHEET 1 OF 2	REV 0
2021-014-TN-SW-002	STORMWATER LAYOUT SHEET 2 OF 2	REV 0
2021-014-TN-SWLS-001	STORMWATER LONGITUDINAL SECTION	REV 0
TYPICAL DETAIL		
2021-009-TN-TD-001	TYPICAL CROSS SECTION	REV 0
2021-009-TN-TD-002	TYPICAL ROAD DETAILS AND STORMWATER DETAILS 01	REV 0
2021-009-TN-TD-003	TYPICAL ROAD DETAILS AND STORMWATER DETAILS 02	REV 0
2021-009-TN-TD-004	UNIVERSAL DETAILS	REV 0
2021-009-TN-TD-005	TRADING STALLS DETAILS	REV 0
2021-009-TN-TD-006	JB MARKS CULVERT LAYOUT	REV 0
2021-009-TN-TD-007	JB MARKS CULVERT SECTION	REV 0
JRA STANDARD DRAWINGS		
JRA-SDRD-041	TYPICAL BUS LAYBY (RISFSA CLASS 3 & 4 ROADS)	
JRA-SDRCS-072	TYPICAL TACTILE PEDESTRIAN CROSSING - SIGNALISED INTERSECTION - COMBINATION RAMPING	
JRA-SDRCS-040	TYPICAL MINIBUS-TAXI LAY-BY	
JRA-SDRS-010	STANDARD TYPE KERBS - 1	
JRA-SDRD-120	TRAFFIC CALMING / SPEED HUMP	
JRA-SDRD-121	RAISED PEDESTRIAN CROSSING (SHEET 1 OF 2)	
JRA-SDRD-122	RAISED PEDESTRIAN CROSSING (SHEET 2 OF 2)	

KEY PLAN
SCALE 1:1000

FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathabula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathabula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: AUG 2023 ECSA Pr. No. 200870199		DATE: 21/08/2023		AMENDMENTS		No		DISTRICT JOHANNESBURG		REVISION 0	
LOCALITY PLAN, KEY PLAN AND LIST OF DRAWINGS								Dwg No		2021-009-TN-RD-001	



BENCHMARKS WG 29				
NAME	Y	X	Z	DESCRIPTION
TC01	98799.945	286300.793	1430.279	30mm iron peg in concrete
TC02	98626.324	286189.038	1430.318	30mm iron peg in concrete
TC03	98556.030	286062.459	1430.324	30mm iron peg in concrete
TC04	98478.080	285900.351	1409.618	30mm iron peg in concrete
TC05	98413.395	285944.072	1419.544	30mm iron peg in concrete
TC06	98417.483	285821.515	1414.782	30mm iron peg in concrete
TC07	98457.371	285879.234	1414.376	30mm iron peg in concrete
TC08	98473.537	285884.741	1414.852	30mm iron peg in concrete
TC09	98492.453	285951.401	1414.576	30mm iron peg in concrete
TC10	98472.058	285829.758	1417.400	30mm iron peg in concrete
TC11	98471.589	286750.575	1420.789	30mm iron peg in concrete
TC12	98468.318	286876.884	1421.179	30mm iron peg in concrete
TC13	98464.895	286925.917	1420.492	30mm iron peg in concrete
TC14	98492.236	286861.807	1420.400	30mm iron peg in concrete
TC15	98432.411	286945.697	1420.536	30mm iron peg in concrete
TC16	98424.545	286950.632	1420.533	30mm iron peg in concrete
TC17	98416.266	286953.211	1420.872	30mm iron peg in concrete
TC18	98503.617	286927.490	1408.526	30mm iron peg in concrete
TC19	98505.541	286948.848	1427.261	30mm iron peg in concrete
TC20	98502.843	286947.511	1420.306	30mm iron peg in concrete
TC21	98508.205	286941.283	1422.537	30mm iron peg in concrete
TC22	98433.276	286929.070	1417.855	30mm iron peg in concrete
TC23	98378.542	286927.818	1414.182	30mm iron peg in concrete
TC24	98400.430	286918.758	1418.929	30mm iron peg in concrete
TC25	98404.124	286918.543	1406.084	30mm iron peg in concrete
TC26	98394.598	286929.551	1412.603	30mm iron peg in concrete
TC27	98401.218	286918.874	1401.489	30mm iron peg in concrete
TC28	98406.541	286945.073	1411.635	30mm iron peg in concrete

MANHOLES				
NAME	Y	X	LID LEVEL	INVERT LEVEL
ELECTRIC MANHOLES				
EMH1	98358.876	286944.951	1427.856	N/A
EMH4	98468.356	286872.978	1420.684	N/A
EMH5	98414.916	286858.187	1428.550	N/A
EMH8	98415.547	286852.962	1428.898	N/A
EMH7	98427.351	286893.691	1428.800	N/A
SEWER MANHOLES				
SMH18	98990.430	2869034.474	1405.413	1403.072
SMH1	98970.672	2869041.124	1426.748	1425.119
SMH1	98970.670	2869042.876	1426.748	1425.119
SMH10	98368.389	286925.047	1420.143	1418.309
SMH11	98394.593	2869121.606	1417.464	Blocked
SMH12	98428.368	2869147.753	1414.378	1413.416
SMH13	98458.790	2869107.410	1410.330	1409.259
SMH14	98611.428	2869131.313	1406.527	1404.711
SMH15	98554.319	2869129.756	1406.954	Blocked
SMH16	98431.403	2869063.416	1410.253	Blocked
SMH17	98316.203	2869020.012	1414.104	Blocked
SMH19	98624.519	2869029.794	1407.100	1404.800
SMH2	98378.951	2869338.482	1425.460	1423.946
SMH20	98568.176	2868986.708	1408.674	1406.287
SMH21	98530.344	2868964.832	1410.488	Blocked
SMH22	98529.012	2868967.836	1410.707	1408.224
SMH23	98523.025	2868965.627	1410.706	1407.860
SMH24	98580.298	2869360.558	1424.213	1423.502
SMH24	98495.382	2868968.932	1409.962	1407.915
SMH25	98470.230	2868961.754	1410.234	1408.453
SMH26	98429.563	2868971.114	1411.605	Blocked
SMH27	98471.129	2868988.735	1414.622	Blocked
SMH27	98463.214	2868873.289	1414.170	Blocked
SMH28	98474.148	2868856.370	1414.780	1413.461
SMH29	98433.997	2868704.789	1423.536	Blocked
SMH3	98389.851	2869365.948	1424.147	1422.511
SMH30	98415.017	2868933.712	1423.545	Blocked
SMH31	98446.816	2868676.747	1424.465	Blocked
SMH32	98455.804	2868673.536	1424.363	Blocked
SMH33	98429.568	2868641.109	1426.718	Blocked
SMH4	98411.950	2869301.895	1420.969	1419.629
SMH5	98409.661	2869302.463	1420.708	Blocked
SMH6	98407.514	2869298.984	1421.073	Blocked
SMH7	98436.058	2869258.101	1418.234	1416.378
SMH8	98475.948	2869256.430	1418.080	1416.871
SMH9	98471.313	2869255.753	1417.129	1417.129
STORM WATER MANHOLES				
SW1	98384.597	2869386.811	1424.460	1423.618
SW2	98417.811	2869286.741	1419.628	1418.982
SW3	98476.700	2868852.567	1415.013	1412.890
SW4	98423.287	2868642.435	1426.995	1424.241

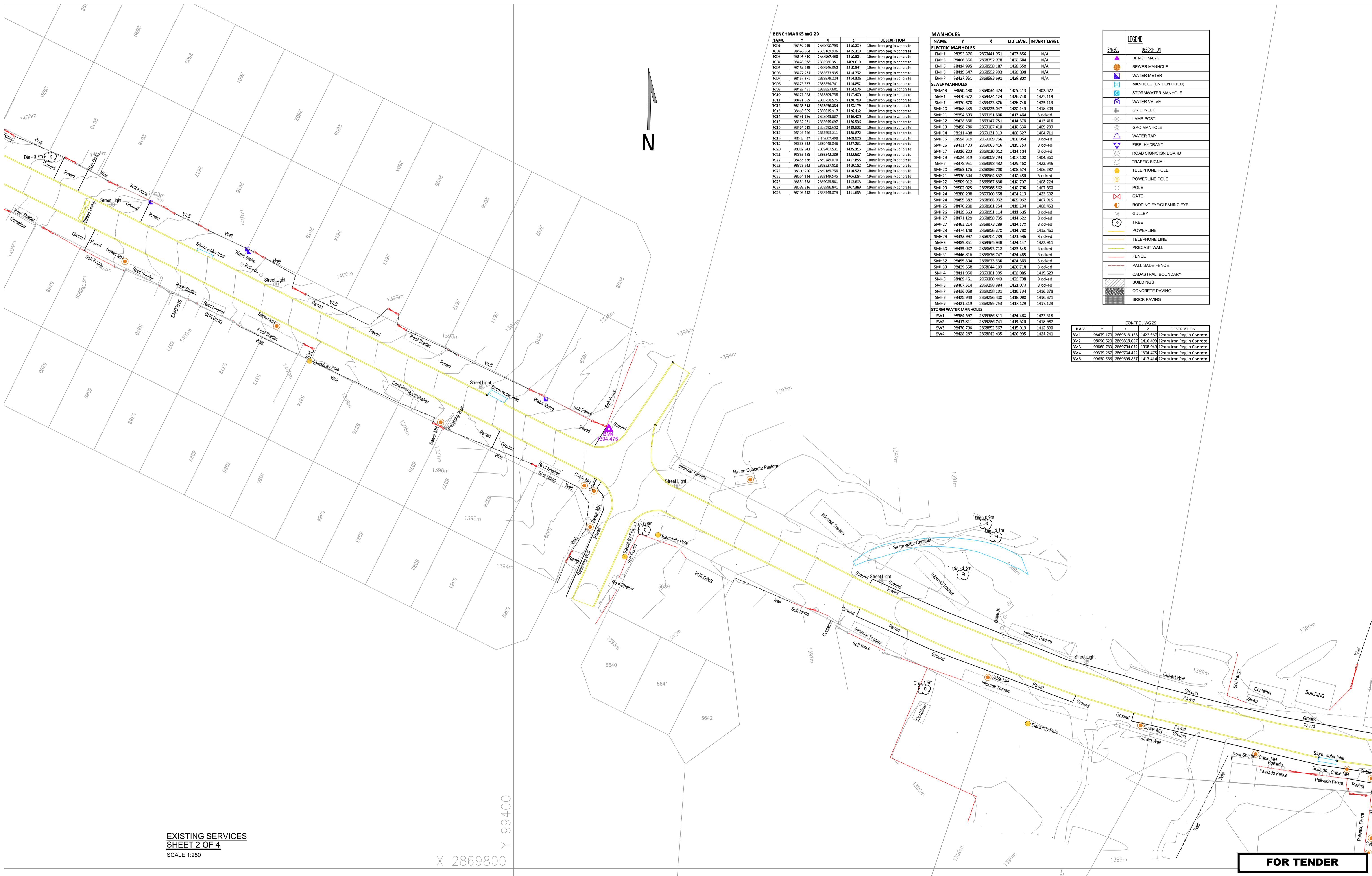
LEGEND	
SYMBOL	DESCRIPTION
▲	BENCH MARK
○	SEWER MANHOLE
□	WATER METER
□	MANHOLE (UNIDENTIFIED)
□	STORMWATER MANHOLE
□	WATER VALVE
□	GRID INLET
□	LAMP POST
□	GPO MANHOLE
□	WATER TAP
□	FIRE HYDRANT
□	ROAD SIGN/SIGN BOARD
□	TRAFFIC SIGNAL
□	TELEPHONE POLE
○	POLE
□	GATE
□	RODDING EYE/CLEANING EYE
□	GULLY
□	TREE
□	POWERLINE
□	TELEPHONE LINE
□	PRECAST WALL
□	FENCE
□	PALLISADE FENCE
□	CADASTRAL BOUNDARY
□	BUILDINGS
□	CONCRETE PAVING
□	BRICK PAVING

CONTROL WG 29				
NAME	Y	X	Z	DESCRIPTION
BM1	98479.170	2869518.159	1422.567	12mm Iron Peg in Concrete
BM2	98496.320	2869818.991	1416.499	12mm Iron Peg in Concrete
BM3	99000.783	2869724.071	1398.949	12mm Iron Peg in Concrete
BM4	99179.287	2869704.423	1394.475	12mm Iron Peg in Concrete
BM5	99630.566	2869506.832	1413.414	12mm Iron Peg in Concrete

EXISTING SERVICES
SHEET 1 OF 4
SCALE 1:250

FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S Mathebula		P O Box 2890 FAERIE GLEN 0043		P O Box 61877 MARSHALLTOWN 201		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajcce.co.za www.ajcce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr No. 200870199		DESIGN CHECKED M Jantjies		AJA CONSULTING CIVIL ENGINEERS		JDA		DISTRICT JOHANNESBURG		REVISION 0	
No		DATE		AMENDMENTS		DIEPSLOOT DEVELOPMENT PROJECT		EXISTING SERVICES SHEET 1 OF 4		Dwg No 2021-009-TN-RD-002	



BENCHMARKS WG 29

NAME	Y	X	Z	DESCRIPTION
TC05	98959.395	2862003.793	1410.209	10mm iron peg in concrete
TC02	98206.304	2862859.595	1415.318	10mm iron peg in concrete
TC03	98204.630	2862967.460	1410.314	10mm iron peg in concrete
TC04	98478.083	2862903.351	1409.618	10mm iron peg in concrete
TC09	98403.945	2862945.052	1410.544	10mm iron peg in concrete
TC06	98423.483	2862973.518	1414.792	10mm iron peg in concrete
TC07	98457.371	2862879.224	1414.316	10mm iron peg in concrete
TC08	98473.537	2862854.741	1414.852	10mm iron peg in concrete
TC09	98692.453	2862857.601	1414.576	10mm iron peg in concrete
TC10	98472.008	2862809.758	1417.400	10mm iron peg in concrete
TC11	98471.589	2862750.575	1420.789	10mm iron peg in concrete
TC12	98469.339	2862636.684	1423.179	10mm iron peg in concrete
TC13	98464.895	2862635.517	1426.692	10mm iron peg in concrete
TC14	98459.236	2862618.807	1426.400	10mm iron peg in concrete
TC15	98432.411	2862645.697	1426.536	10mm iron peg in concrete
TC16	98424.545	2862672.632	1428.932	10mm iron peg in concrete
TC17	98418.396	2862659.111	1428.872	10mm iron peg in concrete
TC18	98202.617	2862627.490	1406.926	10mm iron peg in concrete
TC19	98380.541	2862648.028	1427.261	10mm iron peg in concrete
TC20	98382.843	2862607.511	1425.865	10mm iron peg in concrete
TC21	98396.385	2862542.288	1422.537	10mm iron peg in concrete
TC22	98433.256	2862529.070	1417.895	10mm iron peg in concrete
TC23	98378.542	2862527.888	1419.182	10mm iron peg in concrete
TC24	98400.090	2862588.738	1416.929	10mm iron peg in concrete
TC25	98454.124	2862519.545	1406.084	10mm iron peg in concrete
TC26	98394.598	2862629.916	1412.613	10mm iron peg in concrete
TC27	98389.216	2862648.861	1407.889	10mm iron peg in concrete
TC28	98406.545	2862645.979	1411.635	10mm iron peg in concrete

MANHOLES

NAME	Y	X	LID LEVEL	INVERT LEVEL
ELECTRIC MANHOLES				
EMH1	98353.876	2862941.953	1427.856	N/A
EMH3	98468.356	2862752.978	1426.684	N/A
EMH5	98444.955	2862698.187	1428.550	N/A
EMH6	98415.547	2862592.993	1428.898	N/A
EMH7	98427.351	2862593.691	1428.800	N/A
SEWER MANHOLES				
SMH18	98692.480	2862934.474	1429.413	1428.072
SMH1	98378.672	2862924.124	1428.748	1425.119
SMH1	98370.670	2862943.876	1428.748	1425.119
SMH10	98368.389	2862925.047	1420.143	1418.309
SMH11	98394.533	2862919.606	1417.464	Blocked
SMH12	98428.368	2862917.753	1424.378	1413.416
SMH13	98458.780	2862917.410	1413.330	1409.299
SMH14	98611.428	2862911.913	1426.327	1424.711
SMH15	98554.319	28629109.756	1426.954	Blocked
SMH16	98431.403	2862903.416	1420.253	Blocked
SMH17	98316.203	2862920.012	1424.104	Blocked
SMH19	98524.519	2862909.794	1420.100	1424.840
SMH2	98378.951	2862938.482	1425.460	1423.946
SMH20	98563.176	2862898.708	1428.674	1426.287
SMH21	98530.345	2862896.837	1420.488	Blocked
SMH22	98509.012	2862907.836	1420.707	1428.224
SMH23	98521.025	2862908.521	1420.706	1427.860
SMH24	98383.298	2862936.558	1424.211	1423.502
SMH24	98495.382	2862968.932	1429.962	1427.915
SMH25	98470.230	2862861.754	1420.234	1428.453
SMH26	98429.563	2862891.114	1421.605	Blocked
SMH27	98471.129	2862898.725	1421.622	Blocked
SMH27	98463.214	2862873.289	1424.170	Blocked
SMH28	98474.148	2862856.370	1424.780	1413.461
SMH29	98434.997	2862704.789	1423.536	Blocked
SMH3	98489.851	2862905.948	1424.147	1422.511
SMH30	98495.037	2862869.712	1423.545	Blocked
SMH31	98446.416	2862876.747	1424.465	Blocked
SMH32	98495.004	2862867.536	1424.363	Blocked
SMH33	98479.568	2862844.109	1426.718	Blocked
SMH4	98411.950	2862901.995	1420.985	1419.629
SMH5	98403.461	2862900.463	1420.708	Blocked
SMH6	98407.514	2862928.984	1421.073	Blocked
SMH7	98436.058	2862928.101	1424.234	1416.378
SMH8	98425.948	2862926.430	1418.080	1416.871
SMH9	98411.315	2862925.753	1417.129	1417.129
STORM WATER MANHOLES				
SW1	98384.997	2862936.811	1424.460	1423.618
SW2	98417.811	2862926.741	1419.628	1418.987
SW3	98476.700	2862852.567	1415.013	1412.890
SW4	98428.287	2862842.435	1426.995	1424.241

LEGEND

SYMBOL	DESCRIPTION
▲	BENCH MARK
●	SEWER MANHOLE
○	WATER METER
□	MANHOLE (UNIDENTIFIED)
⊗	STORMWATER MANHOLE
⊕	WATER VALVE
⊖	GRID INLET
⊙	LAMP POST
⊗	GPO MANHOLE
⊕	WATER TAP
⊖	FIRE HYDRANT
⊗	ROAD SIGN/SIGN BOARD
⊕	TRAFFIC SIGNAL
⊖	TELEPHONE POLE
⊙	POLE
⊗	GATE
⊕	RODDING EYE/CLEANING EYE
⊖	GULLY
⊙	TREE
—	POWERLINE
—	TELEPHONE LINE
—	PRECAST WALL
—	FENCE
—	PALLISADE FENCE
—	CADASTRAL BOUNDARY
—	BUILDINGS
—	CONCRETE PAVING
—	BRICK PAVING

CONTROL WG 29

NAME	Y	X	Z	DESCRIPTION
BM1	98479.170	2862938.158	1422.567	12mm iron Peg in Concrete
BM2	98696.620	2862838.097	1414.499	12mm iron Peg in Concrete
BM3	99060.783	2862994.077	1358.848	12mm iron Peg in Concrete
BM4	99179.287	2862904.427	1394.475	12mm iron Peg in Concrete
BM5	99630.566	2862996.837	1413.414	12mm iron Peg in Concrete

EXISTING SERVICES
SHEET 2 OF 4
SCALE 1:250

X 2869800
Y 99400

FOR TENDER

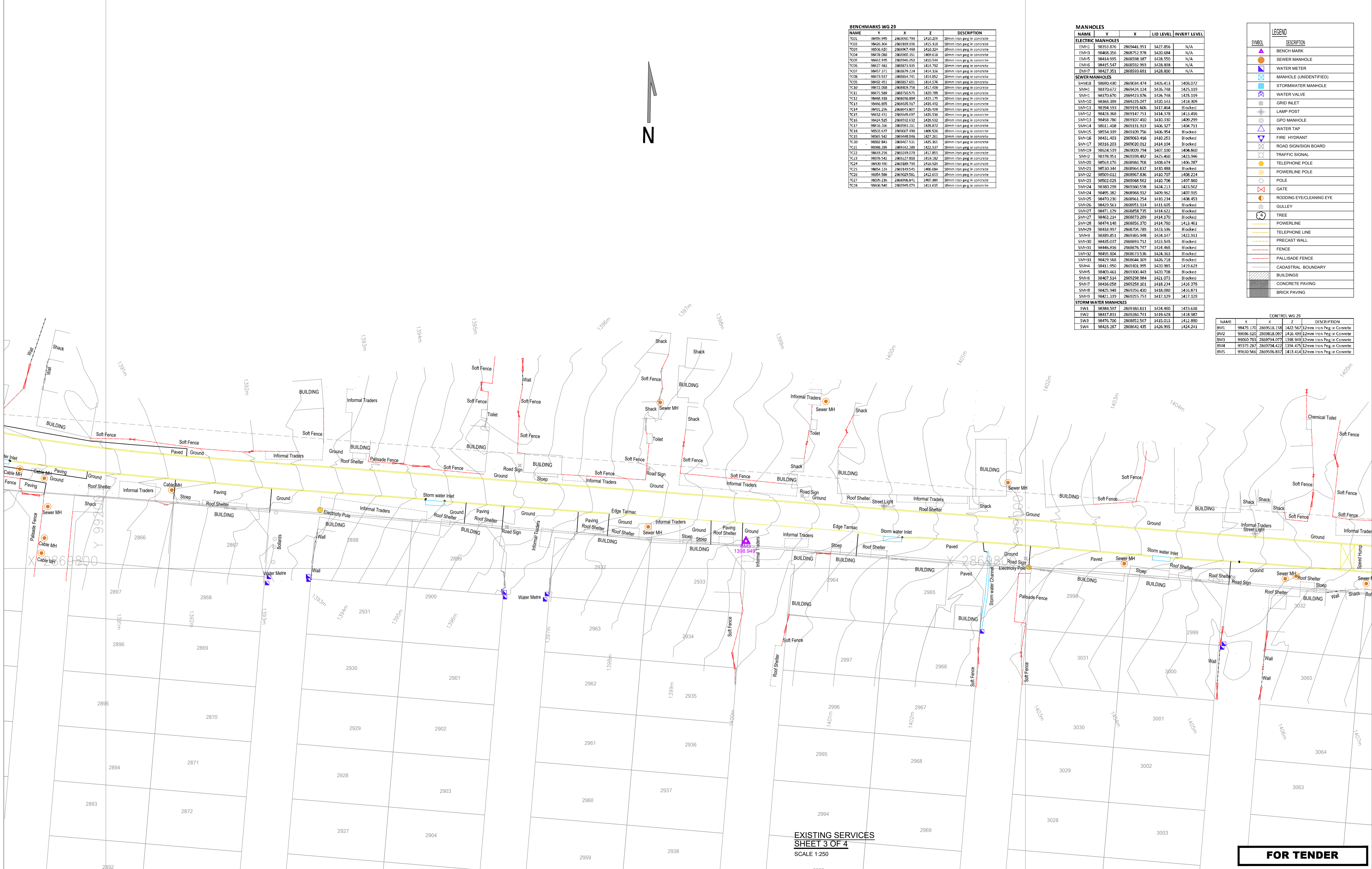
DRAWING TYPE TENDER DRAWINGS		DRAWN BY S Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S Mathebula		P O Box 2890 MARSHALLTOWN 0043		P O Box 61877 MARSHALLTOWN 2011		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajace.co.za www.ajace.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr No: 200870199		DESIGN CHECKED M Jantjies		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajace.co.za www.ajace.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		DISTRICT JOHANNESBURG		REVISION 0	
No		DATE		AMENDMENTS		EXISTING SERVICES SHEET 2 OF 4		DISTRICT JOHANNESBURG		Dwg No 2021-009-TN-RD-003	

BENCHMARKS WG 29				
NAME	Y	X	Z	DESCRIPTION
TC01	98950.945	2863003.793	1420.209	50mm iron peg in concrete
TC02	98926.304	2863019.936	1415.418	50mm iron peg in concrete
TC03	98926.420	2863007.490	1410.344	50mm iron peg in concrete
TC04	98478.083	2863000.251	1409.618	50mm iron peg in concrete
TC05	98403.945	2862946.052	1409.544	50mm iron peg in concrete
TC06	98417.483	2863073.939	1414.792	50mm iron peg in concrete
TC07	98457.371	2863079.224	1414.336	50mm iron peg in concrete
TC08	98473.537	2863054.741	1414.582	50mm iron peg in concrete
TC09	98950.451	2863057.001	1414.336	50mm iron peg in concrete
TC10	98472.008	2863000.728	1417.400	50mm iron peg in concrete
TC11	98471.589	2863052.575	1420.789	50mm iron peg in concrete
TC12	98466.318	2863036.894	1425.179	50mm iron peg in concrete
TC13	98466.855	2863035.917	1425.032	50mm iron peg in concrete
TC14	98953.236	2863051.807	1425.400	50mm iron peg in concrete
TC15	98432.411	2863045.697	1425.536	50mm iron peg in concrete
TC16	98424.525	2863052.632	1425.532	50mm iron peg in concrete
TC17	98416.236	2863059.111	1428.872	50mm iron peg in concrete
TC18	98521.617	2863007.490	1408.926	50mm iron peg in concrete
TC19	98305.541	2862648.048	1427.261	50mm iron peg in concrete
TC20	98382.843	2863007.531	1425.365	50mm iron peg in concrete
TC21	98396.265	2863042.288	1422.537	50mm iron peg in concrete
TC22	98433.256	2862949.070	1417.855	50mm iron peg in concrete
TC23	98378.542	2863227.818	1419.182	50mm iron peg in concrete
TC24	98400.490	2863089.738	1416.929	50mm iron peg in concrete
TC25	98654.124	2863109.545	1406.084	50mm iron peg in concrete
TC26	98354.598	2863029.961	1412.613	50mm iron peg in concrete
TC27	98309.216	2863068.941	1407.889	50mm iron peg in concrete
TC28	98405.545	2863045.873	1411.635	50mm iron peg in concrete

MANHOLES				
NAME	Y	X	LID LEVEL	INVERT LEVEL
ELECTRIC MANHOLES				
EMH1	98353.876	2863041.951	1427.856	N/A
EMH3	98468.356	2863052.978	1420.684	N/A
EMH5	98444.955	2863058.187	1428.550	N/A
EMH6	98415.547	2863032.993	1428.898	N/A
EMH7	98427.351	2863053.691	1428.800	N/A
SEWER MANHOLES				
SMH18	98690.430	2863034.474	1405.413	1403.072
SMH1	98370.672	2863044.124	1426.748	1415.119
SMH11	98370.670	2863043.676	1426.748	1425.119
SMH10	98368.389	2863025.047	1420.143	1418.309
SMH13	98394.593	2863191.606	1417.464	Blocked
SMH12	98428.368	2863147.751	1414.378	1413.416
SMH13	98458.780	2863107.410	1430.330	1409.239
SMH14	98511.408	2863131.913	1406.327	1404.711
SMH15	98554.319	2863105.756	1406.954	Blocked
SMH16	98431.403	2863063.416	1420.253	Blocked
SMH17	98316.203	2863020.012	1424.104	Blocked
SMH19	98524.519	2863035.794	1407.100	1404.860
SMH2	98378.951	2863038.482	1425.400	1423.546
SMH20	98563.175	2863086.708	1408.674	1406.287
SMH21	98530.344	2863064.832	1410.488	Blocked
SMH22	98509.012	2863067.836	1420.707	1408.224
SMH23	98502.025	2863068.562	1420.706	1407.860
SMH24	98380.298	2863040.558	1424.213	1423.502
SMH24	98495.382	2863068.932	1409.962	1407.915
SMH25	98470.230	2863061.754	1410.234	1408.453
SMH26	98429.563	2863051.114	1411.605	Blocked
SMH27	98471.129	2863058.725	1414.622	Blocked
SMH27	98463.214	2863073.289	1414.170	Blocked
SMH28	98474.148	2863056.370	1414.760	1413.461
SMH29	98434.997	2863074.789	1423.536	Blocked
SMH3	98389.851	2863065.948	1424.147	1422.911
SMH30	98435.037	2863069.712	1423.545	Blocked
SMH31	98446.816	2863076.747	1424.465	Blocked
SMH32	98495.804	2863073.536	1424.363	Blocked
SMH33	98429.568	2863064.109	1426.718	Blocked
SMH4	98411.950	2863030.895	1420.985	1419.629
SMH5	98429.461	2863030.442	1420.708	Blocked
SMH6	98407.514	2863028.984	1421.073	Blocked
SMH7	98436.058	2863058.101	1418.234	1416.378
SMH8	98425.948	2863056.430	1418.080	1416.871
SMH9	98421.219	2863055.753	1417.129	1417.129
STORMWATER MANHOLES				
SW1	98384.597	2863086.811	1424.460	1423.618
SW2	98417.811	2863086.741	1419.638	1418.982
SW3	98476.700	2863052.567	1415.013	1412.890
SW4	98428.287	2863042.435	1426.955	1424.241

CONTROL WG 29				
NAME	Y	X	Z	DESCRIPTION
BM1	98470.170	2863058.138	1422.567	12mm iron Peg in Concrete
BM2	98606.620	2863088.097	1416.499	12mm iron Peg in Concrete
BM3	98500.753	2863074.077	1388.949	12mm iron Peg in Concrete
BM4	99370.287	2863074.422	1394.475	12mm iron Peg in Concrete
BMS	99630.566	2863096.837	1413.414	12mm iron Peg in Concrete

LEGEND	
SYMBOL	DESCRIPTION
▲	BENCH MARK
●	SEWER MANHOLE
○	WATER METRE
□	MANHOLE (UNIDENTIFIED)
⊗	STORMWATER MANHOLE
⊕	WATER VALVE
⊖	GRID INLET
⊙	LAMP POST
⊚	GPO MANHOLE
⊛	WATER TAP
⊜	FIRE HYDRANT
⊝	ROAD SIGN/SIGN BOARD
⊞	TRAFFIC SIGNAL
⊟	TELEPHONE POLE
⊠	POWERLINE POLE
⊡	POLE
⊢	GATE
⊣	RODDING EYECLEANING EYE
⊤	GULLEY
⊥	TREE
⊦	POWERLINE
⊧	TELEPHONE LINE
⊨	PRECAST WALL
⊩	FENCE
⊪	PALLISADE FENCE
⊫	CADASTRAL BOUNDARY
⊬	BUILDINGS
⊭	CONCRETE PAVING
⊮	BRICK PAVING



EXISTING SERVICES
SHEET 3 OF 4
SCALE 1:250

FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS AJA CONSULTING CIVIL ENGINEERS		CLIENT JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathebula		P O Box 2890 FAERIE GLEN 0043		P O Box 61877 MARSHALLTOWN 201		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 993 Fax: (086) 763 7046 info@ajace.co.za www.ajace.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr No: 200870199		DESIGN CHECKED M. Jantjies		AJA CONSULTING CIVIL ENGINEERS		JDA JOHANNESBURG DEVELOPMENT AGENCY		DISTRICT JOHANNESBURG		REVISION 0	
DATE		DATE		AMENDMENTS		EXISTING SERVICES SHEET 3 OF 4		2021-009-TN-RD-004		Dwg No	

NAME	Y	X	Z	DESCRIPTION
TC01	98759.95	2869392.79	1420.27	10mm iron peg in concrete
TC02	98760.304	2869393.95	1413.93	10mm iron peg in concrete
TC03	9856.620	286967.450	1410.324	10mm iron peg in concrete
TC04	98678.088	2869892.351	1409.618	10mm iron peg in concrete
TC05	98661.915	2869994.052	1410.544	10mm iron peg in concrete
TC06	98617.483	2869873.935	1414.792	10mm iron peg in concrete
TC07	98657.371	2869879.234	1414.336	10mm iron peg in concrete
TC08	98673.537	2869894.741	1414.852	10mm iron peg in concrete
TC09	98692.451	2869917.659	1414.576	10mm iron peg in concrete
TC10	98677.088	2869893.758	1417.400	10mm iron peg in concrete
TC11	98671.589	2869750.575	1420.789	10mm iron peg in concrete
TC12	98668.118	2869898.894	1421.179	10mm iron peg in concrete
TC13	98666.895	2869625.917	1425.492	10mm iron peg in concrete
TC14	98671.296	2869873.807	1420.409	10mm iron peg in concrete
TC15	98632.411	2869345.697	1425.536	10mm iron peg in concrete
TC16	98634.547	2869345.632	1429.918	10mm iron peg in concrete
TC17	98616.266	2869593.311	1428.872	10mm iron peg in concrete
TC18	98633.617	2869007.490	1408.926	10mm iron peg in concrete
TC19	98685.443	2869448.588	1427.263	10mm iron peg in concrete
TC20	98632.843	2869407.531	1425.365	10mm iron peg in concrete
TC21	98398.285	2869342.289	1422.537	10mm iron peg in concrete
TC22	98633.296	2869229.070	1417.855	10mm iron peg in concrete
TC23	98678.542	2869277.818	1419.186	10mm iron peg in concrete
TC24	98600.690	2869189.758	1410.920	10mm iron peg in concrete
TC25	98654.124	2869119.545	1406.694	10mm iron peg in concrete
TC26	98654.588	2869229.566	1412.633	10mm iron peg in concrete
TC27	98629.219	2869098.815	1407.880	10mm iron peg in concrete
TC28	98630.548	2869045.870	1411.635	10mm iron peg in concrete

NAME	Y	X	LID LEVEL	INVERT LEVEL
EMH1	98351.576	2869441.951	1427.856	N/A
EMH3	98468.356	2869572.978	1420.684	N/A
EMH5	98414.995	2869598.187	1428.550	N/A
EMH6	98415.547	2869592.993	1428.898	N/A
EMH7	98427.251	2869593.691	1428.800	N/A

NAME	Y	X	LID LEVEL	INVERT LEVEL
SMH18	98690.430	2869434.474	1405.413	1403.072
SMH19	98370.672	2869424.124	1426.748	1425.119
SMH1	98370.670	2869423.876	1426.748	1425.119
SMH10	98365.389	2869423.047	1420.143	1418.309
SMH11	98394.591	2869371.606	1417.464	Blocked
SMH12	98428.368	2869147.751	1414.378	1413.416
SMH13	98438.780	2869107.410	1410.330	1409.299
SMH14	98611.408	2869191.919	1406.327	1404.711
SMH15	98554.919	2869109.736	1406.954	Blocked
SMH16	98431.403	2869563.816	1410.253	Blocked
SMH17	98316.203	2869200.012	1414.104	Blocked
SMH19	98604.519	2869009.794	1407.100	1404.860
SMH2	98378.951	2869398.482	1425.460	1423.946
SMH20	98563.176	2869895.708	1408.674	1406.287
SMH21	98533.344	2869864.919	1410.488	Blocked
SMH22	98500.012	2869867.836	1410.707	1408.224
SMH23	98502.025	2869868.562	1410.706	1407.860
SMH24	98380.798	2869360.538	1424.213	1423.502
SMH24	98495.382	2869898.932	1409.962	1407.915
SMH25	98470.230	2869861.154	1410.234	1408.453
SMH26	98429.563	2869851.114	1411.605	Blocked
SMH27	98471.129	2869858.735	1414.622	Blocked
SMH27	98463.214	2869873.289	1414.170	Blocked
SMH28	98474.148	2869856.370	1414.780	1413.863
SMH29	98434.997	2869704.789	1423.585	Blocked
SMH3	98389.851	2869365.948	1424.147	1422.911
SMH30	98435.037	2869693.712	1423.545	Blocked
SMH31	98446.816	2869676.747	1424.465	Blocked
SMH32	98455.824	2869673.336	1424.353	Blocked
SMH33	98419.568	2869644.309	1426.728	Blocked
SMH4	98411.950	2869301.995	1420.985	1419.623
SMH5	98409.461	2869300.443	1420.708	Blocked
SMH6	98407.514	2869298.984	1421.073	Blocked
SMH7	98436.058	2869356.401	1418.234	1416.378
SMH8	98425.948	2869256.430	1418.083	1416.873
SMH9	98421.319	2869255.753	1417.129	1417.129

NAME	Y	X	Z	DESCRIPTION
BM1	98479.120	2869518.158	1427.257	12mm iron Peg in Concrete
BM2	98696.620	2869818.097	1416.409	12mm iron Peg in Concrete
BM3	99060.783	2869794.077	1338.949	12mm iron Peg in Concrete
BM4	99379.287	2869704.422	1394.475	12mm iron Peg in Concrete
BM5	99630.566	2869596.837	1413.414	12mm iron Peg in Concrete

NAME	Y	X	Z	DESCRIPTION
SW1	98384.597	2869385.611	1424.490	1423.618
SW2	98417.911	2869385.711	1419.628	1418.983
SW3	98476.700	2869852.567	1415.013	1412.890
SW4	98428.287	2869642.435	1426.995	1424.241

LEGEND

- BENCH MARK
- SEWER MANHOLE
- WATER METER
- MANHOLE (UNIDENTIFIED)
- STORMWATER MANHOLE
- WATER VALVE
- GRID INLET
- LAMP POST
- GPO MANHOLE
- FIRE TAP
- FIRE HYDRANT
- ROAD SIGN/SIGN BOARD
- TRAFFIC SIGNAL
- TELEPHONE POLE
- POWERLINE POLE
- POLE
- GATE
- RODDING EYECLEANING EYE
- GUILLEY
- TREE
- POWERLINE
- TELEPHONE LINE
- PRECAST WALL
- FENCE
- PALLISADE FENCE
- CADASTRAL BOUNDARY
- BUILDINGS
- CONCRETE PAVING
- BRICK PAVING

EXISTING SERVICES
SHEET 4 OF 4
SCALE 1:250

FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S Shoko		CONSULTANTS AJA CONSULTING CIVIL ENGINEERS		CLIENT JOHANNESBURG DEVELOPMENT AGENCY		PROJECT DIEPSLOOT DEVELOPMENT PROJECT		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S Mathebula		P O Box 2890 FAERIE GLEN 0043		P O Box 61877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024		DESIGN CHECKED M Jantjies		AJA CONSULTING CIVIL ENGINEERS		JDA JOHANNESBURG DEVELOPMENT AGENCY		DISTRICT JOHANNESBURG		REVISION 0	
DATE: 02/02/2024		No		AMENDMENTS		EXISTING SERVICES SHEET 4 OF 4		Dwg No		2021-009-TN-RD-005	



LEGEND

EXISTING ROADSURFACE	
PROPOSED ROAD TO BE RESURFACED INCLUDING BASE AND SUBBASE PREPARATION	
PROPOSED GABION BASKETS	
FIGURE 8 KERB - MOUNTABLE KERB	
STORMWATER CHANNEL KERB	
FIGURE 10 KERB - RECTANGULAR KERB	
(221.2 x 110.8 x 60mm) RED CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
(221.2 x 110.8 x 60mm) GREY CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
PROPOSED INTERLOCKING PAVING BLOCKS (221.2x110.8x60mm) CHARCOAL COLOUR	
PROPOSED PRECAST CONCRETE PAVING SLAB (600x300x60mm) GREY COLOUR	

- NOTES: SETTING OUT AND LAYERWORKS**
- ALL BENCHMARKS AND BOUNDARY PEGS TO BE CONFIRMED BY SURVEYOR
 - EXISTING GROUND LEVELS TO BE SURVEYED AFTER SITE CLEARANCE, PRIOR TO COMMENCEMENT OF CONSTRUCTION
 - SETTING OUT DATA FOR ROAD/PARKING AREAS REFERS TO FINISHED LEVELS.
 - TOP-OF-BEW AND WORKSPACE OFFSETS AS PER RELEVANT PAVEMENT DESIGN DETAILS.
 - ALL CONSTRUCTION TO BE AS PER SANS 1200 STANDARD WITH VARIATIONS AS PER PROJECT SPECIFICATION.
 - REMAINDER OF AREA TO BE NEARLY FINISHED OFF.
 - CONTRACTOR TO ENSURE AND CONFIRM THAT ALL EXISTING SERVICES WHICH ENCRUSH INTO THE EXTENT OF THE WORKS HAVE BEEN PROPERLY DISCONNECTED AND/OR SEALED PRIOR TO COMMENCEMENT OF ANY EXCAVATIONS.
 - ALL LAYERWORKS TO BE CONSTRUCTED ACCORDING TO DETAILS AND SPECIFICATIONS.
 - THE EXISTING GRADES FOR STORMWATER PIPES WILL BE KEPT, ONLY KI REPOSITIONING WILL BE DONE. (STORMWATER PIPE SLOPE SHOULD BE 1% WITH MAXIMUM STORMWATER FLOW VELOCITY WITHIN THE PIPE AT 4.5m/s)

**JB MARKS GEOMETRIC LAYOUT
SHEET 1 OF 4
SCALE 1:250**

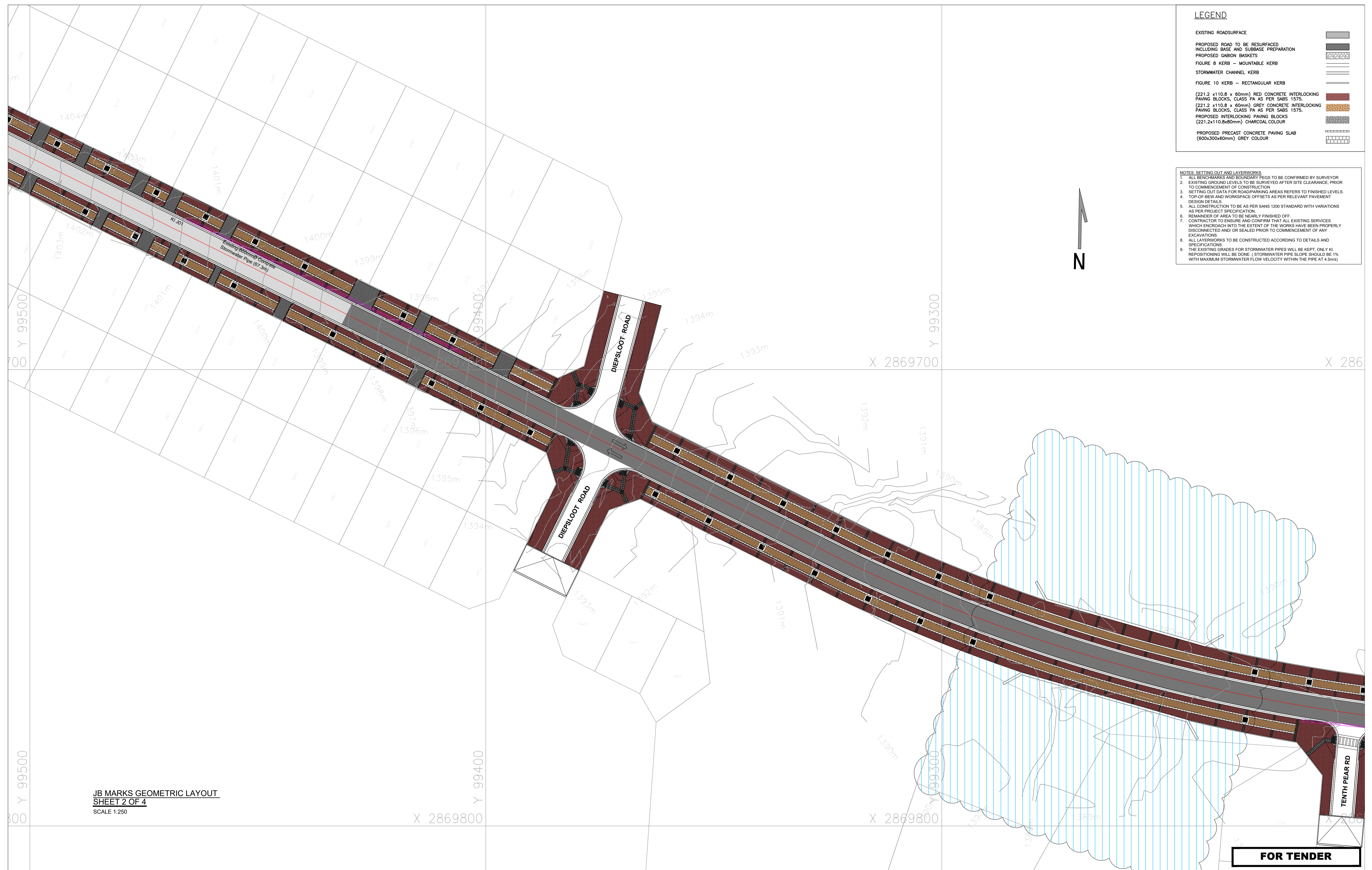
FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 61877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		JB MARKS GEOMETRIC LAYOUT SHEET 1		DISTRICT JOHANNESBURG		REVISION 0	
DATE: _____		No		DATE		AMENDMENTS		Dwg No		2021-009-TN-RD-006	

LEGEND

EXISTING ROADSURFACE	
PROPOSED ROAD TO BE RESURFACED INCLUDING BASE AND SUBBASE PREPARATION	
PROPOSED GABION BASKETS	
FIGURE 8 KERB - MOUNTABLE KERB	
STORMWATER CHANNEL KERB	
FIGURE 10 KERB - RECTANGULAR KERB	
(221.2 x 110.8 x 60mm) RED CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
(221.2 x 110.8 x 60mm) GREY CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
PROPOSED INTERLOCKING PAVING BLOCKS (221.2x110.8x60mm) CHARCOAL COLOUR	
PROPOSED PRECAST CONCRETE PAVING SLAB (600x300x60mm) GREY COLOUR	

- NOTES: SETTING OUT AND LAYERWORKS**
- ALL BENCHMARKS AND BOUNDARY PEGS TO BE CONFIRMED BY SURVEYOR
 - EXISTING GROUND LEVELS TO BE SURVEYED AFTER SITE CLEARANCE, PRIOR TO COMMENCEMENT OF CONSTRUCTION
 - SETTING OUT DATA FOR ROAD/PARKING AREAS REFERS TO FINISHED LEVELS.
 - TOP-OF-BEW AND WORKSPACE OFFSETS AS PER RELEVANT PAVEMENT DESIGN DETAILS.
 - ALL CONSTRUCTION TO BE AS PER SANS 1200 STANDARD WITH VARIATIONS AS PER PROJECT SPECIFICATION.
 - REMAINDER OF AREA TO BE NEARLY FINISHED OFF.
 - CONTRACTOR TO ENSURE AND CONFIRM THAT ALL EXISTING SERVICES WHICH ENDOUR INTO THE EXTENT OF THE WORKS HAVE BEEN PROPERLY DISCONNECTED AND/OR SEALED PRIOR TO COMMENCEMENT OF ANY EXCAVATIONS.
 - ALL LAYERWORKS TO BE CONSTRUCTED ACCORDING TO DETAILS AND SPECIFICATIONS.
 - THE EXISTING GRADES FOR STORMWATER PIPES WILL BE KEPT, ONLY KI REPOSITIONING WILL BE DONE. (STORMWATER PIPE SLOPE SHOULD BE 1% WITH MAXIMUM STORMWATER FLOW VELOCITY WITHIN THE PIPE AT 4.5m/s)



JB MARKS GEOMETRIC LAYOUT
SHEET 2 OF 4
 SCALE 1:250

FOR TENDER

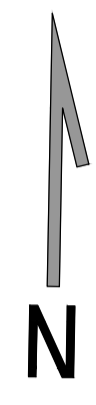
DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		DESIGN CHECKED M. Jantjies		DISTRICT JOHANNESBURG		REVISION 0	
No		DATE		AMENDMENTS		JB MARKS GEOMETRIC LAYOUT SHEET 2		2021-009-TN-RD-007		Dwg No	



LEGEND

EXISTING ROADSURFACE	
PROPOSED ROAD TO BE RESURFACED INCLUDING BASE AND SUBBASE PREPARATION	
PROPOSED GABION BASKETS	
FIGURE 8 KERB - MOUNTABLE KERB	
STORMWATER CHANNEL KERB	
FIGURE 10 KERB - RECTANGULAR KERB	
(221.2 x 110.8 x 60mm) RED CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
(221.2 x 110.8 x 60mm) GREY CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
PROPOSED INTERLOCKING PAVING BLOCKS (221.2x110.8x60mm) CHARCOAL COLOUR	
PROPOSED PRECAST CONCRETE PAVING SLAB (600x300x60mm) GREY COLOUR	

- NOTES: SETTING OUT AND LAYERWORKS**
1. ALL BENCHMARKS AND BOUNDARY PEGS TO BE CONFIRMED BY SURVEYOR
 2. EXISTING GROUND LEVELS TO BE SURVEYED AFTER SITE CLEARANCE, PRIOR TO COMMENCEMENT OF CONSTRUCTION
 3. SETTING OUT DATA FOR ROAD/PARKING AREAS REFERS TO FINISHED LEVELS.
 4. TOP-OF-BEW AND WORKSPACE OFFSETS AS PER RELEVANT PAVEMENT DESIGN DETAILS
 5. ALL CONSTRUCTION TO BE AS PER SANS 1200 STANDARD WITH VARIATIONS AS PER PROJECT SPECIFICATION
 6. REMAINDER OF AREA TO BE NEARLY FINISHED OFF.
 7. CONTRACTOR TO ENSURE AND CONFIRM THAT ALL EXISTING SERVICES WHICH ENDOUR INTO THE EXTENT OF THE WORKS HAVE BEEN PROPERLY DISCONNECTED AND/OR SEALED PRIOR TO COMMENCEMENT OF ANY EXCAVATIONS.
 8. ALL LAYERWORKS TO BE CONSTRUCTED ACCORDING TO DETAILS AND SPECIFICATIONS.
 9. THE EXISTING GRADES FOR STORMWATER PIPES WILL BE KEPT, ONLY KI REPOSITIONING WILL BE DONE. (STORMWATER PIPE SLOPE SHOULD BE 1% WITH MAXIMUM STORMWATER FLOW VELOCITY WITHIN THE PIPE AT 4.5m/s)



JB MARKS GEOMETRIC LAYOUT
SHEET 3 OF 4
 SCALE 1:250

FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S Mathebula		P O Box 2890 FAERIE GLEN 0043		P O Box 61877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr No. 200870199		DATE: 02/02/2024		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		DISTRICT JOHANNESBURG		REVISION 0	
No		DATE		AMENDMENTS		DESIGN CHECKED M Jantjies		JB MARKS GEOMETRIC LAYOUT SHEET 3		Dwg No 2021-009-TN-RD-008	

LEGEND

EXISTING ROADSURFACE	
PROPOSED ROAD TO BE RESURFACED INCLUDING BASE AND SUBBASE PREPARATION PROPOSED GABION BASKETS	
FIGURE 8 KERB - MOUNTABLE KERB	
STORMWATER CHANNEL KERB	
FIGURE 10 KERB - RECTANGULAR KERB	
(221.2 x 110.8 x 60mm) RED CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
(221.2 x 110.8 x 60mm) GREY CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
PROPOSED INTERLOCKING PAVING BLOCKS (221.2x110.8x60mm) CHARCOAL COLOUR	
PROPOSED PRECAST CONCRETE PAVING SLAB (600x300x60mm) GREY COLOUR	

- NOTES: SETTING OUT AND LAYERWORKS**
- ALL BENCHMARKS AND BOUNDARY PEGS TO BE CONFIRMED BY SURVEYOR
 - EXISTING GROUND LEVELS TO BE SURVEYED AFTER SITE CLEARANCE, PRIOR TO COMMENCEMENT OF CONSTRUCTION
 - SETTING OUT DATA FOR ROAD/PARKING AREAS REFERS TO FINISHED LEVELS.
 - TOP-OF-BEW AND WORKSPACE OFFSETS AS PER RELEVANT PAVEMENT DESIGN DETAILS.
 - ALL CONSTRUCTION TO BE AS PER SANS 1200 STANDARD WITH VARIATIONS AS PER PROJECT SPECIFICATION
 - REMAINDER OF AREA TO BE NEARLY FINISHED OFF.
 - CONTRACTOR TO ENSURE AND CONFIRM THAT ALL EXISTING SERVICES WHICH ENCRUSCH INTO THE EXTENT OF THE WORKS HAVE BEEN PROPERLY DISCONNECTED AND/OR SEALED PRIOR TO COMMENCEMENT OF ANY EXCAVATIONS.
 - ALL LAYERWORKS TO BE CONSTRUCTED ACCORDING TO DETAILS AND SPECIFICATIONS.
 - THE EXISTING GRADES FOR STORMWATER PIPES WILL BE KEPT, ONLY KI REPOSITIONING WILL BE DONE. (STORMWATER PIPE SLOPE SHOULD BE 1% WITH MAXIMUM STORMWATER FLOW VELOCITY WITHIN THE PIPE AT 4.5m/s)



JB MARKS GEOMETRIC LAYOUT
SHEET 3 OF 4
 SCALE 1:250

FOR TENDER

DRAWING TYPE	TENDER DRAWINGS
DRAWING APPROVAL	
M. JANTJIES	for CLIENT (NAME AND SIGNATURE)
DATE: FEB 2024	ECSA Pr No. 200870199

DRAWN BY	S Shoko	
DRAWING CHECKED	S Mathebula	
DESIGNED BY	S Mathebula	
DESIGN CHECKED	M Jantjies	
No	DATE	AMENDMENTS
0	02/02/2024	ISSUED FOR TENDER

CONSULTANTS:
AJA CONSULTING CIVIL ENGINEERS
 P. O. Box 2890
 FAERIE GLEN
 0043
 Tel: (012) 991 1993
 Fax: (086) 763 7046
 info@ajace.co.za
 www.ajace.co.za

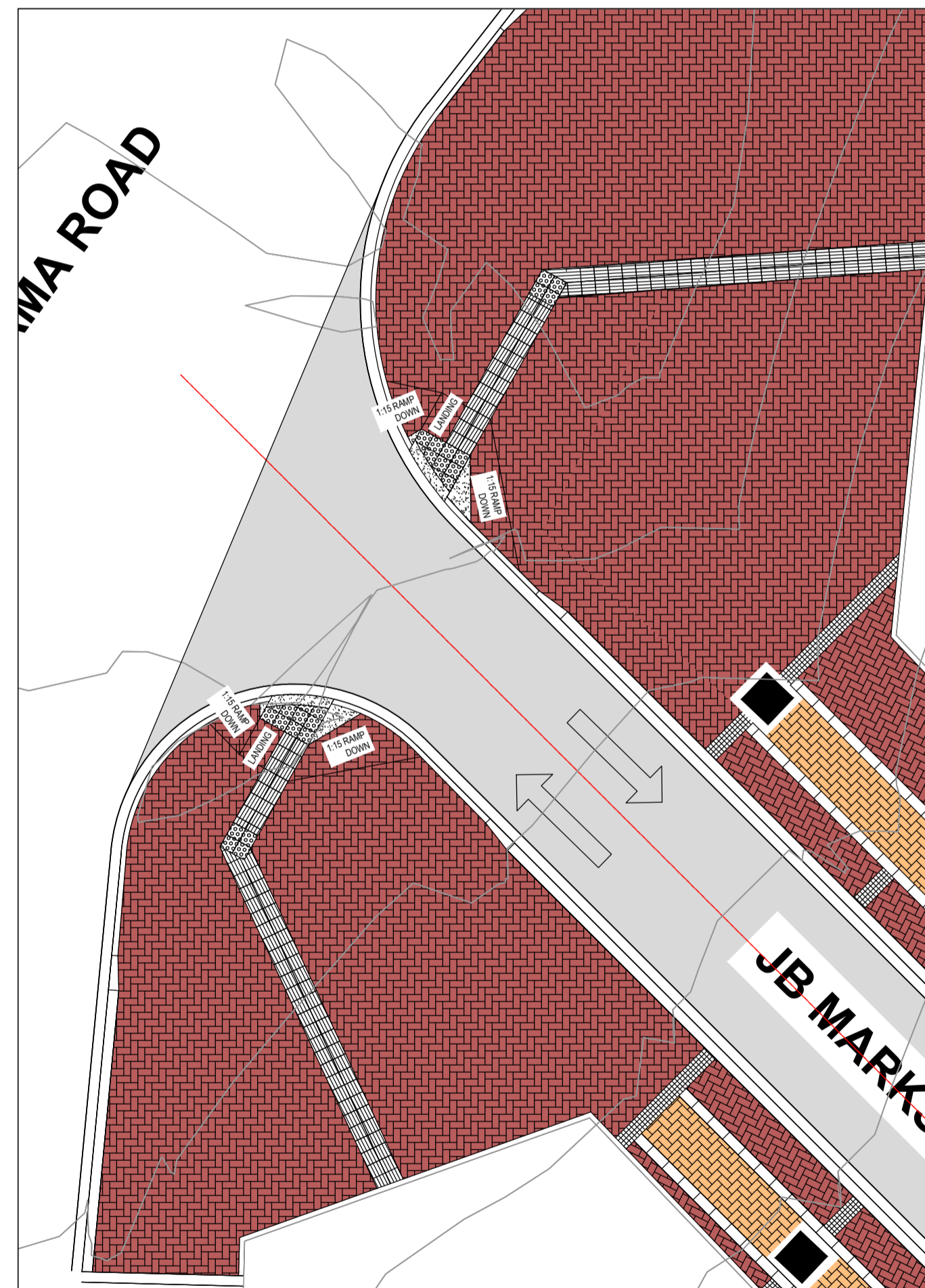
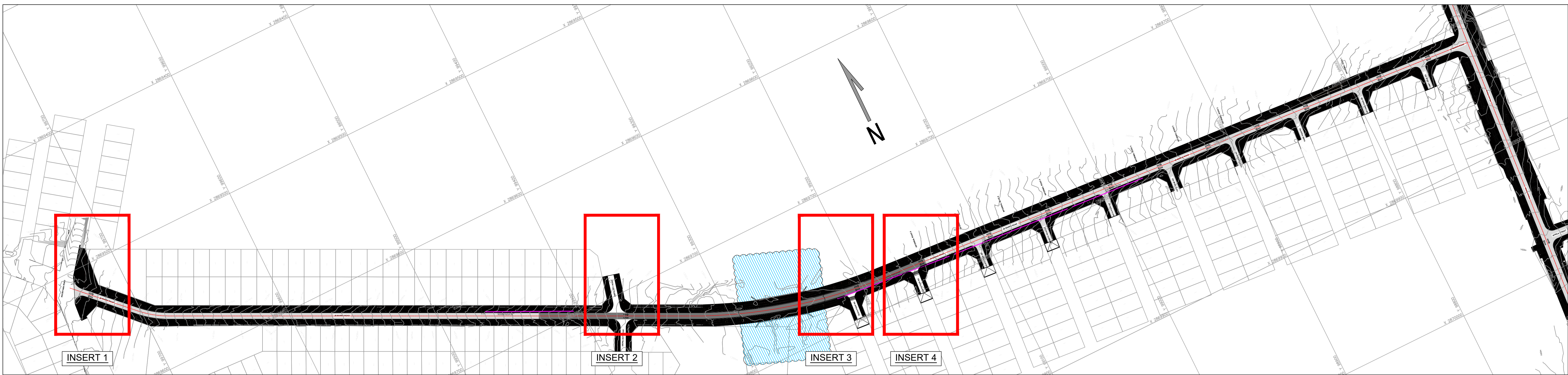
CLIENT:
JOHANNESBURG DEVELOPMENT AGENCY
 P. O. Box 61877
 MARSHALLTOWN
 2017
 Tel: (011) 688 7851
 info@jda.org.za
 www.jda.org.za

DIEPSLOOT DEVELOPMENT PROJECT

JB MARKS GEOMETRIC LAYOUT
SHEET 4 OF 4

FILE No	-
AGREEMENT No	-
ROAD No s	-
DISTRICT	JOHANNESBURG

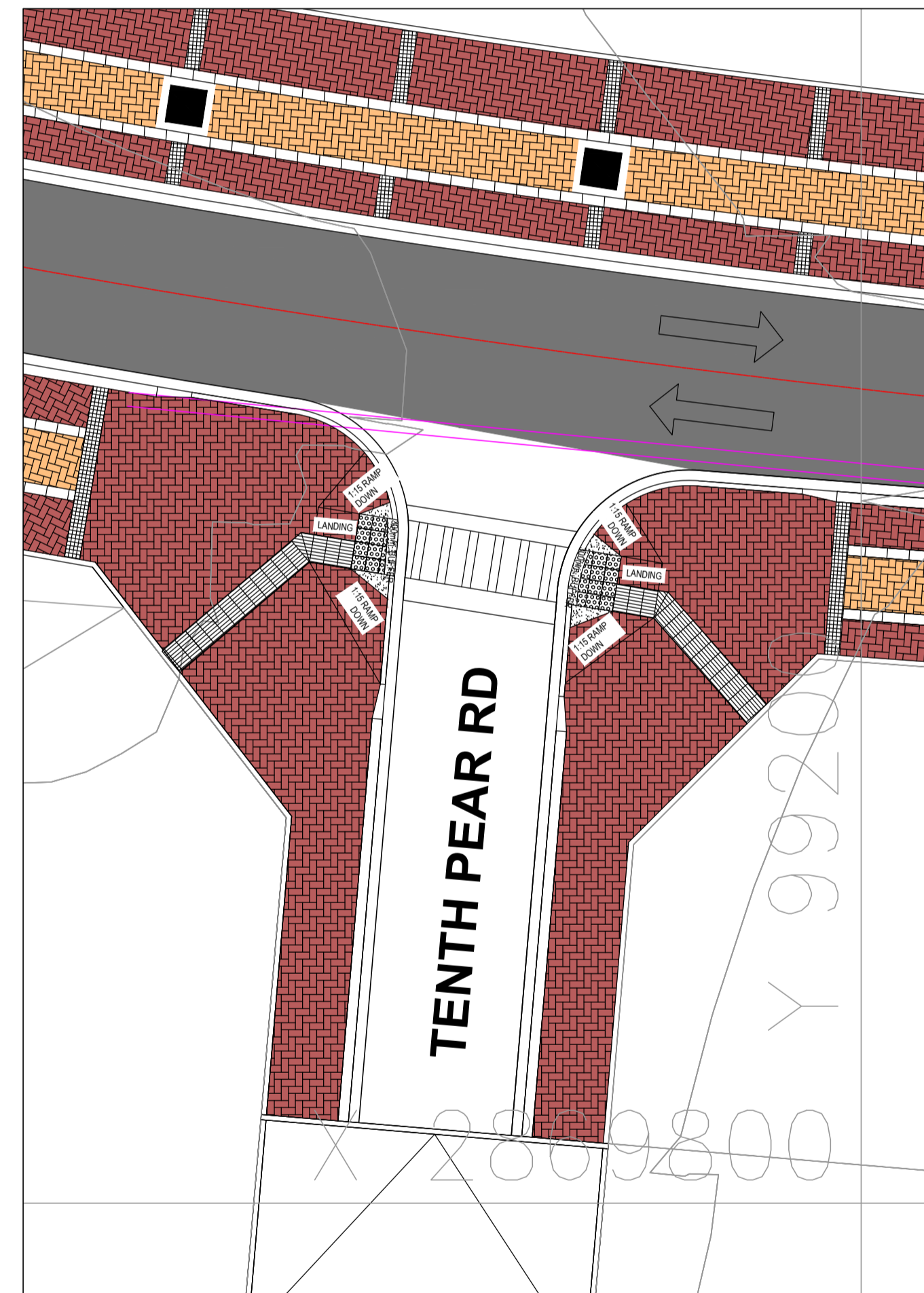
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CONTRACT No	N/A
SCALE	AS INDICATED
REVISION	0
DWG No	2021-009-TN-RD-009



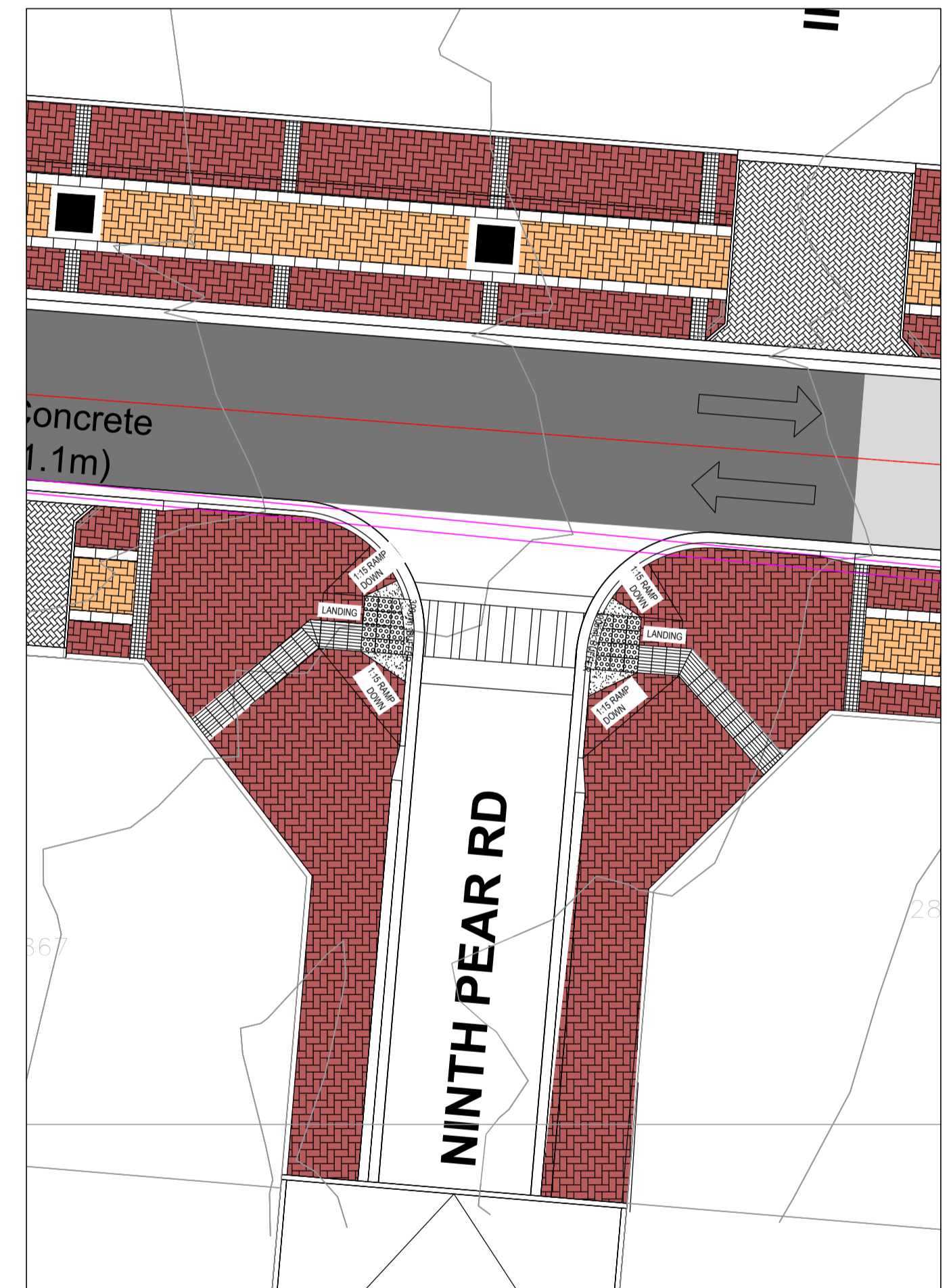
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SCALE 1:150



UNIVERSAL ACCESS LAYOUT
INSERT 2
SCALE 1:150



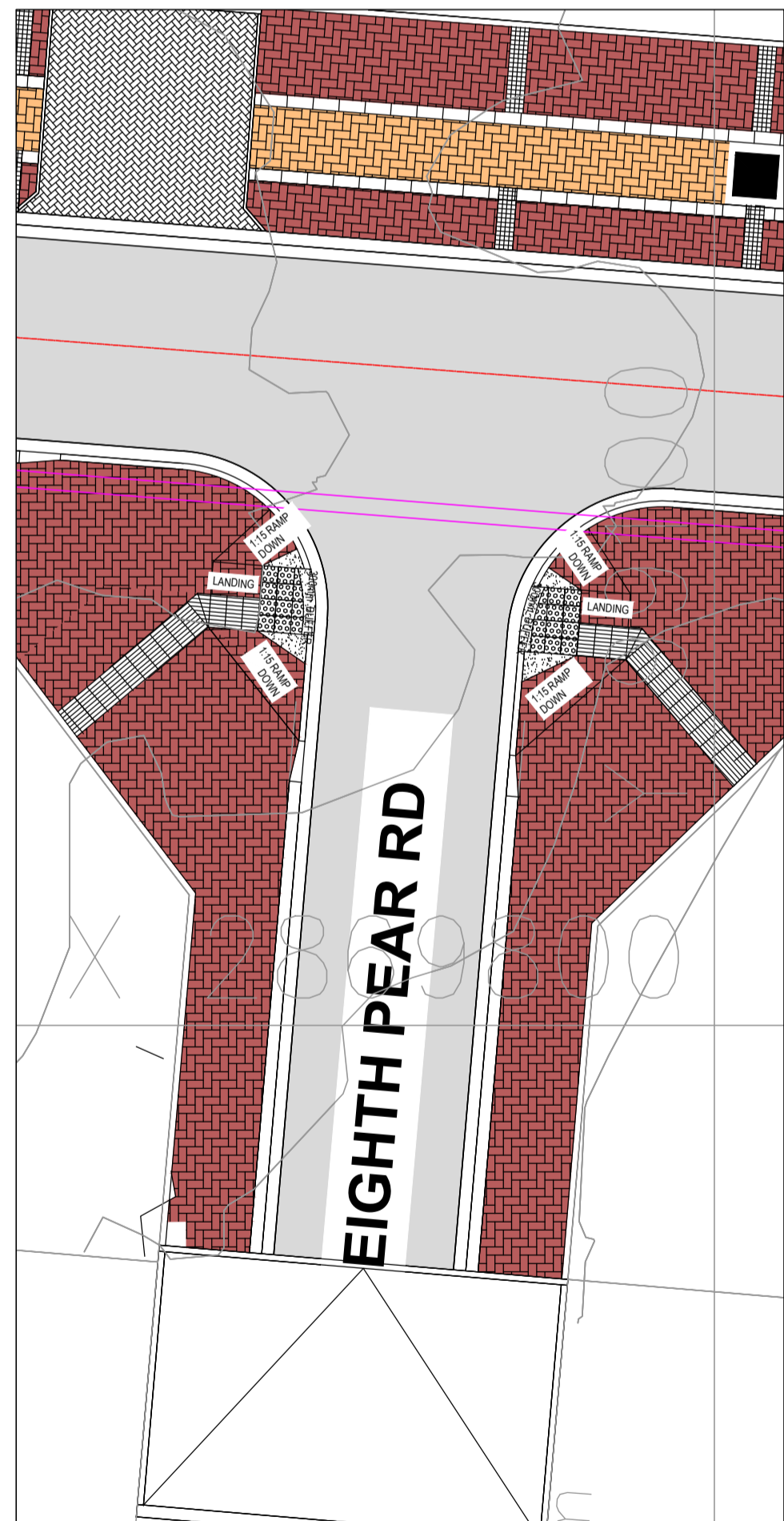
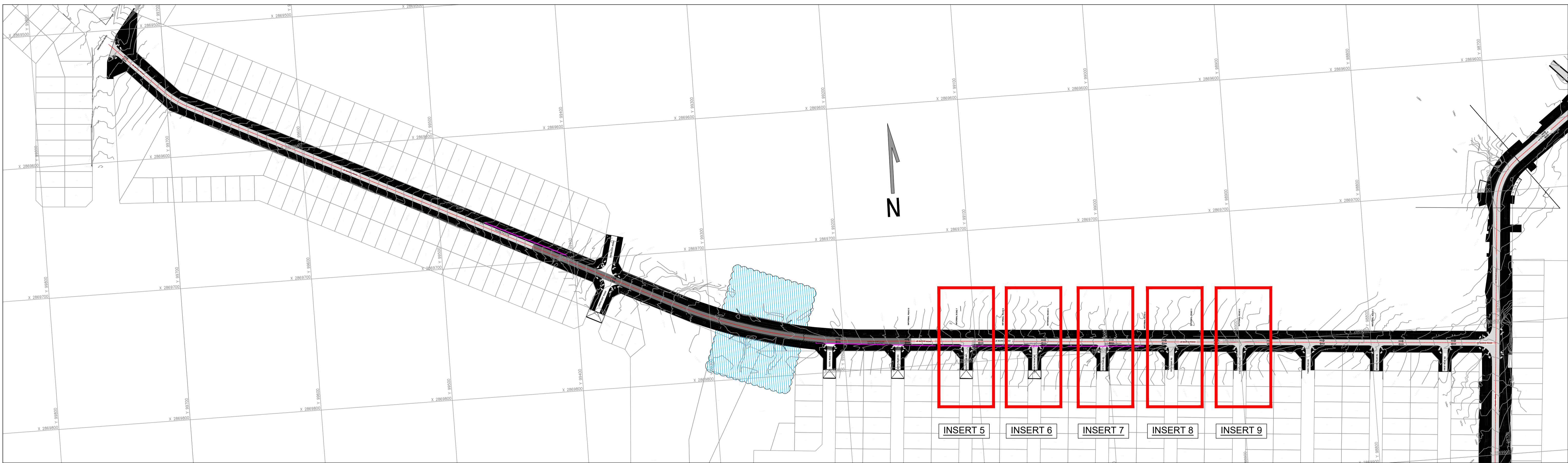
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SCALE 1:150



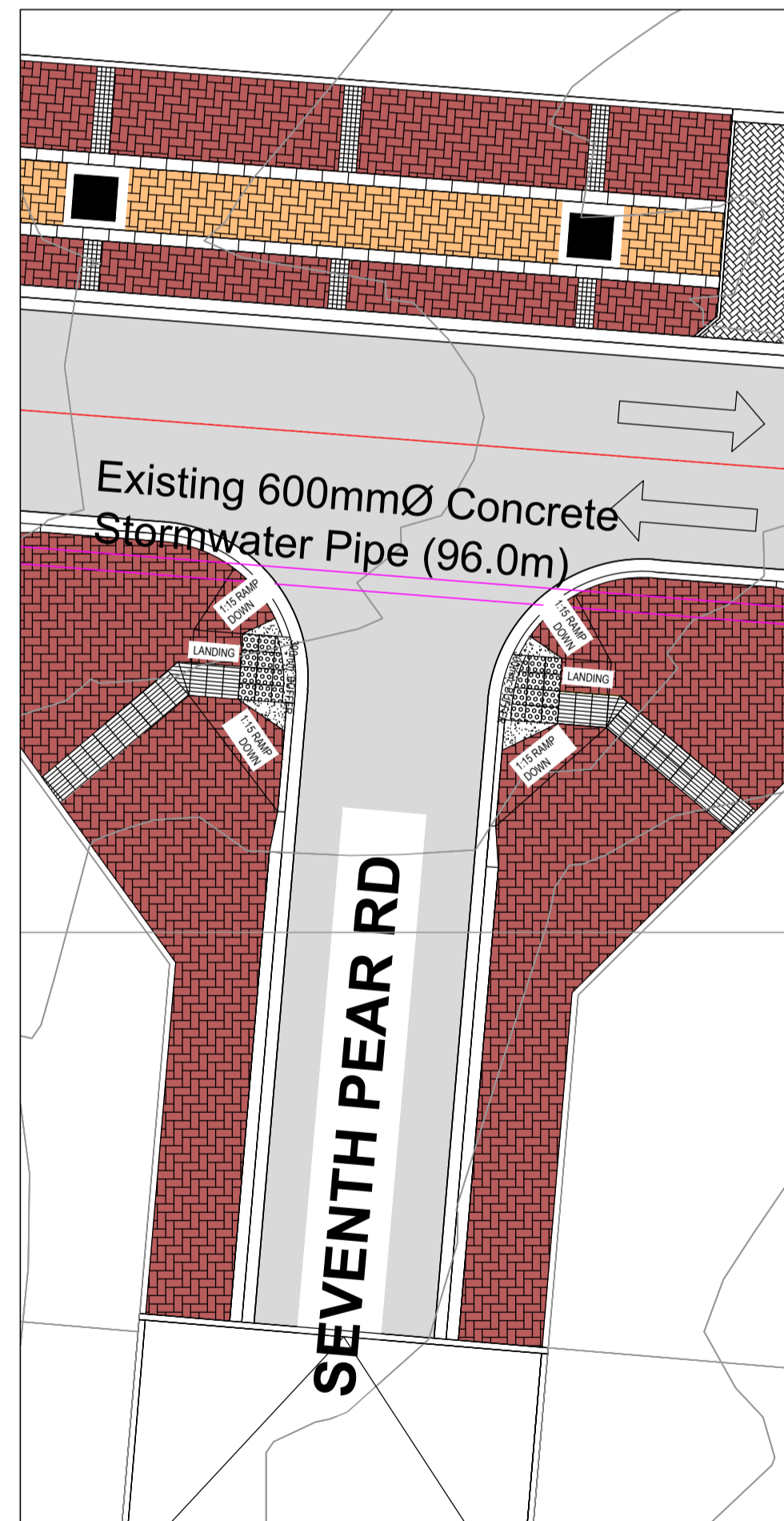
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SCALE 1:150

FOR TENDER

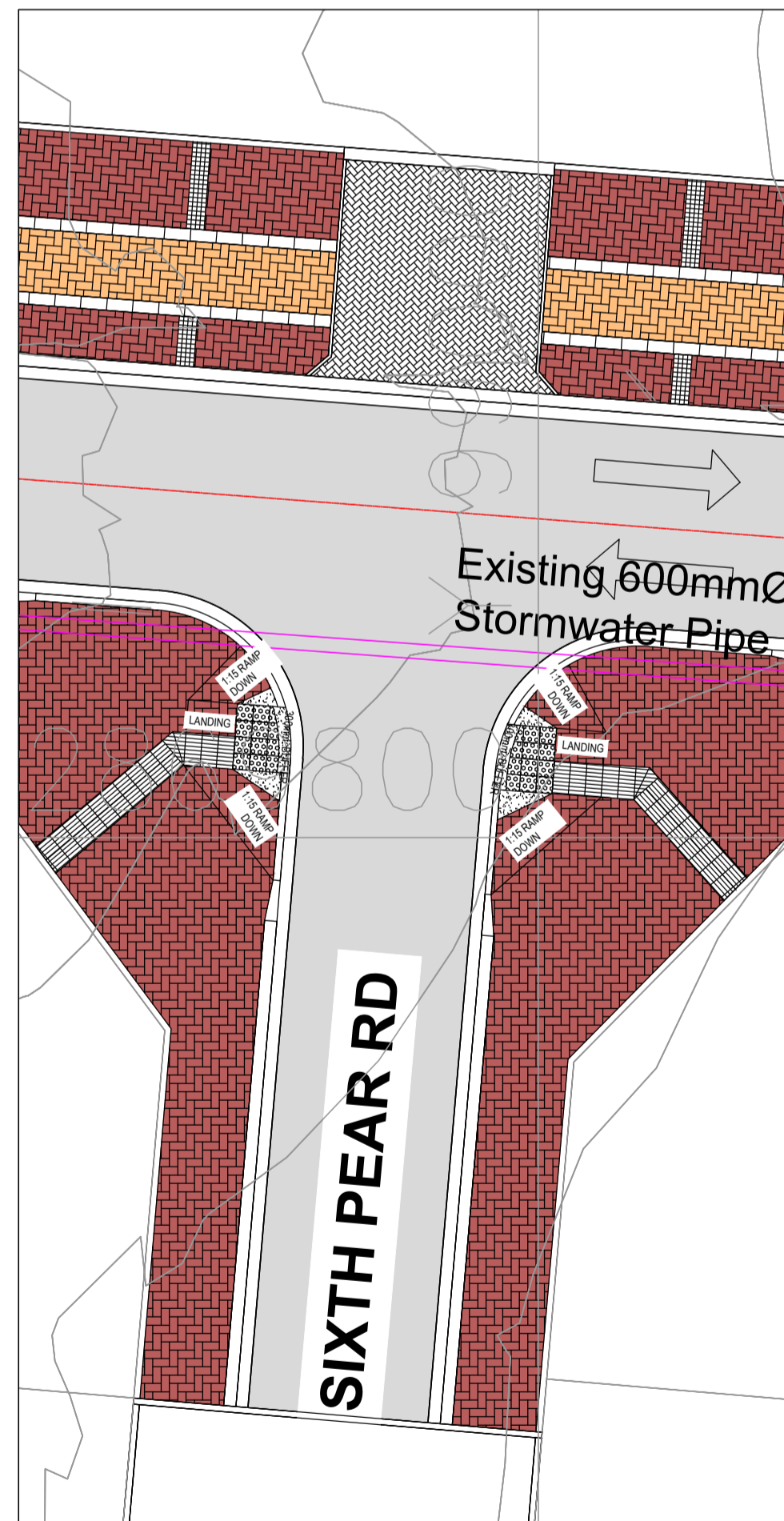
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DRAWING APPROVAL				DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 61877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A			
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		for CLIENT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED		REVISION 0	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE		DESIGN CHECKED M. Jantjies		AJA CONSULTING CIVIL ENGINEERS		JDA		DISTRICT JOHANNESBURG		Dwg No 2021-009-TN-RD-010			
		No DATE AMENDMENTS				AJA CONSULTING CIVIL ENGINEERS		DIEPSLOOT DEVELOPMENT PROJECT							
						AJA CONSULTING CIVIL ENGINEERS		JB MARKS UNIVERSAL ACCESS LAYOUT SHEET 1 OF 3							



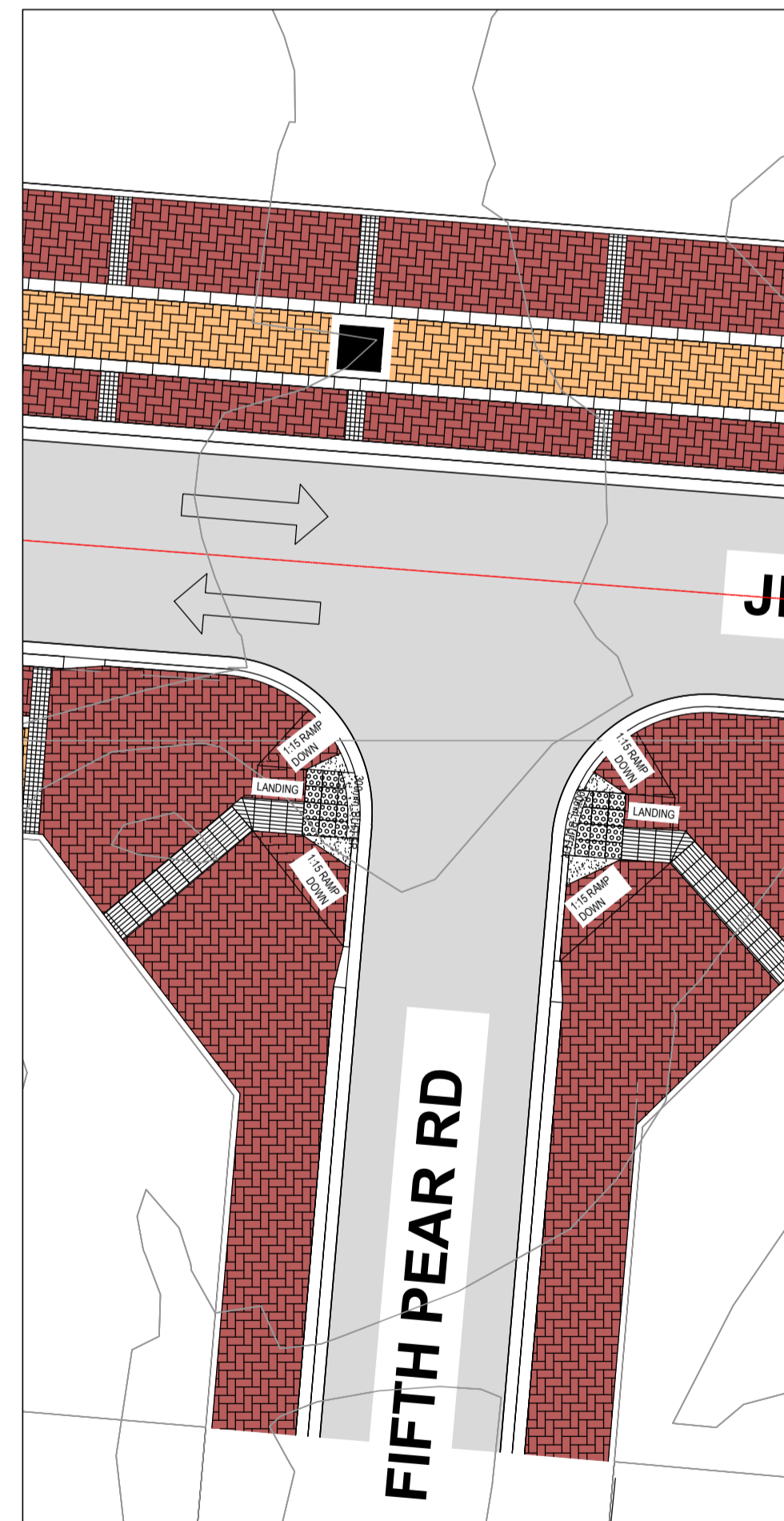
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SCALE 1:150



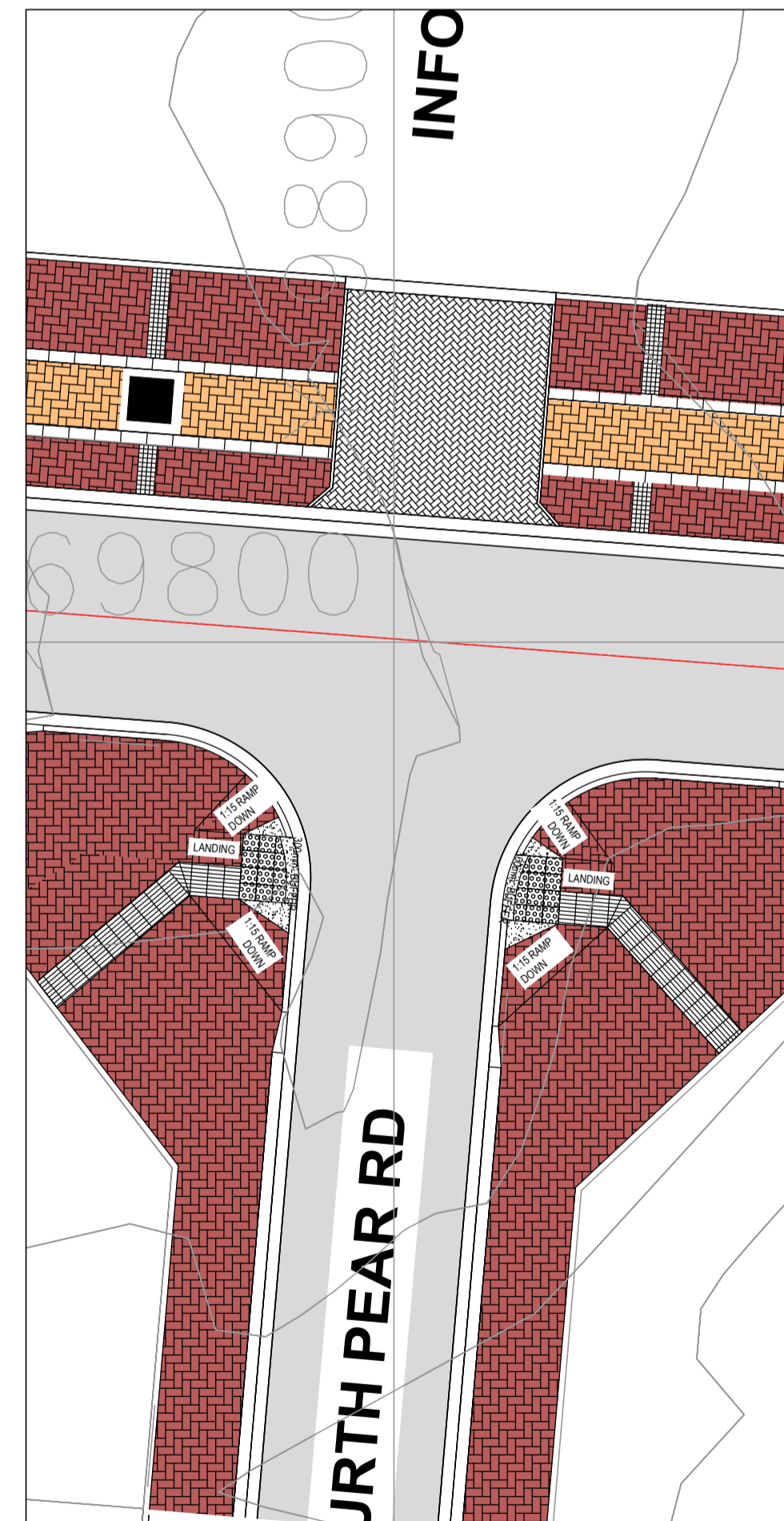
UNIVERSAL ACCESS LAYOUT
INSERT 6
SCALE 1:150



UNIVERSAL ACCESS LAYOUT
INSERT 7
SCALE 1:150



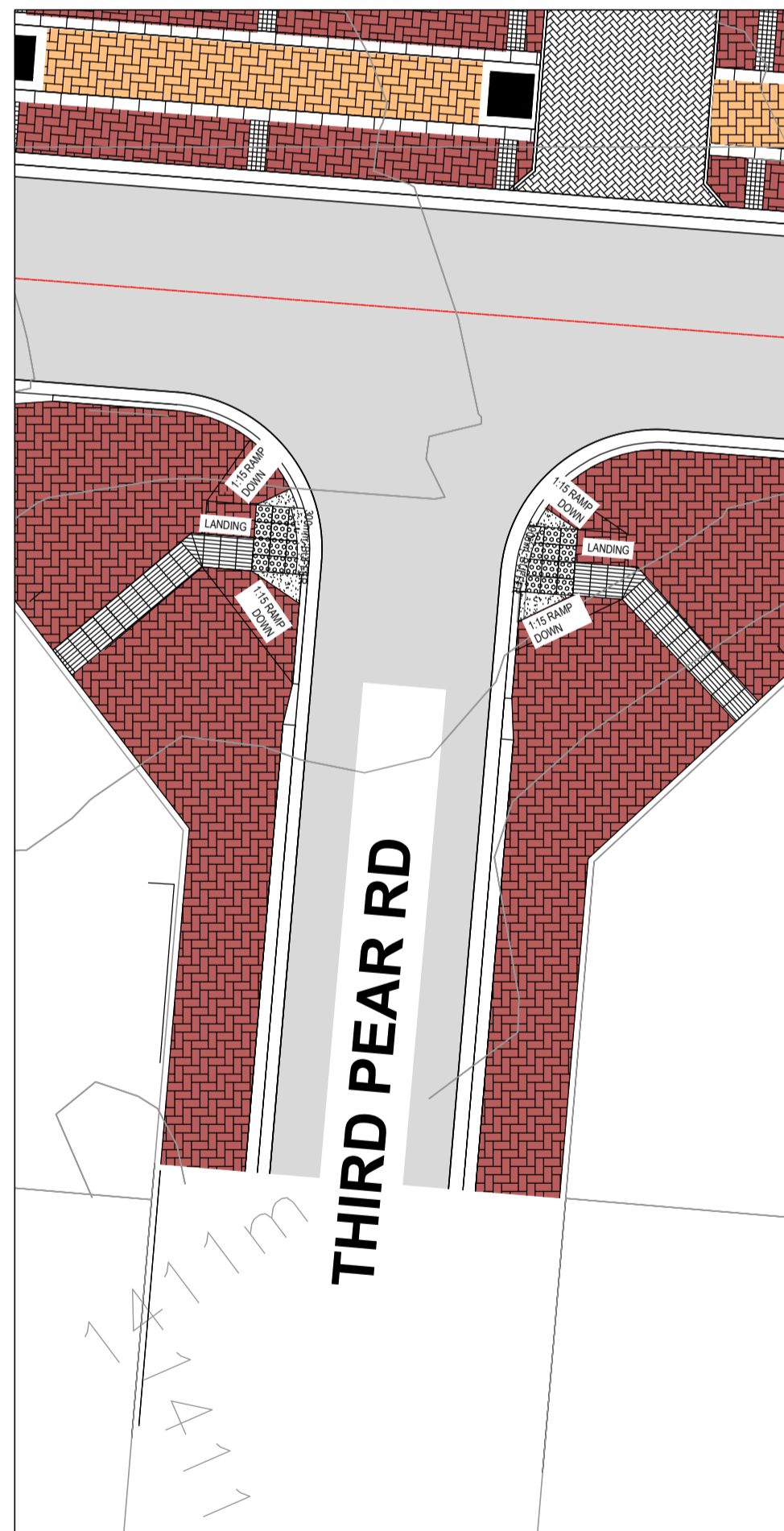
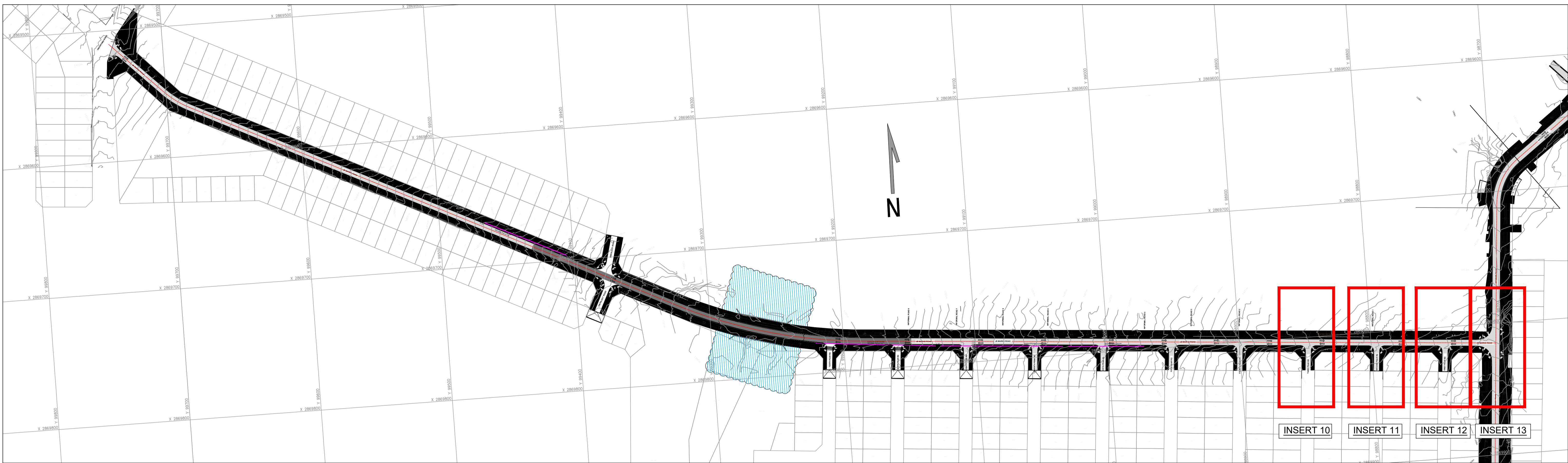
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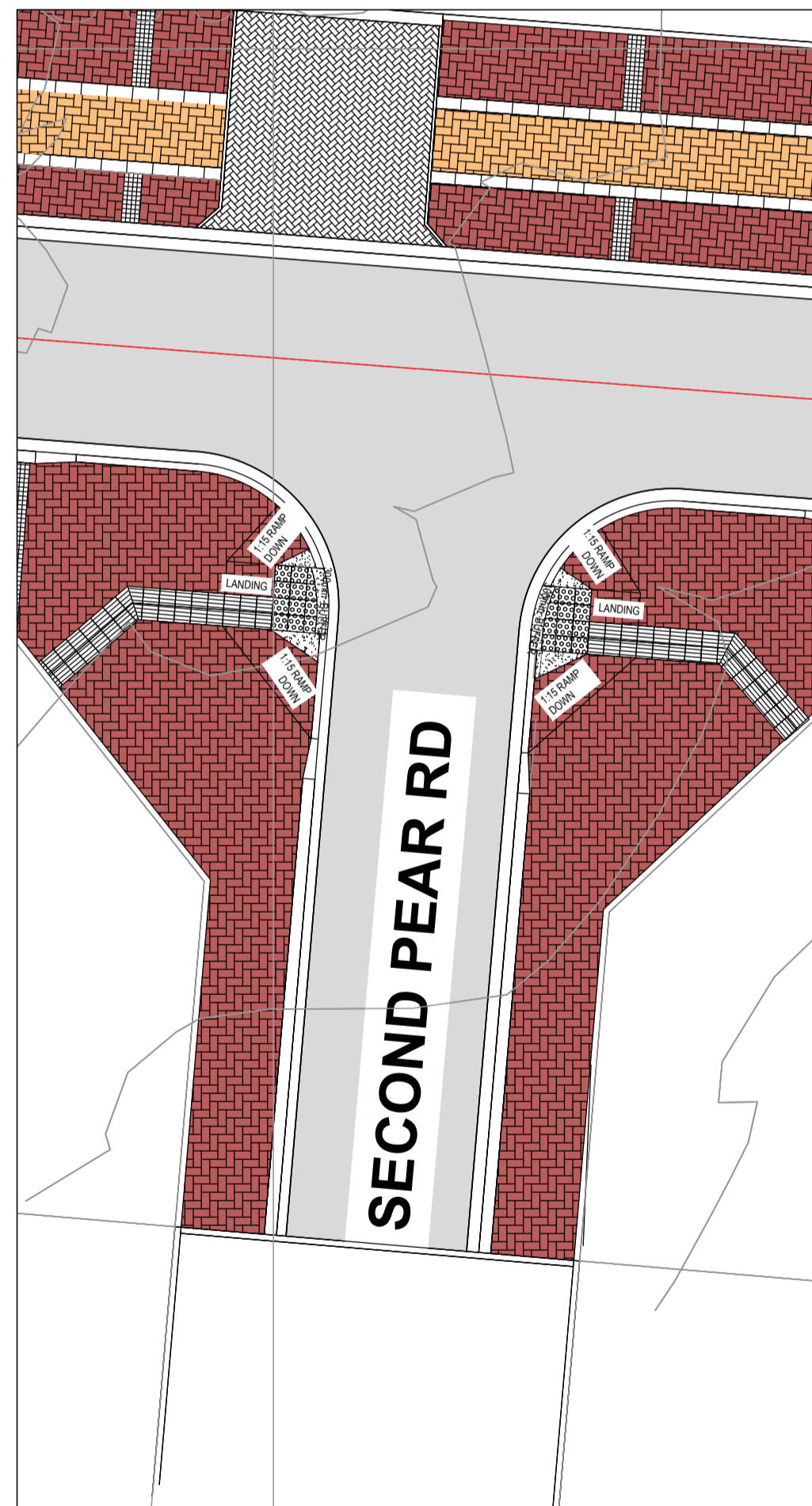
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INSERT 9
SCALE 1:150

FOR TENDER

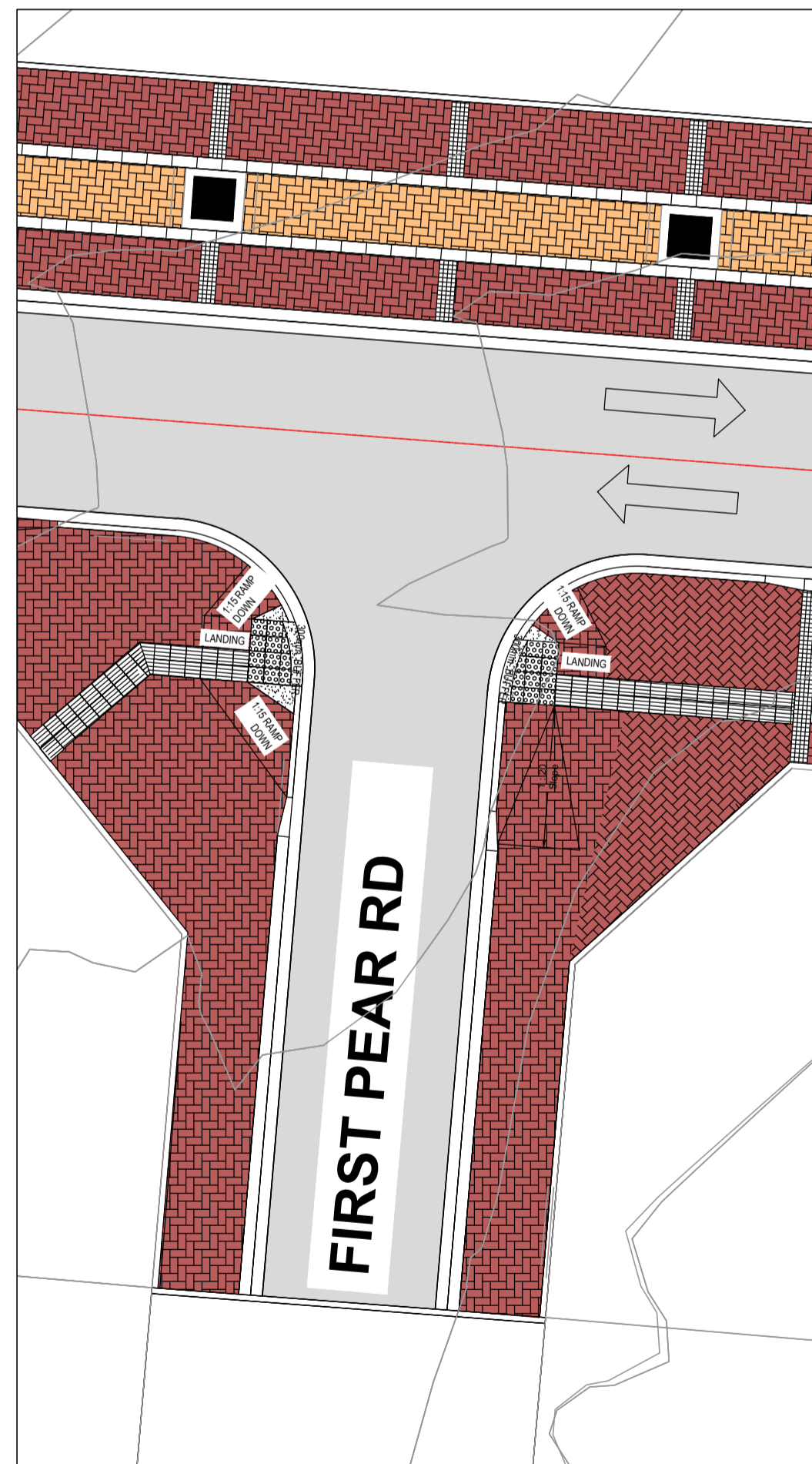
DRAWING TYPE TENDER DRAWINGS				DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		DIEPSLOOT DEVELOPMENT PROJECT		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL				DRAWING CHECKED S. Mathabula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		JB MARKS UNIVERSAL ACCESS LAYOUT SHEET 2 OF 3		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		for CLIENT (NAME AND SIGNATURE)		DESIGNED BY S. Mathabula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za				ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE: _____		DESIGN CHECKED M. Jantjies								DISTRICT JOHANNESBURG		REVISION 0	
		0 02/02/2024 ISSUED FOR TENDER												Dwg No 2021-009-TN-RD-011	
		No DATE AMENDMENTS													



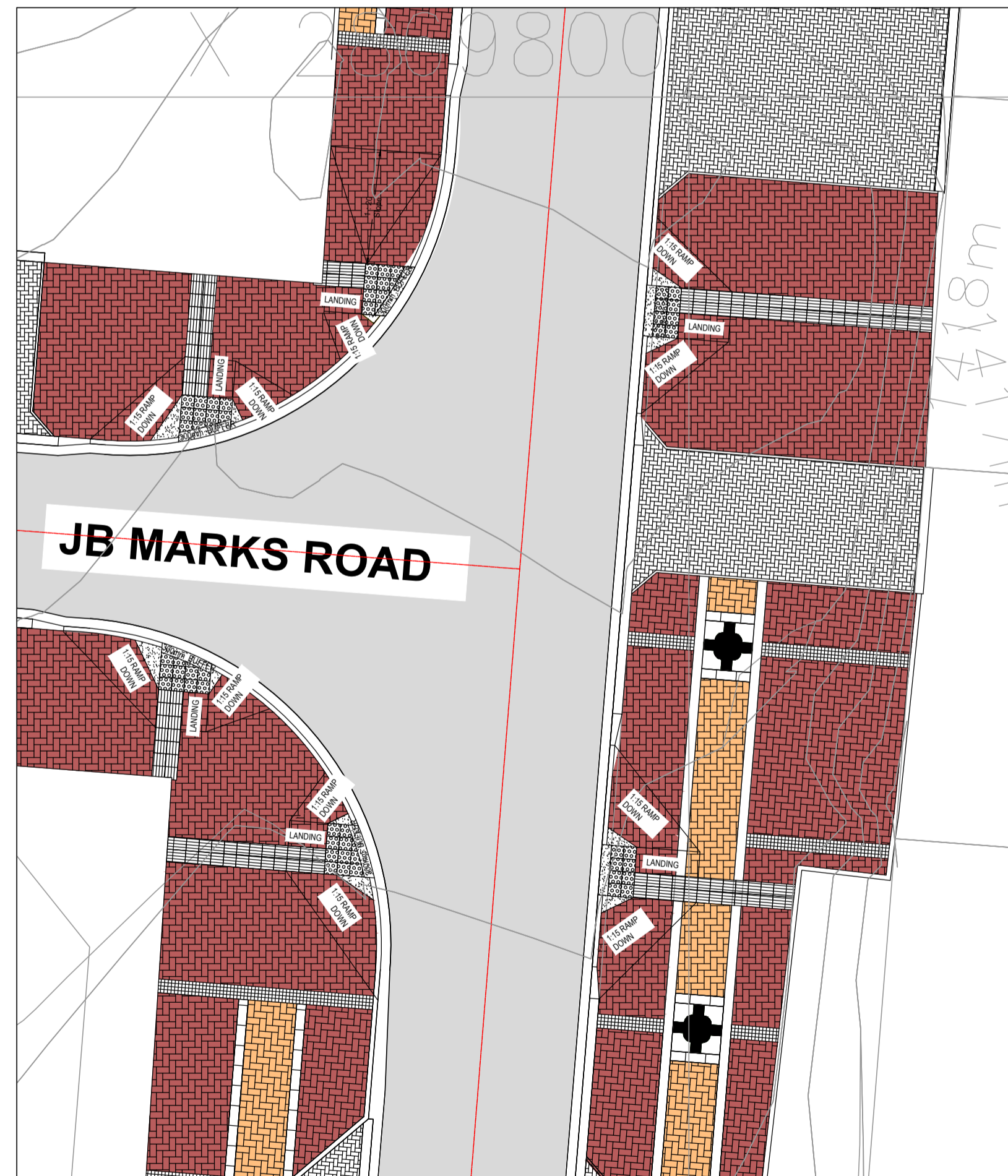
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INSERT 10
SCALE 1:150



UNIVERSAL ACCESS LAYOUT
INSERT 11
SCALE 1:150



UNIVERSAL ACCESS LAYOUT
INSERT 12
SCALE 1:150



UNIVERSAL ACCESS LAYOUT
INSERT 13
SCALE 1:150

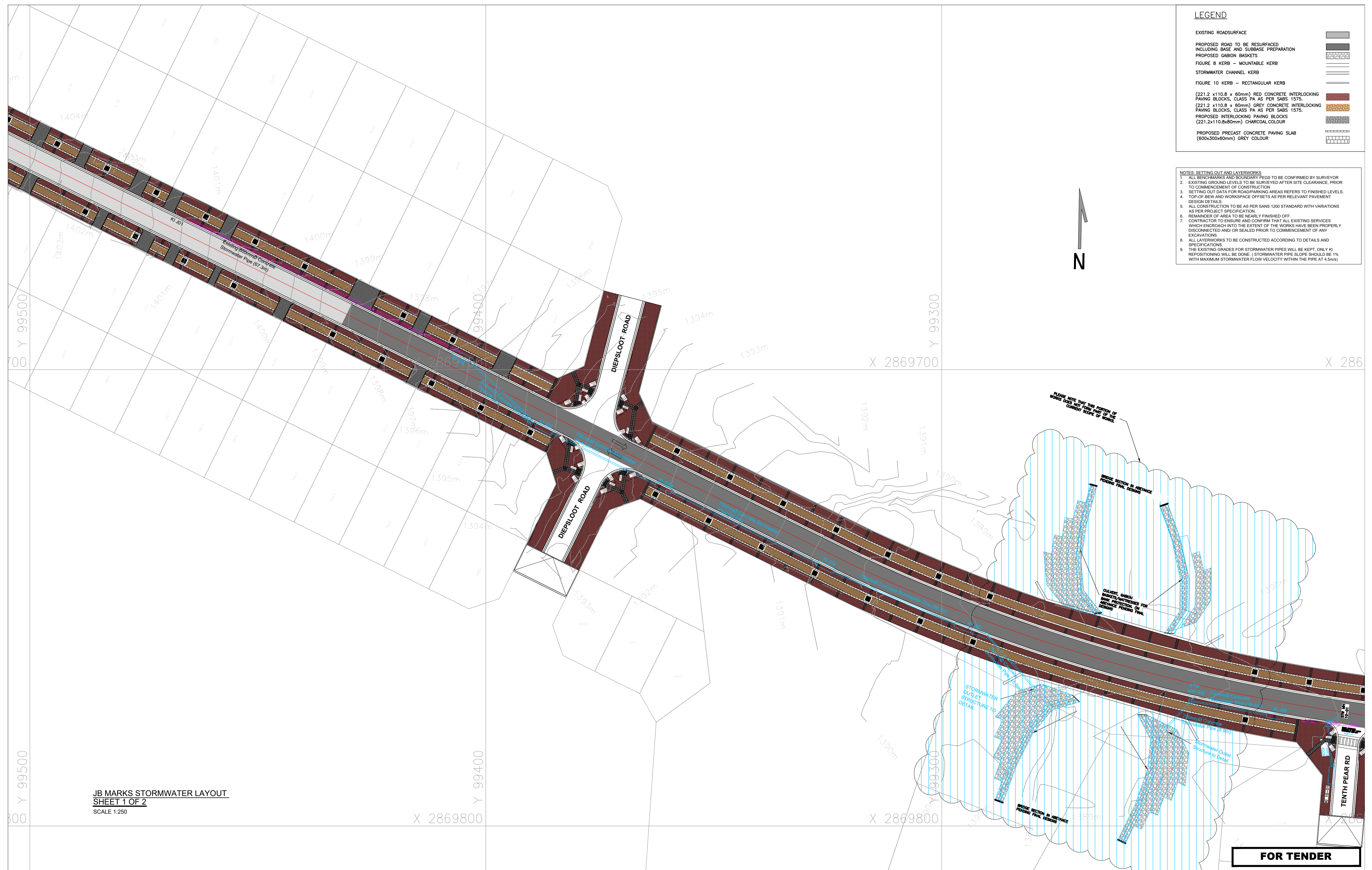
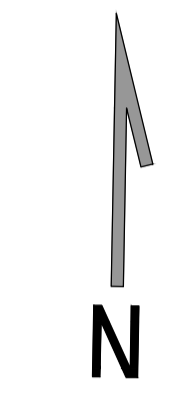
FOR TENDER

DRAWING TYPE TENDER DRAWINGS				DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL				DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJES for CONSULTANT (NAME AND SIGNATURE)		for CLIENT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE		DESIGN CHECKED M. Jantjies		AJA CONSULTING CIVIL ENGINEERS		JDA JOHANNESBURG DEVELOPMENT AGENCY		DISTRICT JOHANNESBURG		REVISION 0	
0 02/02/2024 ISSUED FOR TENDER		No DATE AMENDMENTS				DIEPSLOOT DEVELOPMENT PROJECT		JB MARKS UNIVERSAL ACCESS LAYOUT SHEET 3 OF 3		2021-009-TN-RD-012		Dwg No	

LEGEND

EXISTING ROADSURFACE	
PROPOSED ROAD TO BE RESURFACED INCLUDING BASE AND SUBBASE PREPARATION	
PROPOSED GABION BASKETS	
FIGURE 8 KERB - MOUNTABLE KERB	
STORMWATER CHANNEL KERB	
FIGURE 10 KERB - RECTANGULAR KERB	
(221.2 x 110.8 x 60mm) RED CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
(221.2 x 110.8 x 60mm) GREY CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
PROPOSED INTERLOCKING PAVING BLOCKS (221.2x110.8x60mm) CHARCOAL COLOUR	
PROPOSED PRECAST CONCRETE PAVING SLAB (600x300x60mm) GREY COLOUR	

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 - EXISTING GROUND LEVELS TO BE SURVEYED AFTER SITE CLEARANCE, PRIOR TO COMMENCEMENT OF CONSTRUCTION
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JB MARKS STORMWATER LAYOUT
SHEET 1 OF 2
 SCALE 1:250

FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		DATE: 02/02/2024		DISTRICT JOHANNESBURG		REVISION 0	
No		DATE		AMENDMENTS		DATE		Dwg No		2021-009-TN-SW-001	



LEGEND

EXISTING ROADSURFACE	
PROPOSED ROAD TO BE RESURFACED INCLUDING BASE AND SUBBASE PREPARATION	
PROPOSED GABION BASKETS	
FIGURE 8 KERB - MOUNTABLE KERB	
STORMWATER CHANNEL KERB	
FIGURE 10 KERB - RECTANGULAR KERB	
(221.2 x 110.8 x 60mm) RED CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
(221.2 x 110.8 x 60mm) GREY CONCRETE INTERLOCKING PAVING BLOCKS, CLASS PA AS PER SABS 1575.	
PROPOSED INTERLOCKING PAVING BLOCKS (221.2x110.8x60mm) CHARCOAL COLOUR	
PROPOSED PRECAST CONCRETE PAVING SLAB (600x300x60mm) GREY COLOUR	

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 3. SETTING OUT DATA FOR ROAD/PARKING AREAS REFERS TO FINISHED LEVELS.
 4. TOP-OF-BEW AND WORKSPACE OFFSETS AS PER RELEVANT PAVEMENT DESIGN DETAILS
 5. ALL CONSTRUCTION TO BE AS PER SANS 1200 STANDARD WITH VARIATIONS AS PER PROJECT SPECIFICATION
 6. REMAINDER OF AREA TO BE NEARLY FINISHED OFF.
 7. CONTRACTOR TO ENSURE AND CONFIRM THAT ALL EXISTING SERVICES WHICH ENDOUR INTO THE EXTENT OF THE WORKS HAVE BEEN PROPERLY DISCONNECTED AND/OR SEALED PRIOR TO COMMENCEMENT OF ANY EXCAVATIONS.
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 9. THE EXISTING GRADES FOR STORMWATER PIPES WILL BE KEPT, ONLY KI REPOSITIONING WILL BE DONE. (STORMWATER PIPE SLOPE SHOULD BE 1% WITH MAXIMUM STORMWATER FLOW VELOCITY WITHIN THE PIPE AT 4.5m/s)

JB MARKS STORMWATER LAYOUT
SHEET 2 OF 2
 SCALE 1:250

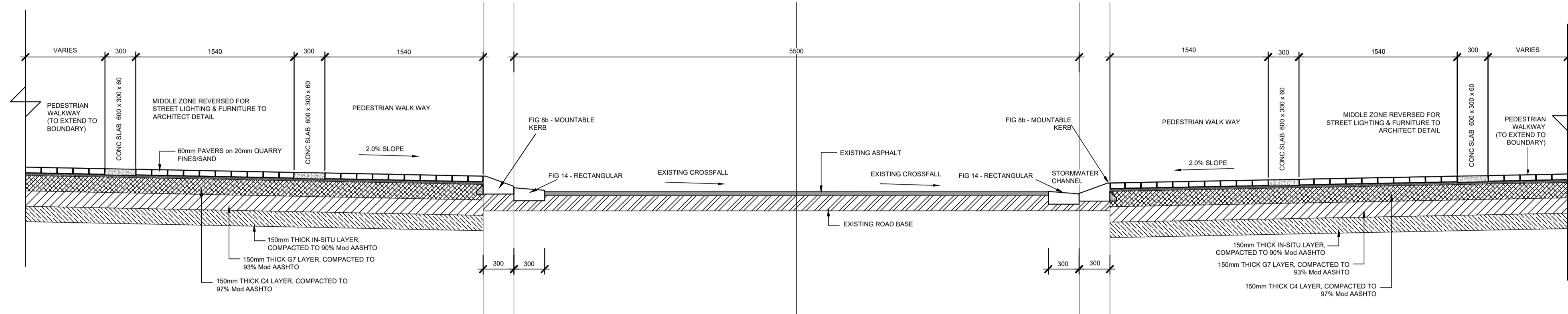
FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S Mathebula		P O Box 2890 FAERIE GLEN 0043		P O Box 61877 MARSHALLTOWN 2011		AGREEMENT No -		CONTRACT No N/A	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr No: 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		JB MARKS STORMWATER LAYOUT SHEET 2 OF 2		DISTRICT JOHANNESBURG		REVISION 0	
No		DATE		AMENDMENTS				Dwg No		2021-009-TN-SW-002	

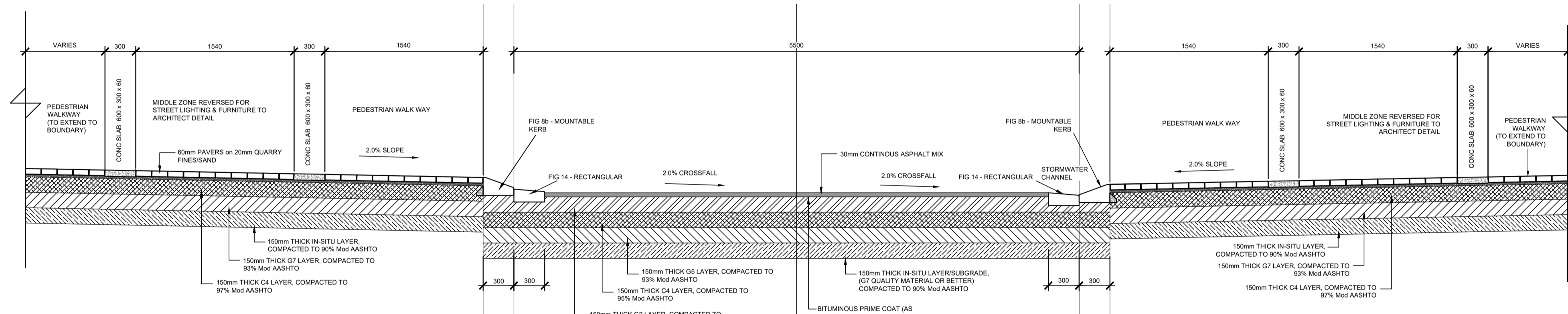
GENERAL NOTES:

1. WORK TO FIGURED DIMENSIONS ONLY.
2. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE EXECUTING ANY WORKS.
3. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERING AND ARCHITECTURAL DRAWINGS.
4. TYPICAL SECTIONS EXCLUDE BELLMOUTH AREAS AND ACCESSSES TO PRIVATE PROPERTIES.
5. REFER TO "UNIVERSAL ACCESSES" DRAWINGS FOR INTERSECTION DETAILS.
6. ALL PORTIONS TO BE RESURFACED INCLUDE BELLMOUTHS AT ALL ROAD INTERSECTIONS.
7. EXISTING SERVICES TO BE PROTECTED AND RETAINED (EXCEPT WHERE NEW STORMWATER SERVICES ARE PROPOSED).
8. ALL EXISTING STORMWATER DRAINS TO BE CLEANED AND / OR DE-SILT.

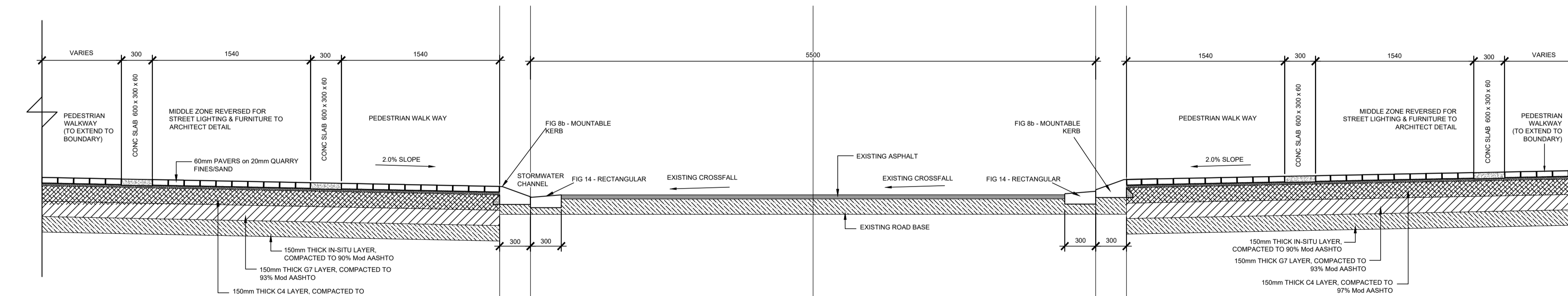
ALL SECTIONS ASSUME THAT ONE IS FACING IN THE DIRECTION OF RISING CHAINAGES



TYPICAL CROSS SECTION JB MARKS 03
CH 0+660 km TO CH 1+088 km



TYPICAL CROSS SECTION JB MARKS 02
CH 0+0360 km TO CH 0+526 km & CH 0+566 km TO CH 0+660 km

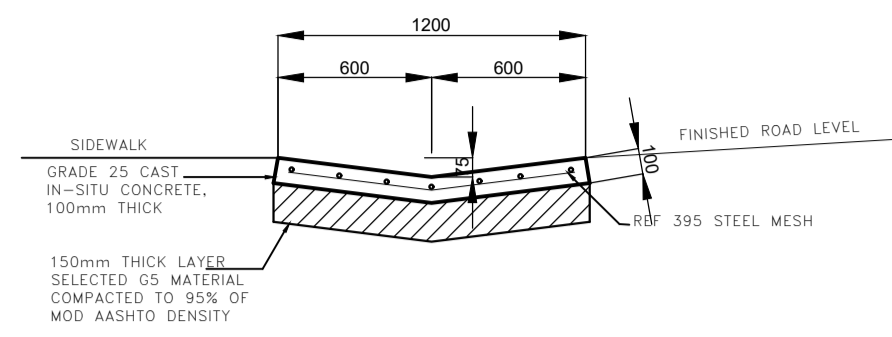


TYPICAL CROSS SECTION JB MARKS 01
CH 0+012 km TO CH 0+360 km

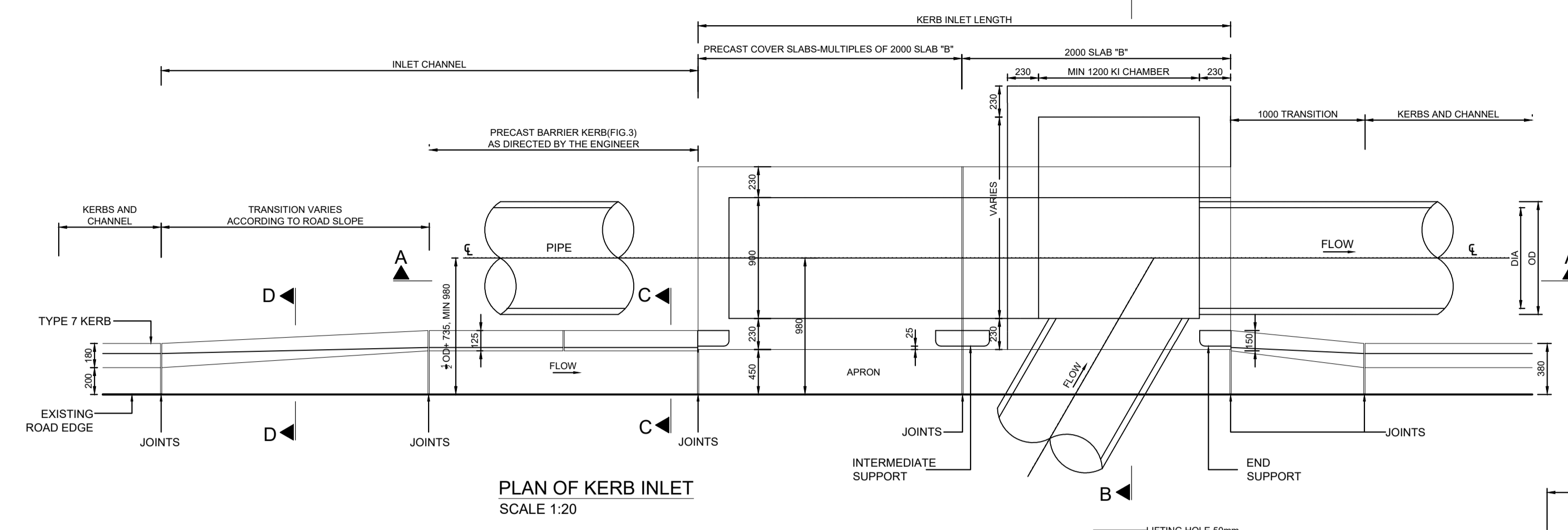
FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 61877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No -	
DESIGNED BY M. Jantjies		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024		DATE: 02/02/2024		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		DISTRICT JOHANNESBURG		REVISION 0	
ECSA P: No. 200870199		AMENDMENTS		www.ajacce.co.za		www.jda.org.za		Dwg No		2021-009-TN-TD-001	

DIEPSLOOT DEVELOPMENT PROJECT
TYPICAL CROSS SECTION FOR PEACH STREET AND GATESIDE STREET

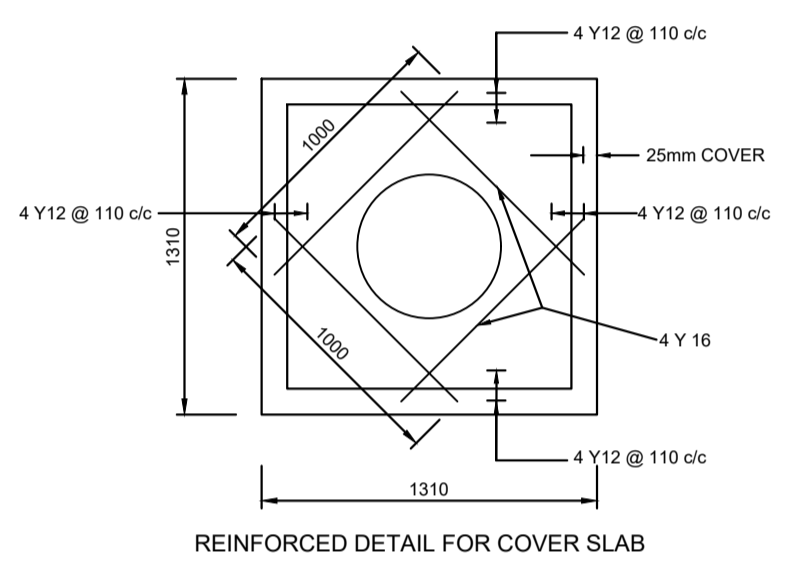


TYPE 1: SMALL SIDE DRAIN ALLOWING ERF ACCESS
SCALE 1:20

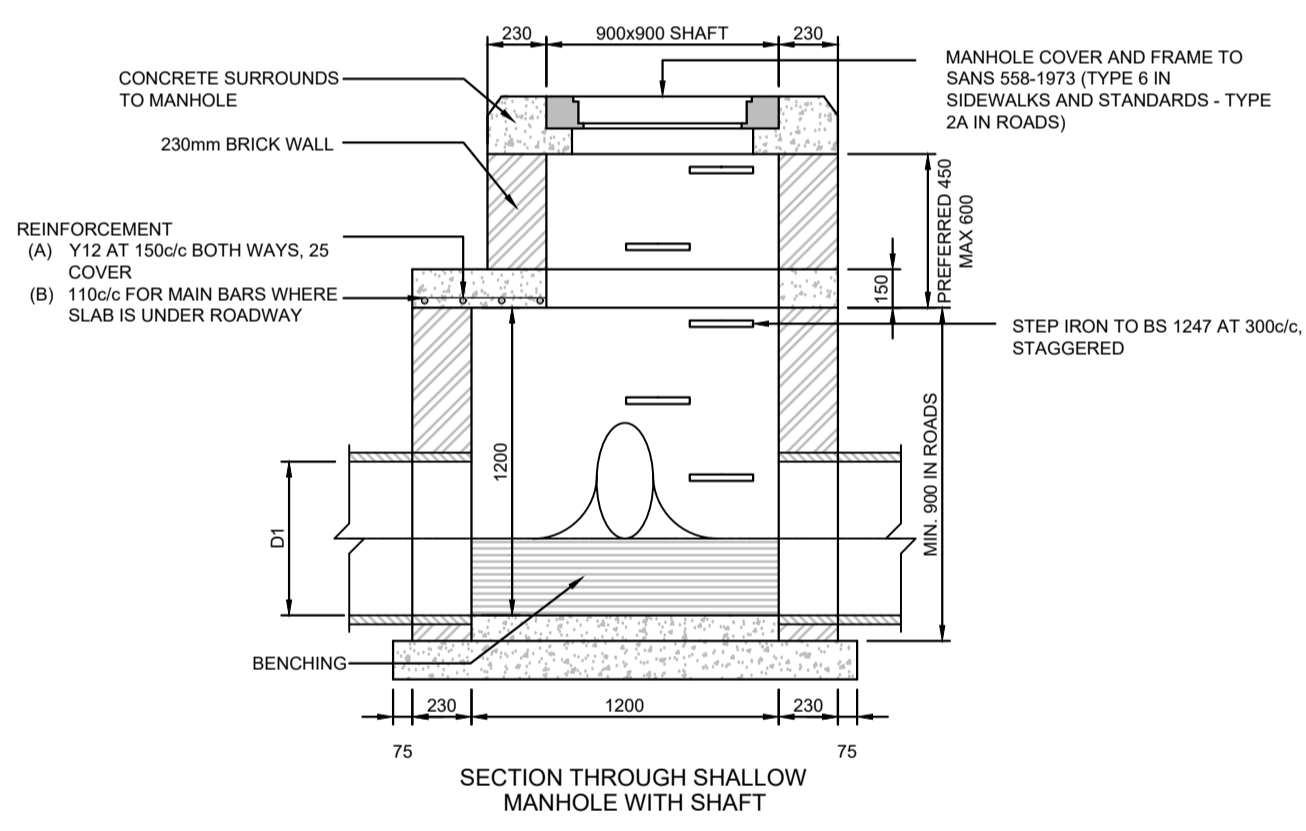


PLAN OF KERB INLET
SCALE 1:20

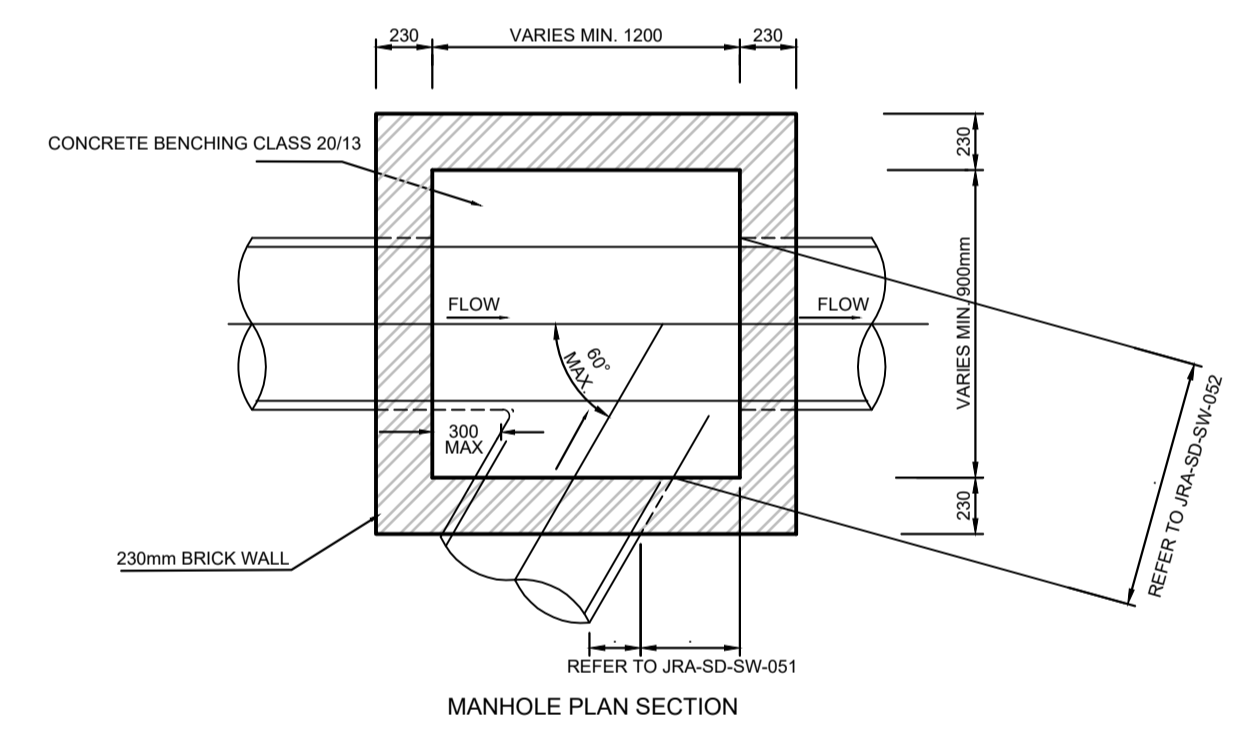
- NOTES:**
- CONCRETE STRENGTH TO BE AS FOLLOWS:
A) MANHOLE SURROUNDS AND BENCHING: CLASS 15/19
B) CAST IN-SITU DECK SLABS & FOUNDATION: CLASS 25/19
C) PRECAST COVER SLABS & OTHER ITEMS: CLASS 25/19
D) CAST IN-SITU KERBS, APRONS ETC.: CLASS 25/19
 - ALL FLOORS AND BENCHING TO BE STEEL TROWELLED WITH A SMOOTH FINISH.
 - ALL BRICKS TO BE FB30 TO SABS 227-1986 WITH WATER ABSORPTION < 14% AND EFFLORESCENCE OF 10.
 - ALL BRICKWORK TO BE IN ENGLISH BOND.
 - MANHOLE & KERB INLET WIDTHS AND DEPTHS:
WIDTH:
750mm PIPES AND LESS = 900mm
825mm PIPES AND MORE = 1200mm
SOME JUNCTION MANHOLE SIZES TO BE DETERMINED ON SITE.
DEPTH:
THE DEPTH INDICATED SHOULD BE INCREASED IF NECESSARY FOR MANHOLES TO PERMIT SUFFICIENT DISCHARGE HEAD TO DEVELOP. MANHOLE DEPTH > 1.75m. WIDTH OF BRICKWORK TO BE INCREASED TO 330mm.
 - KERB INLET - THE APRON OVER THE LENGTH OF THE KERB INLET AND THE TRANSITION TO BE LOWERED BY 25mm.
 - NO BACKFILL TO BE DONE UNTIL MORTAR IS SEVEN DAYS OLD.
 - PROVIDE STEP IRONS WHEN DEPTH > 1.200m
 - PIPES AT INLET AND OUTLET TO BE LAID SOFFIT TO SOFFIT
 - SHOULD THERE BE A CHANGE IN PIPE DIAMETER THE GREATER OF THE TWO SHOULD BE USED TO DETERMINE THE POSITIONING OF THE PIPES.
 - CONTRACTOR TO MAKE GOOD ALL KERB INLET STRUCTURES ALONG ALL THE ROADS
- NOTES AND SPECIFICATIONS**
- GENERAL**
- ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
 - ALL DIMENSIONS ARE IN MILLIMETERS (UNLESS OTHERWISE SPECIFIED)
 - DO NOT SCALE FROM THESE DRAWINGS.
 - ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
 - ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CIVIL DETAIL DRAWINGS.
 - THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS (IF APPLICABLE)
 - THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 'A'.
 - THE SIGNATURE OR INITIALS ON THIS DRAWING OF ANY MANAGER OF THE TRANSPORT AND ROADS DEPARTMENT, IN NO WAY RELIEVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
 - THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF THE TRANSPORT AND ROADS DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
 - FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
 - CONTRACTOR TO MAKE GOOD ALL KERB INLET STRUCTURES ALONG ALL THE ROADS



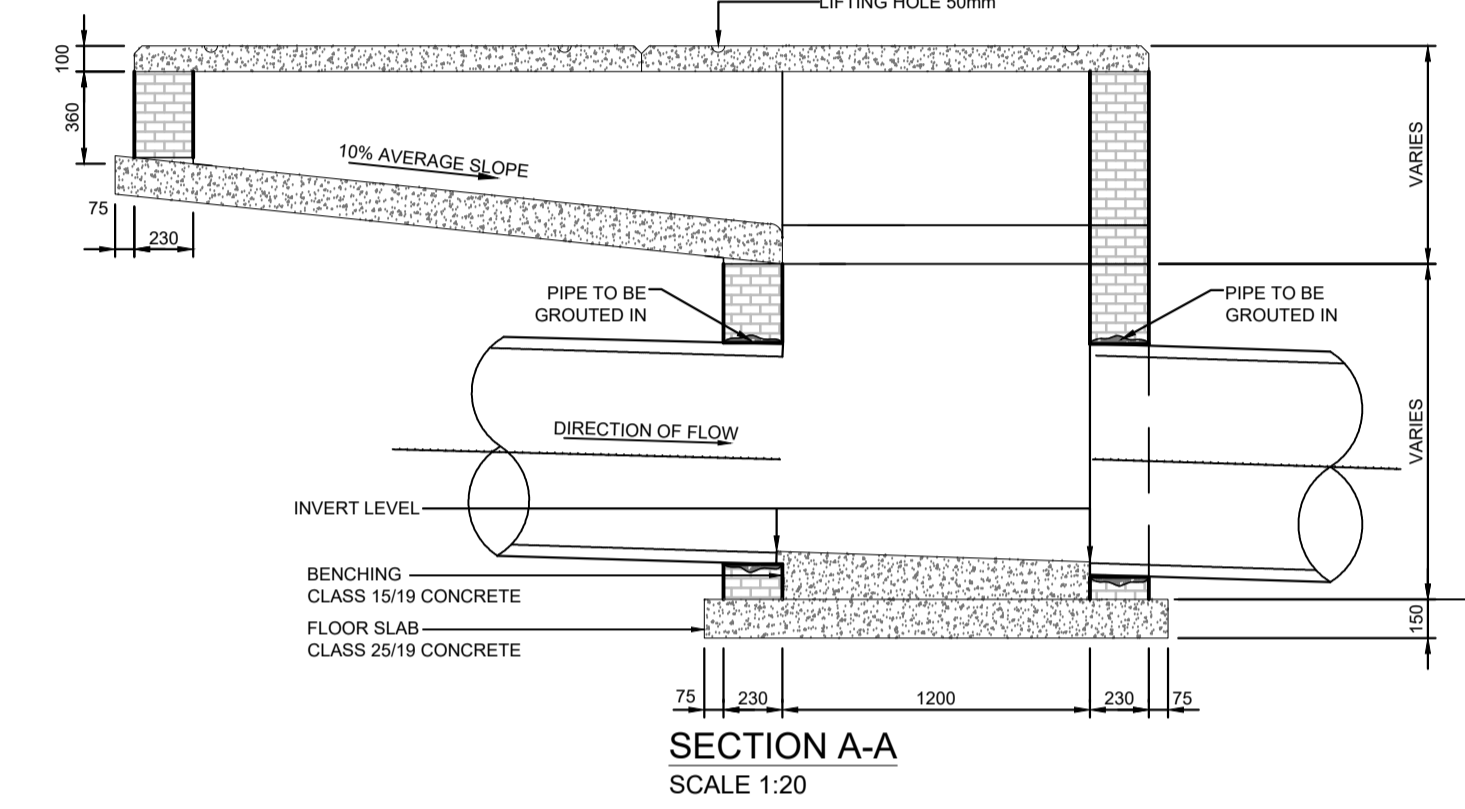
REINFORCED DETAIL FOR COVER SLAB



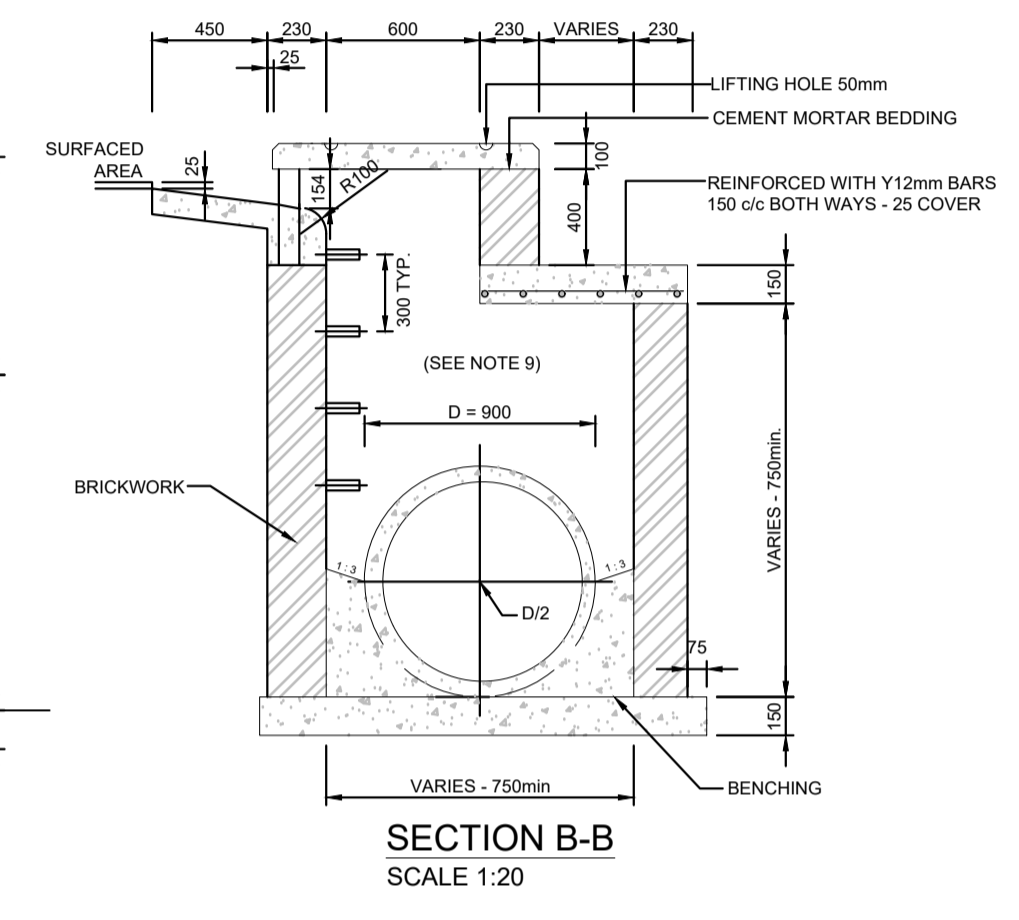
SECTION THROUGH SHALLOW MANHOLE WITH SHAFT



MANHOLE PLAN SECTION



SECTION A-A
SCALE 1:20



SECTION B-B
SCALE 1:20

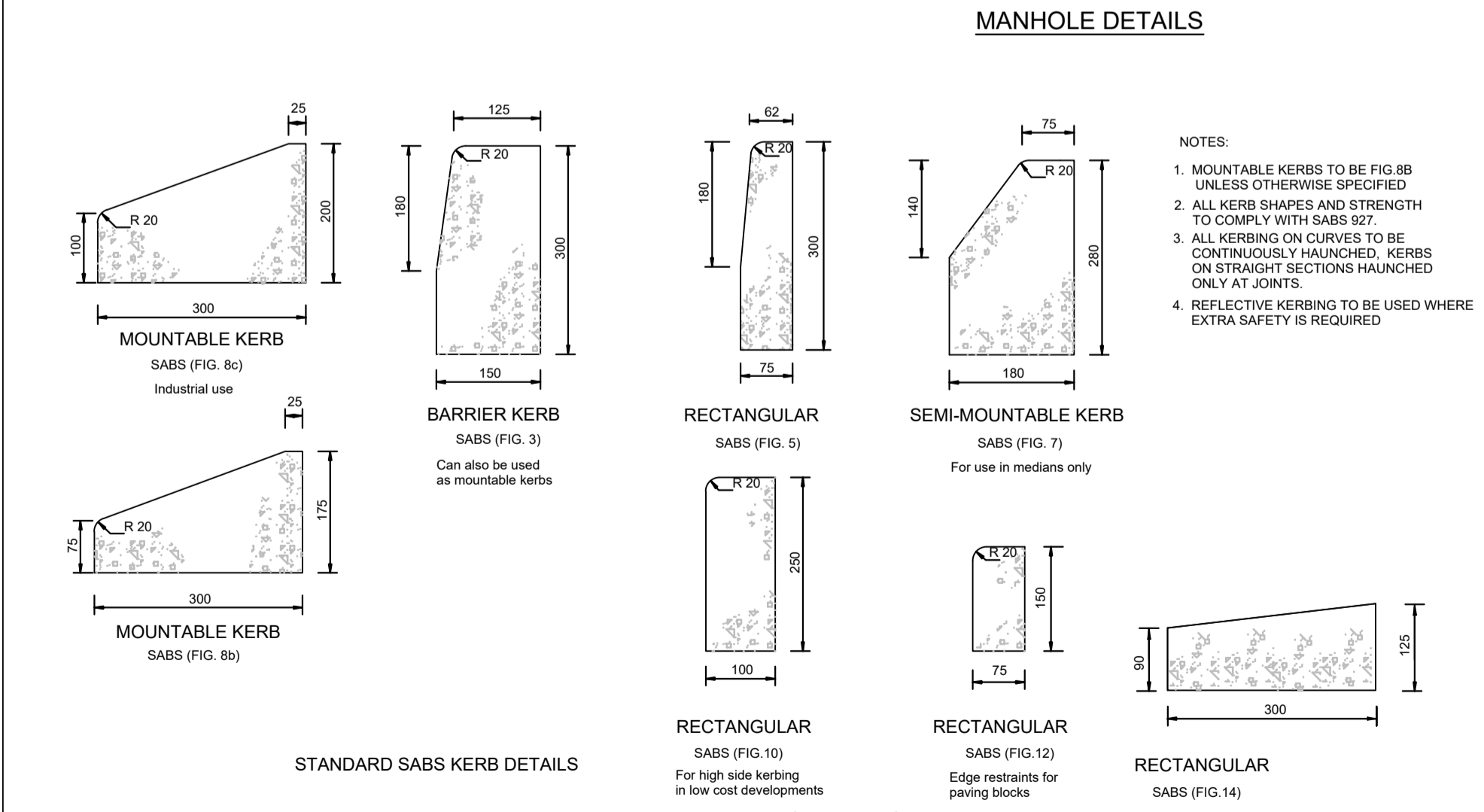
TABLE A: PRECAST COVER SLAB REINFORCEMENT DETAILS

Span (mm)	Thickness (mm)	Main Reinforcement	
		b = 450	b = 600
Up to 500	125	4 Y 12 - 125	5 Y 12 - 125
Up to 1000	150	5 Y 12 - 100	5 Y 12 - 125
Up to 1250	150	4 Y 16 - 125	5 Y 12 - 125
Up to 1500	175	4 Y 16 - 125	5 Y 12 - 125
Up to 1750	175	4 Y 16 - 125	5 Y 12 - 125
Up to 2000	200	4 Y 16 - 125	5 Y 16 - 125
Up to 2250	200	4 Y 16 - 125	5 Y 16 - 125
Up to 2500	200	5 Y 16 - 100	5 Y 16 - 125
Up to 2750	225	5 Y 16 - 100	5 Y 16 - 125
Up to 3000	225	5 Y 16 - 100	6 Y 16 - 125

Distribution reinforcement: Y10 bars @ 125 c/c for all spans

Refer in notes for bending details

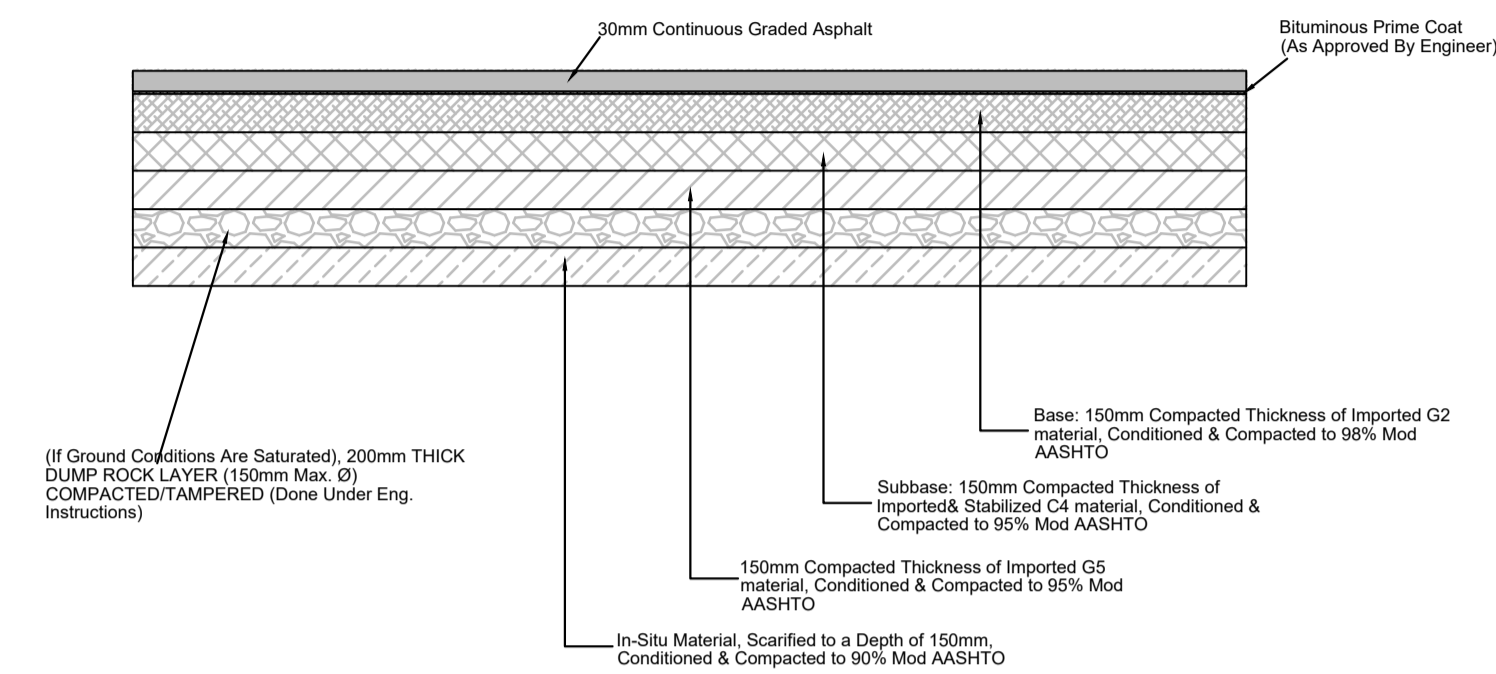
PRECAST COVER SLAB FOR JUNCTION BOXES



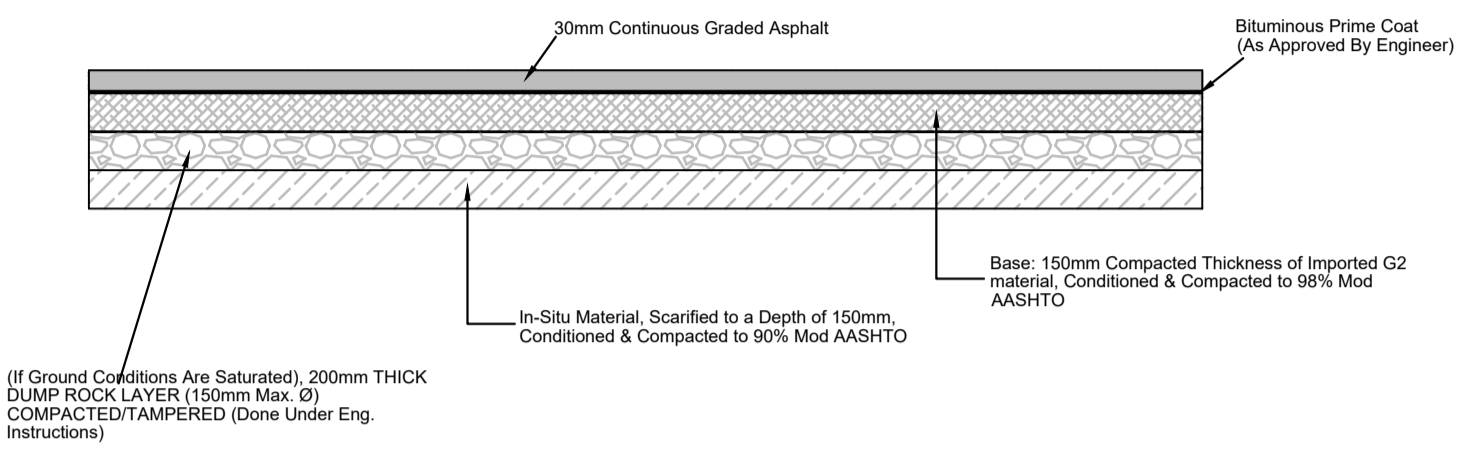
- NOTES:**
- MOUNTABLE KERBS TO BE FIG.8B UNLESS OTHERWISE SPECIFIED
 - ALL KERB SHAPES AND STRENGTH TO COMPLY WITH SABS 927
 - ALL KERBING ON CURVES TO BE CONTINUOUSLY HAUNCHED. KERBS ON STRAIGHT SECTIONS HAUNCHED ONLY AT JOINTS.
 - REFLECTIVE KERBING TO BE USED WHERE EXTRA SAFETY IS REQUIRED

FOR TENDER

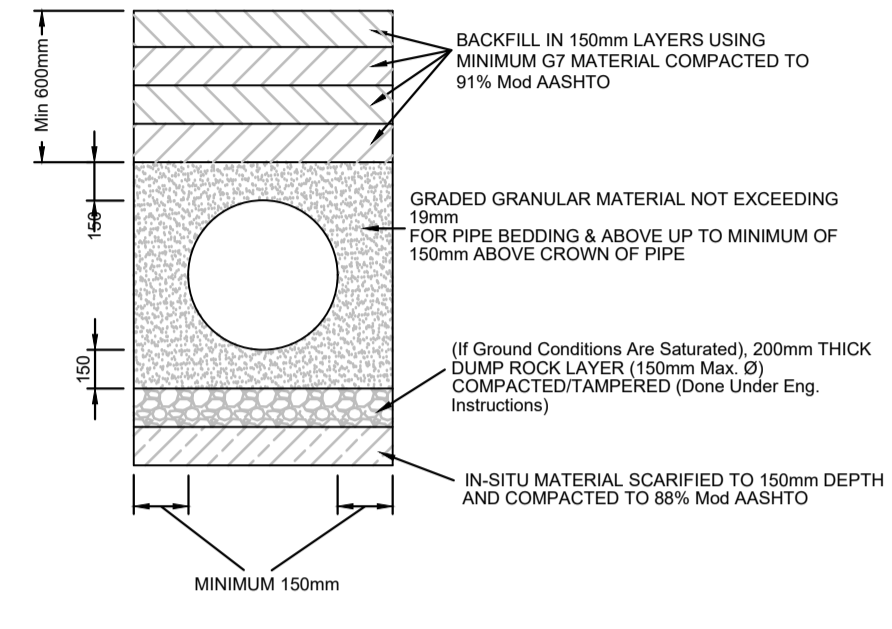
DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathabula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALL TOWN 2001		AGREEMENT No -		CONTRACT No -	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathabula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DESIGN CHECKED M. Jantjies		TENDER NO. 0		TENDER DATE 02/02/2024		DISTRICT JOHANNESBURG		REVISION 0	
DATE		DATE		AMENDMENTS		PROJECT NAME TYPICAL ROAD AND STORMWATER DETAILS 01		Dwg No 2021-009-TN-TD-002			



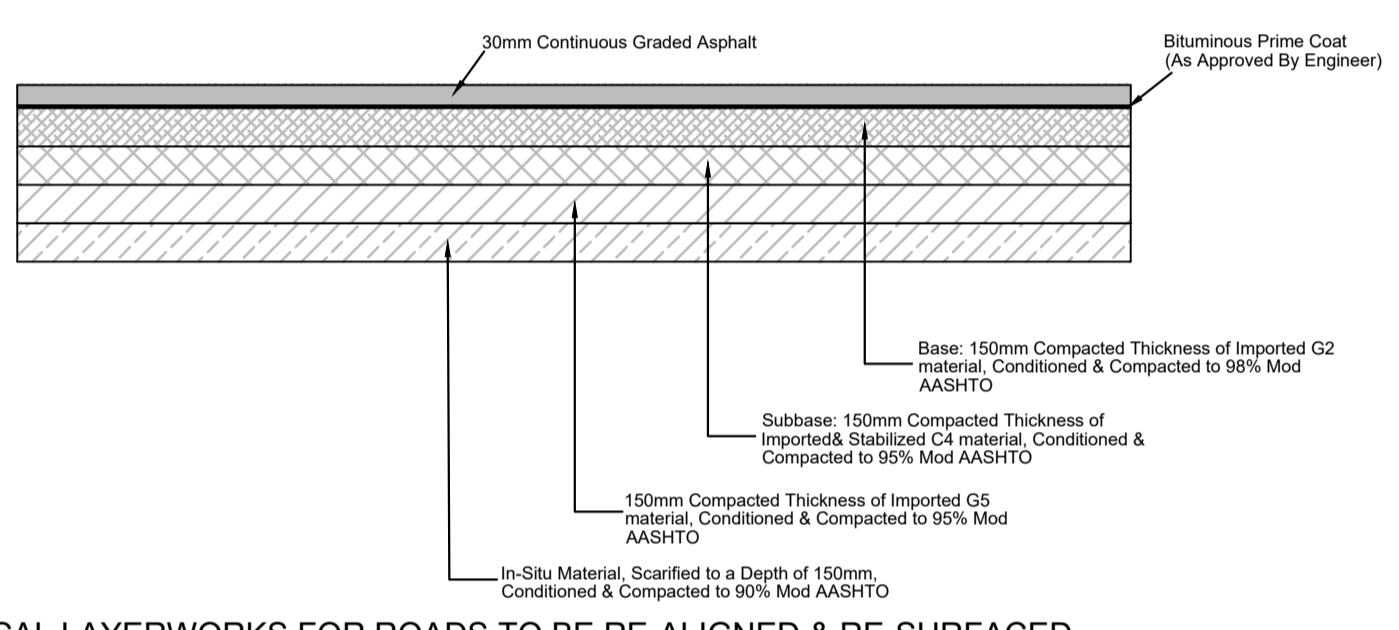
TYPICAL LAYERWORKS FOR ROADS TO BE RE-ALIGNED & RE-SURFACED FOR SATURATED CONDITIONS ONLY
Scale 1:20



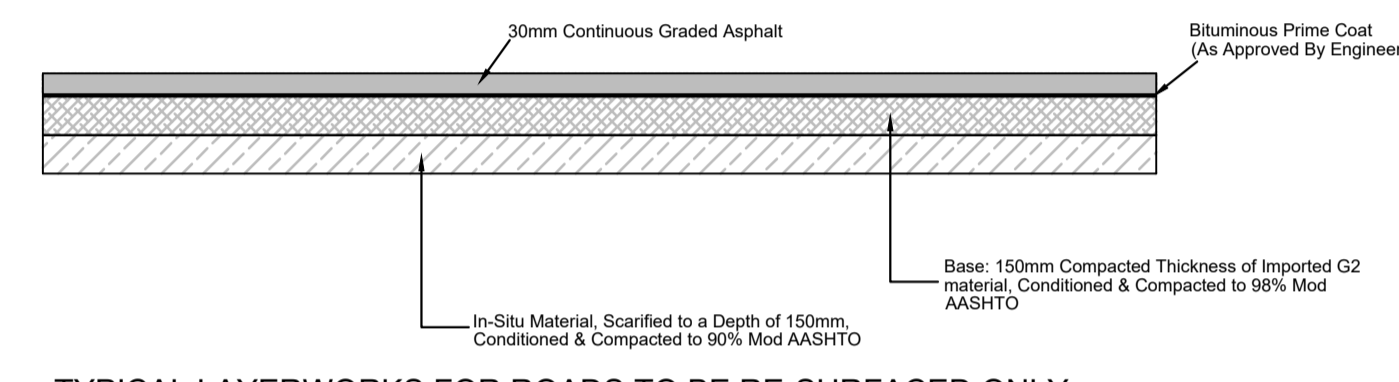
TYPICAL LAYERWORKS FOR ROADS TO BE RE-SURFACED ONLY FOR SATURATED CONDITIONS ONLY
Scale 1:20



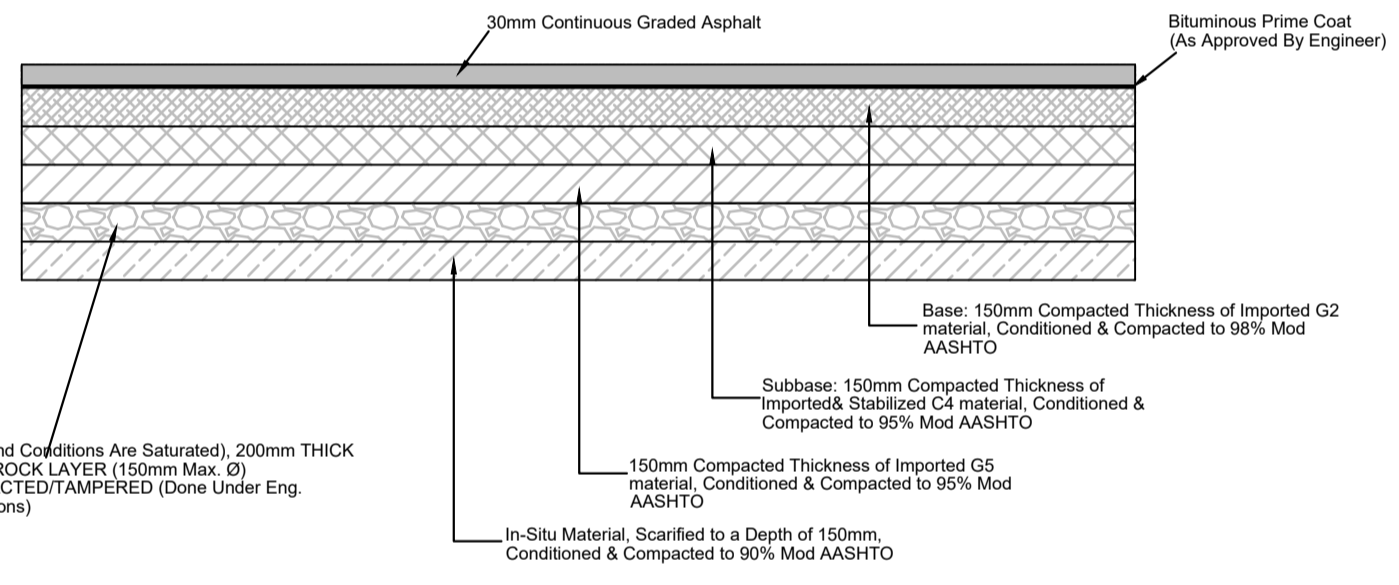
TYPICAL PIPE BEDDING DETAILS
SCALE: NTS



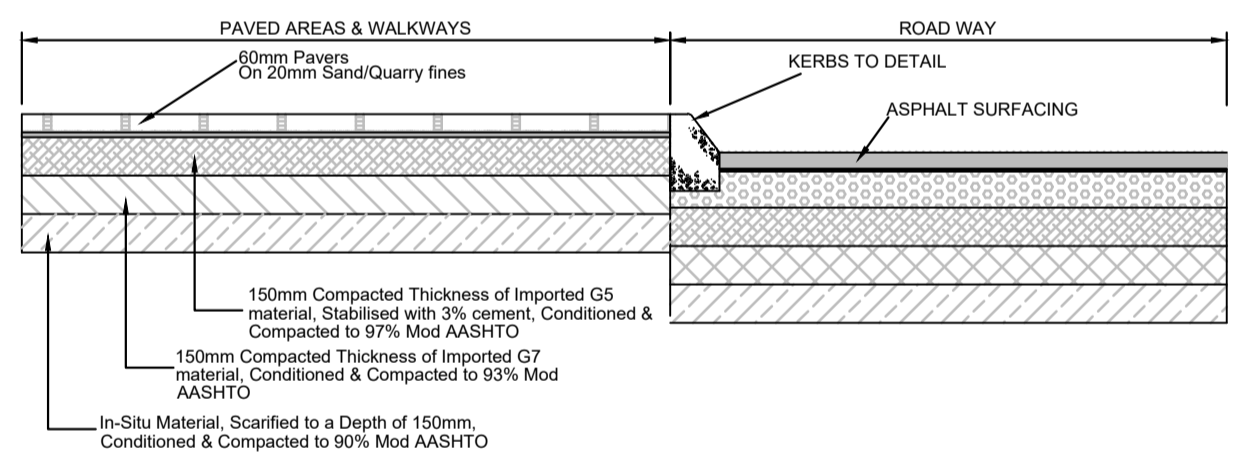
TYPICAL LAYERWORKS FOR ROADS TO BE RE-ALIGNED & RE-SURFACED FOR DRY CONDITIONS ONLY
Scale 1:20



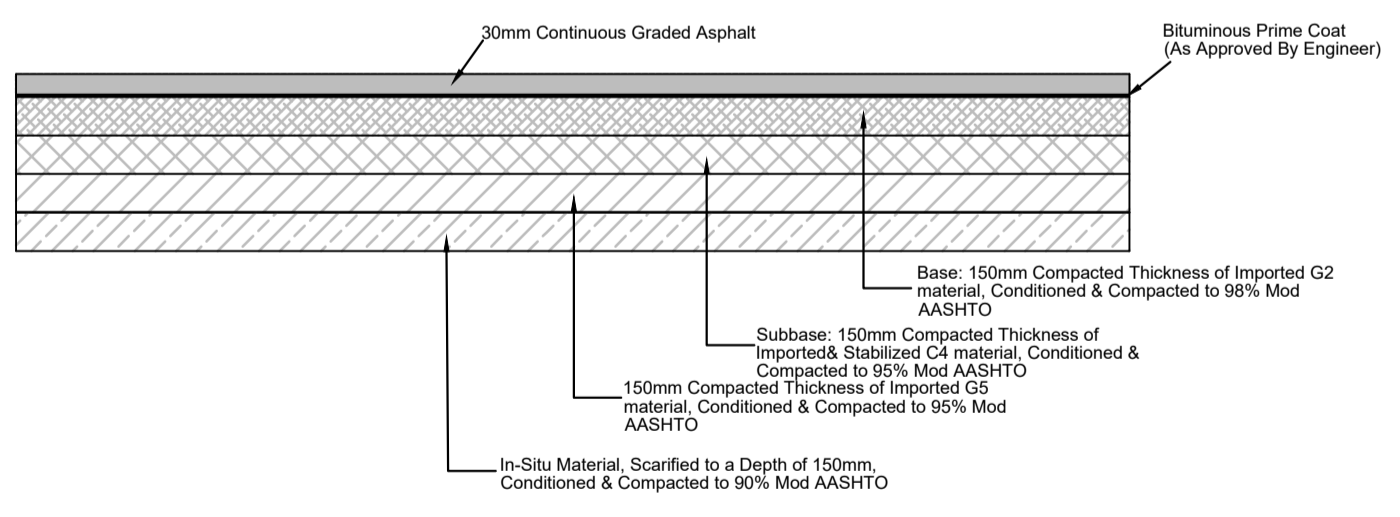
TYPICAL LAYERWORKS FOR ROADS TO BE RE-SURFACED ONLY FOR DRY CONDITIONS ONLY
Scale 1:20



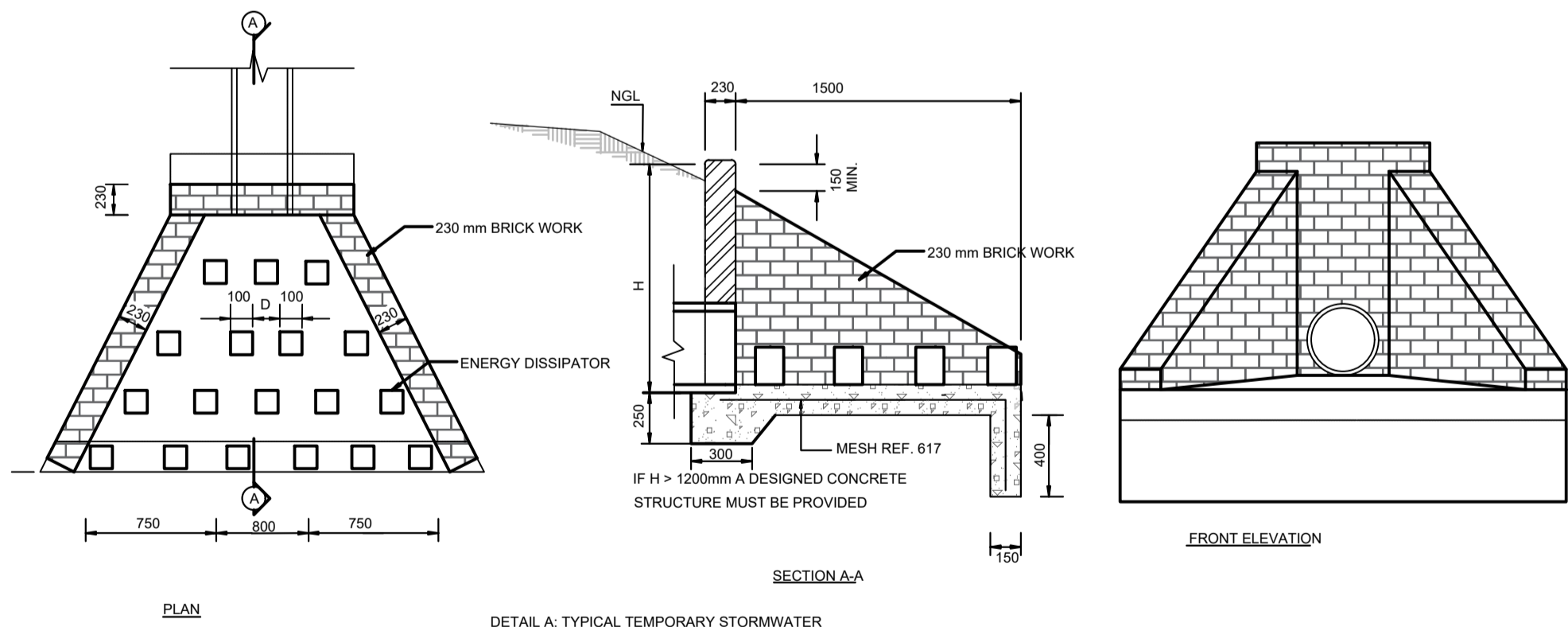
TYPICAL LAYERWORKS FOR UN-SURFACED BELLMOUTHS (AT INTERSECTIONS) FOR SATURATED CONDITIONS ONLY
Scale 1:20



TYPICAL LAYERWORKS FOR WALKWAYS
Scale NTS



TYPICAL LAYERWORKS FOR UN-SURFACED BELLMOUTHS (AT INTERSECTIONS) FOR DRY CONDITIONS ONLY
Scale NTS

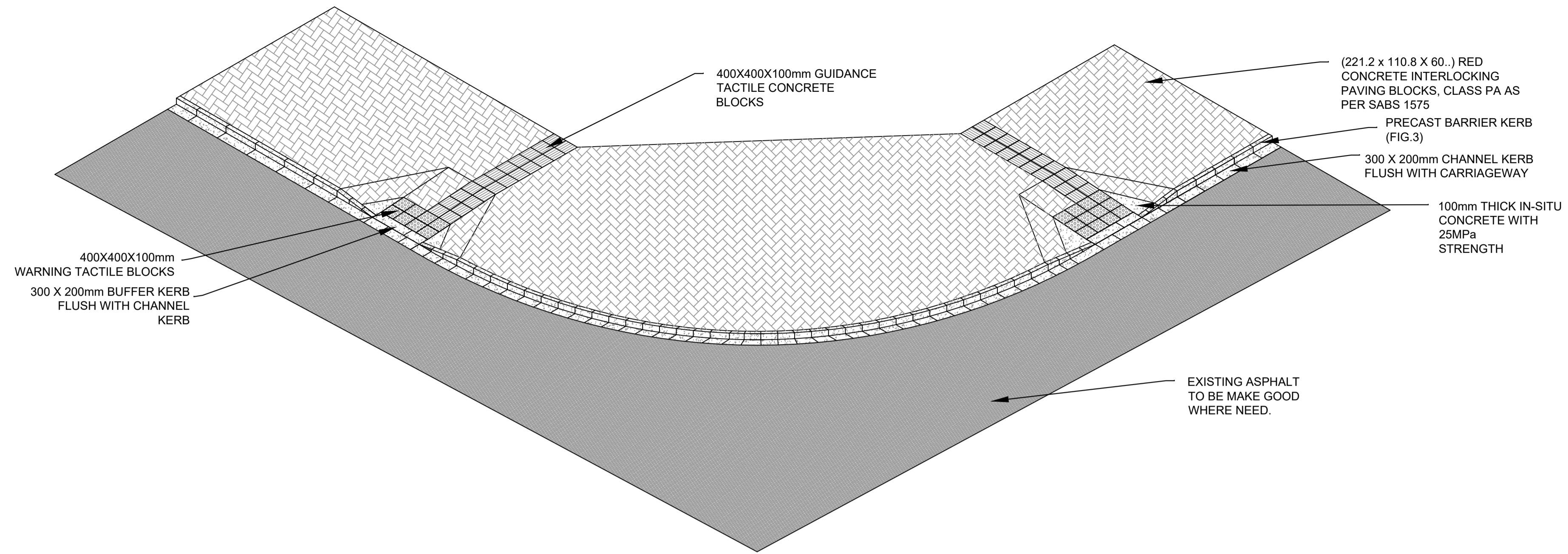


PLAN
SECTION A-A
DETAIL A: TYPICAL TEMPORARY STORMWATER OUTLET DETAIL (WITH ENERGY DISSIPATORS)

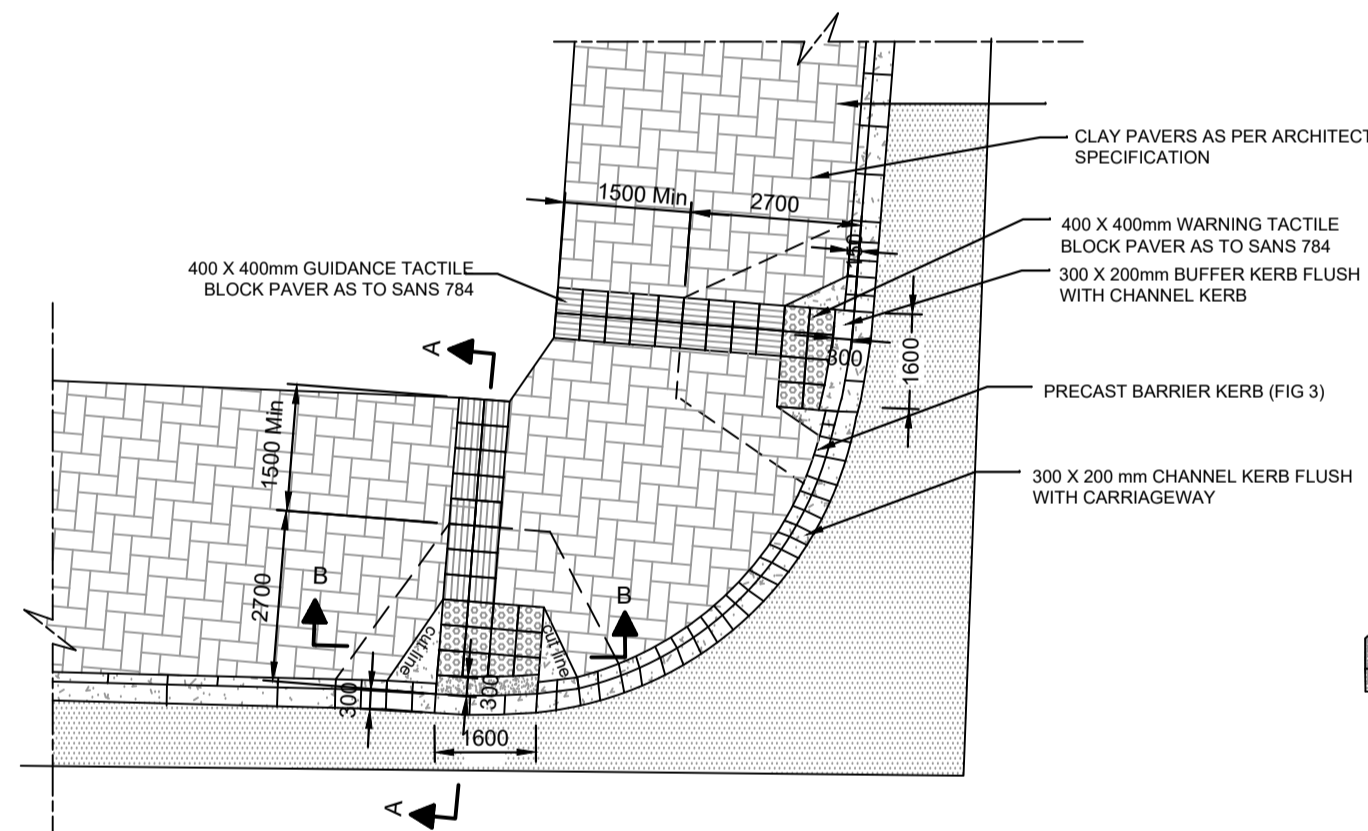
FOR TENDER

DRAWING TYPE TENDER DRAWINGS				DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL				DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2101		AGREEMENT No -		CONTRACT No -	
M. JANTJIES				DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024		ECSA Pr. No. 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		DESIGN CHECKED M. Jantjies		DISTRICT JOHANNESBURG		REVISION 0	
		No		DATE		AMENDMENTS				Dwg No		2021-009-TN-TD-003	

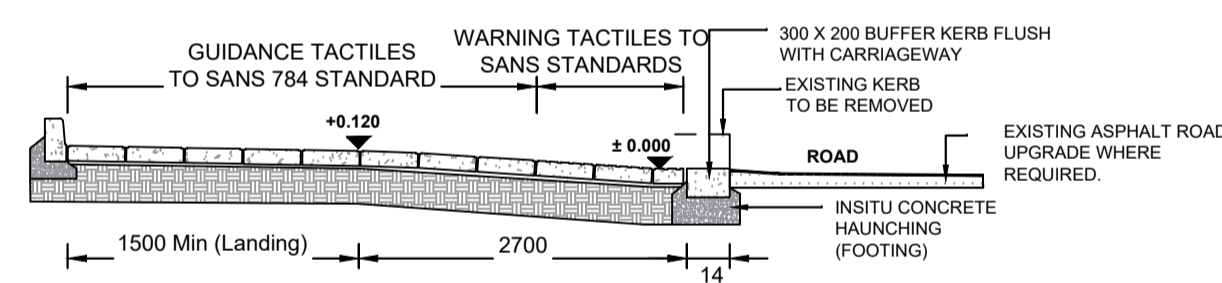
DIEPSLOOT DEVELOPMENT PROJECT
TYPICAL ROAD AND STORMWATER DETAILS 02



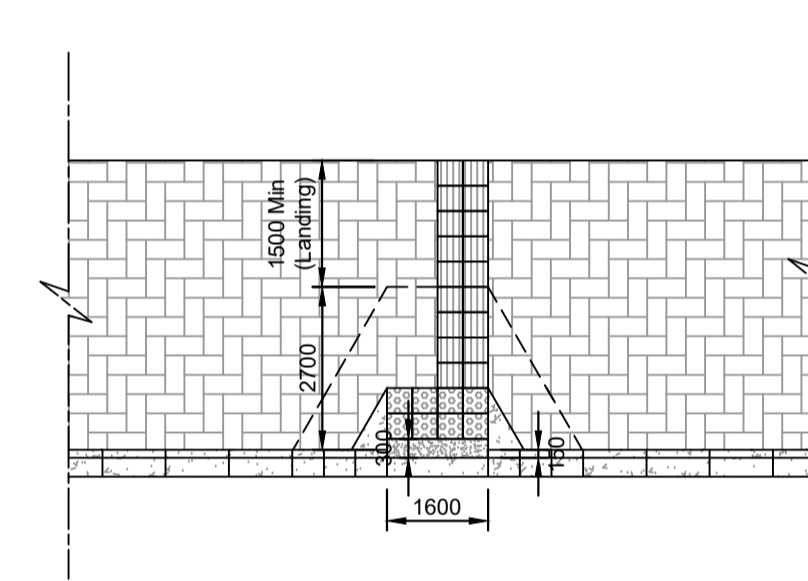
ISOMETRIC VIEW OF PEDESTRIAN RAMP (1:15 SLOPE)



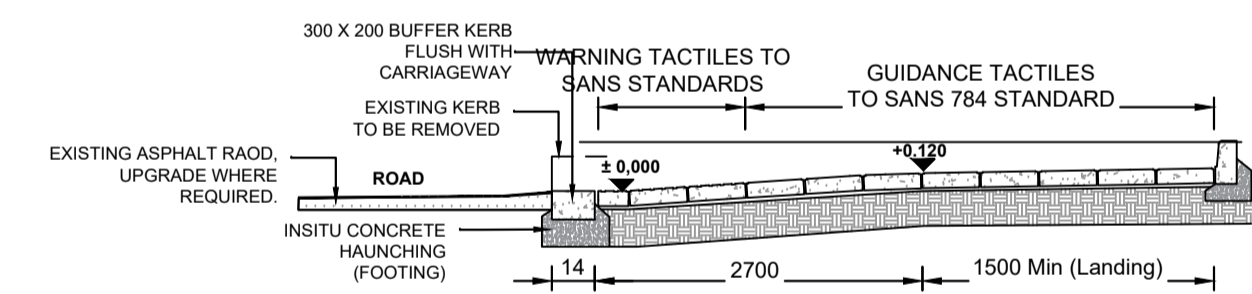
PLAN VIEW: TWO PEDESTRIAN CROSSING AT EACH STREET CORNER



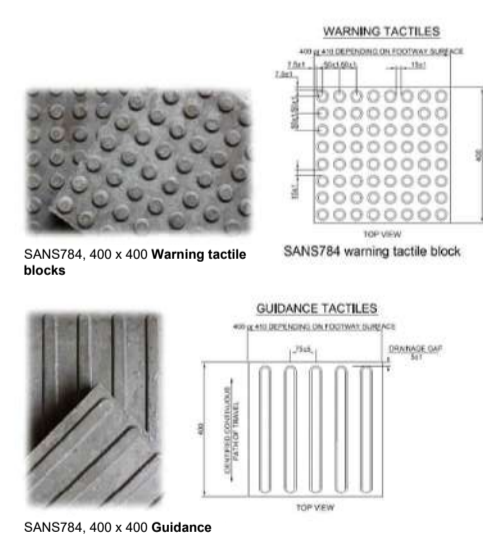
SECTION A-A: PEDESTRIAN RAMP AT 1:15 SLOPE



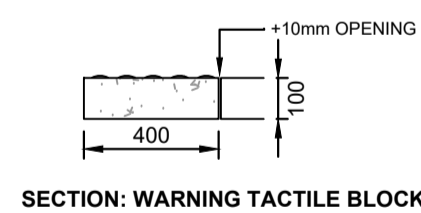
PLAN VIEW: TWO PEDESTRIAN CROSSING AT EACH STREET CORNER



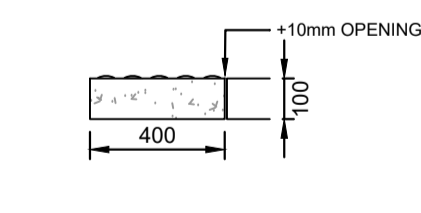
SECTION A-A: PEDESTRIAN RAMP AT 1:15 SLOPE



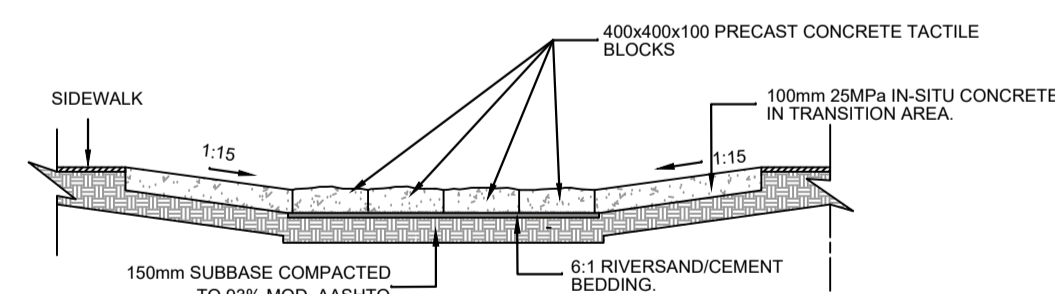
PLAN VIEW: TACTILE BLOCK PAVERS DETAILS



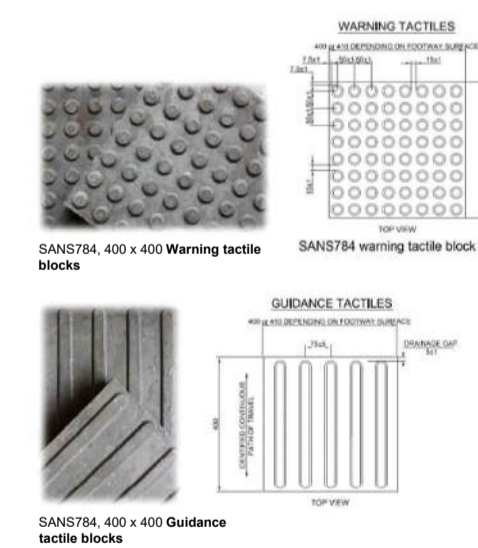
SECTION: WARNING TACTILE BLOCK



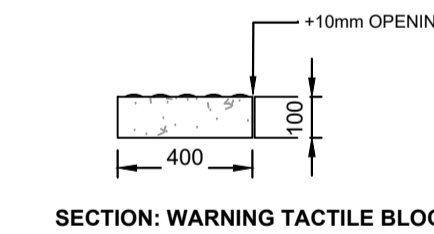
SECTION: WARNING TACTILE BLOCK



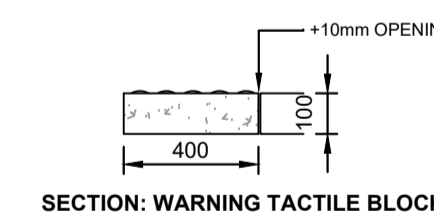
SECTION B-B



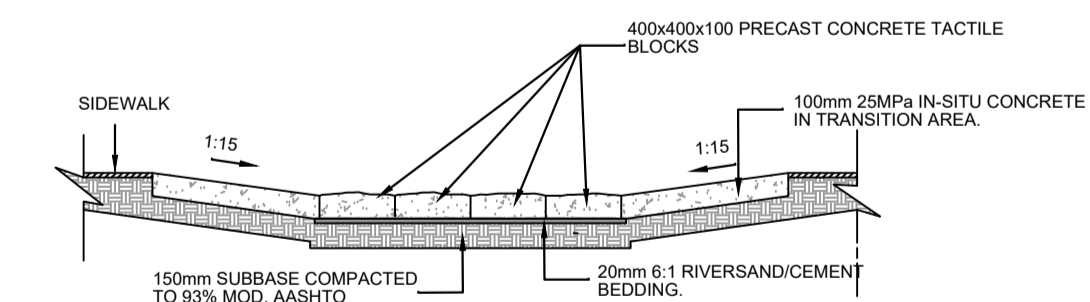
PLAN VIEW: TACTILE BLOCK PAVERS DETAILS



SECTION: WARNING TACTILE BLOCK



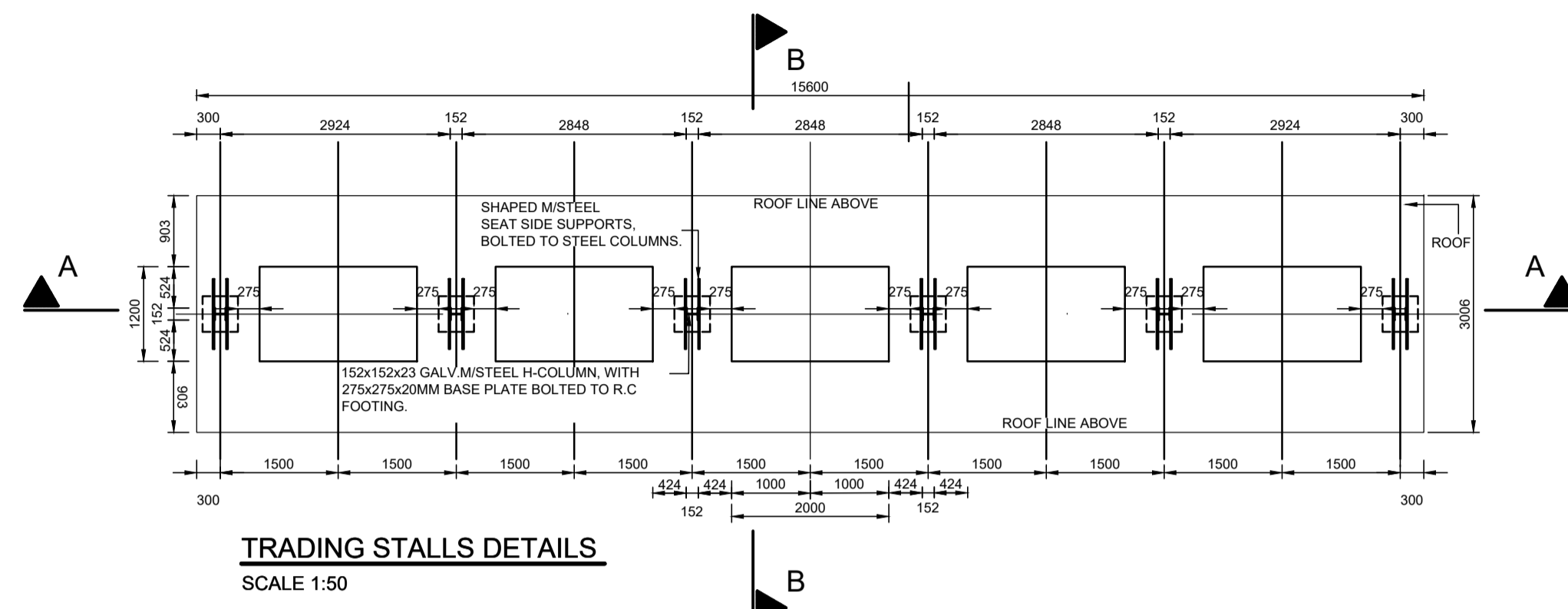
SECTION: WARNING TACTILE BLOCK



SECTION B-B

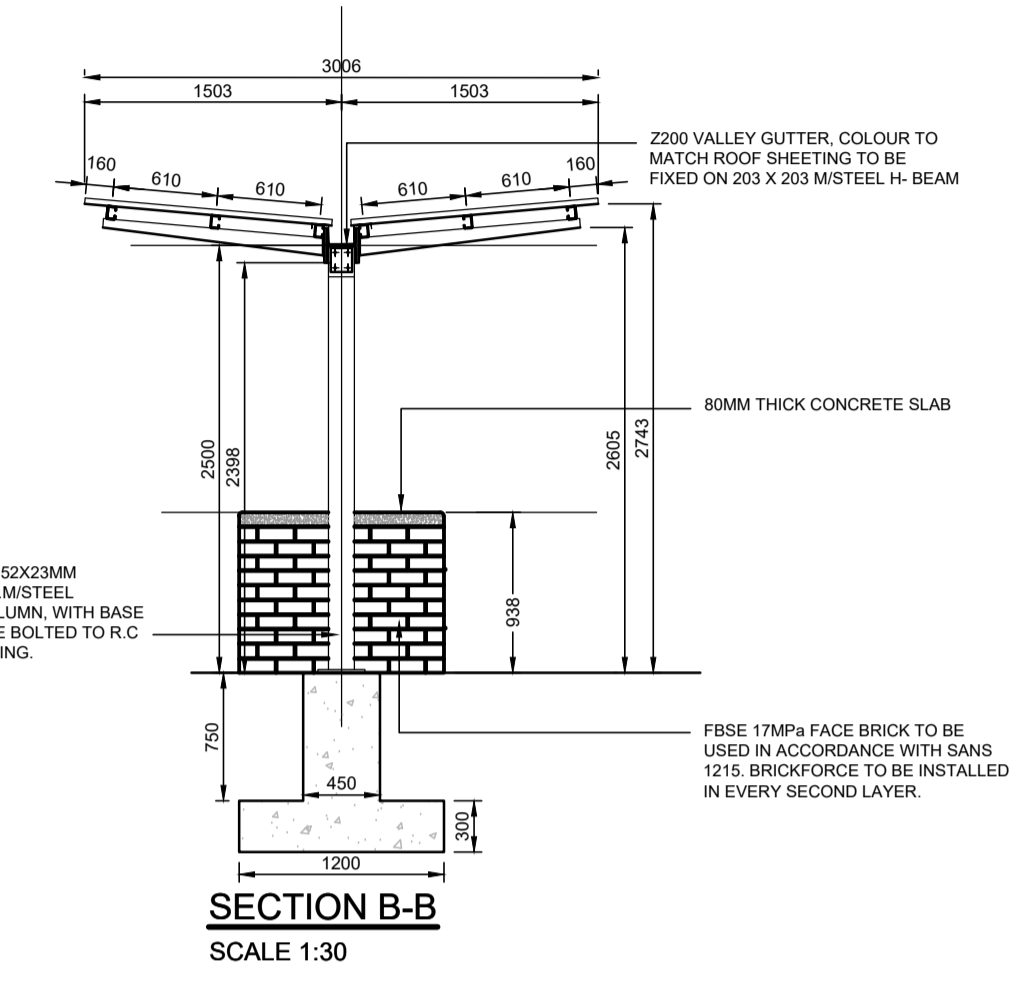
FOR TENDER

DRAWING TYPE TENDER DRAWINGS				DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL				DRAWING CHECKED S. Mathabula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 61877 MARSHALLTOWN 2101		AGREEMENT No -		CONTRACT No -	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		for CLIENT (NAME AND SIGNATURE)		DESIGNED BY S. Mathabula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (010) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		DESIGN CHECKED M. Jantjies		UNIVERSAL ACCESS DETAILS		DISTRICT JOHANNESBURG		REVISION 0	
		No		DATE		AMENDMENTS						Dwg No 2021-009-TN-TD-004	



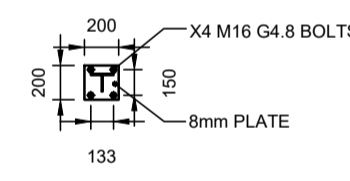
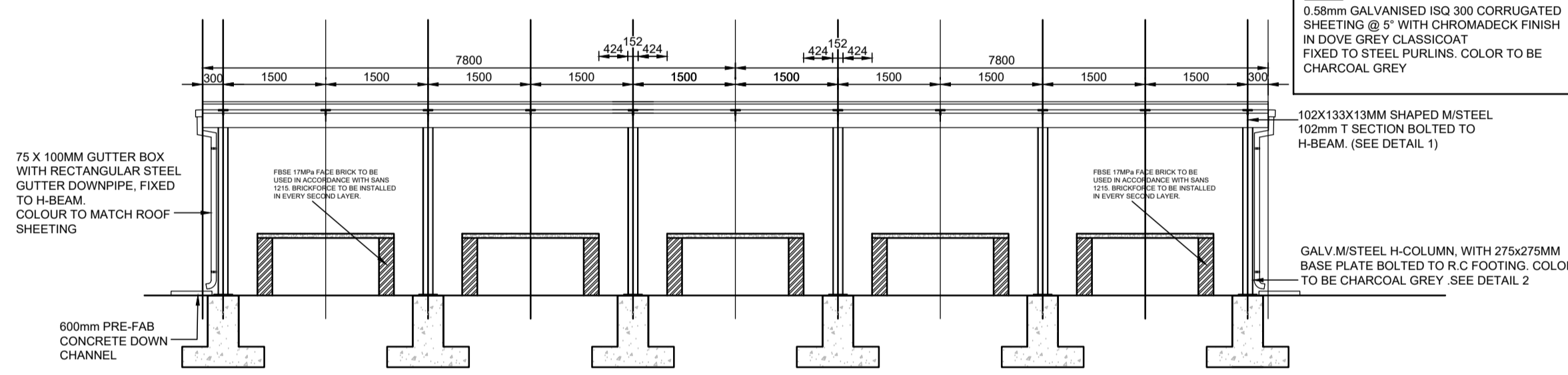
ROOF:

- FINISH TO ALL NEW STEEL WORKS TO BE PAINTED IS COLOUR CHARCOAL GREY.
- CORRUGATED ISQ300 CHROMADEK SHEETING COLOUR DARK DOLPHIN ON UPPER SIDE OF SHEETING, PEBBLE GREY TO UNDERSIDE OF SHEETING.
- PROVISION OF RAIN WATER GOODS & GUTTER, 75MM X 100MM GUTTER BOX AND RECTANGULAR DOWNPIPE, COLOUR TO MATCH ROOF SHEETING.



ROOF:
BROWN/BUILT SHEETING @ 5° FINISHED WITH STANDARD CHROMADEK Z200. IN DOVE GREY N 13639 ON UNDER SIDE & DARK DOLPHIN ON TOP SIDE. FIXED TO STEEL PURLINS. COLOR TO BE CHARCOAL GREY.

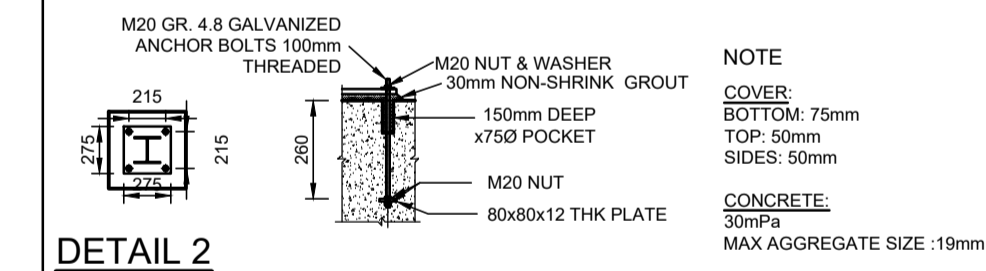
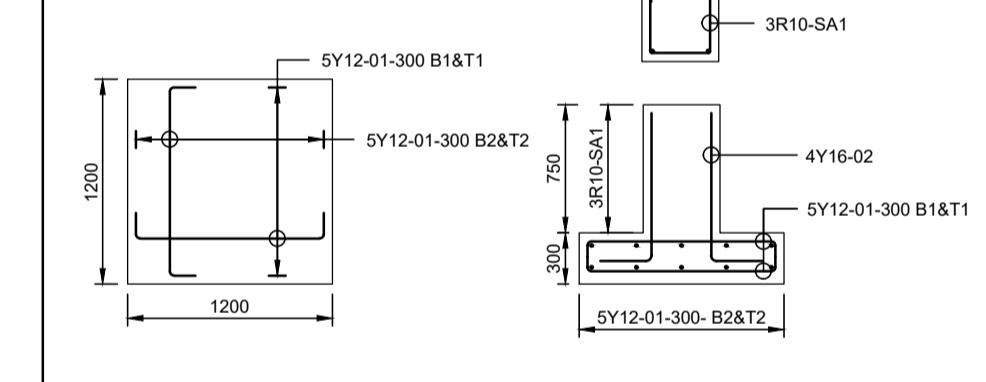
ROOF:
0.58mm GALVANISED ISQ 300 CORRUGATED SHEETING @ 5° WITH CHROMADEK FINISH IN DOVE GREY CLASSIC OAT. FIXED TO STEEL PURLINS. COLOR TO BE CHARCOAL GREY.



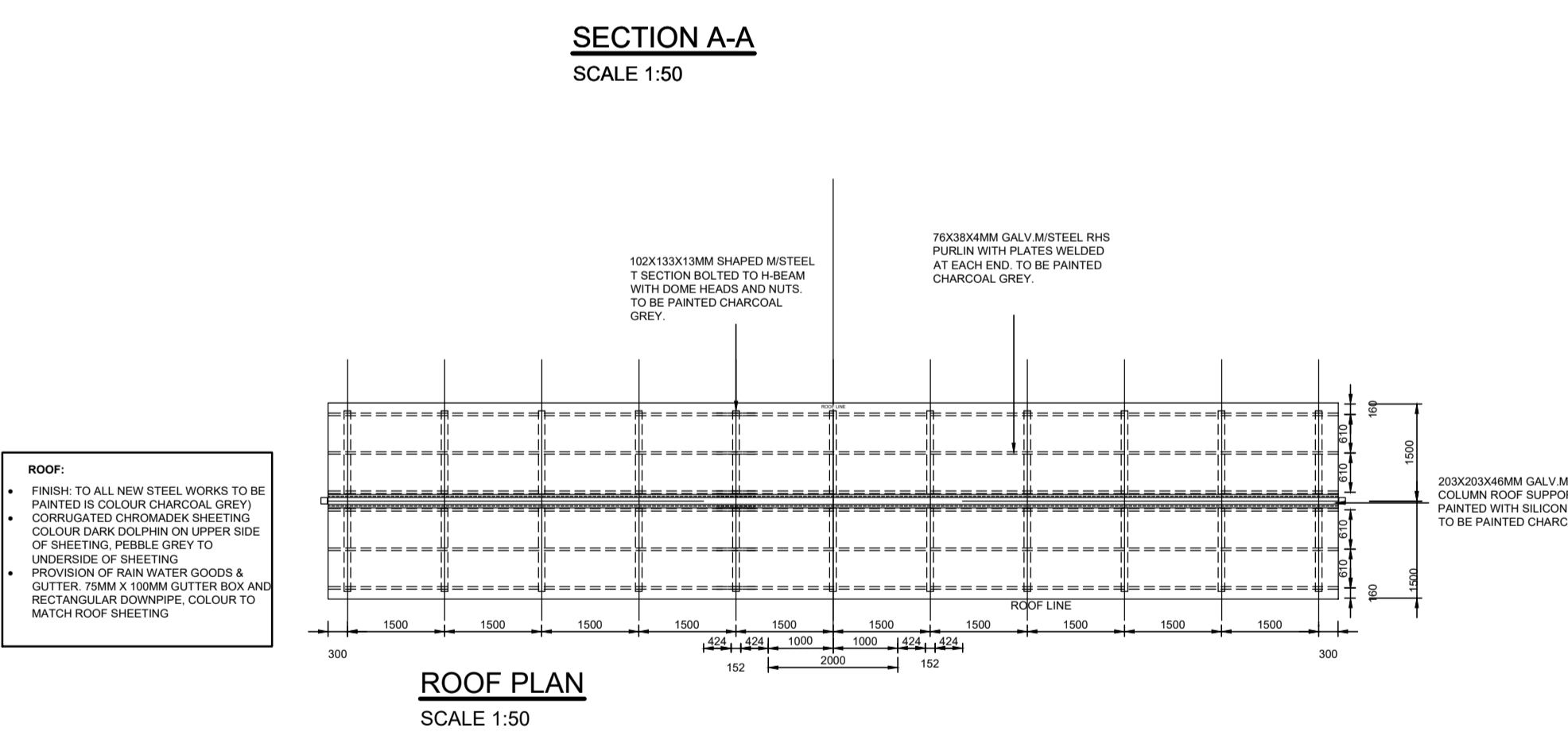
NOTE

- T SECTION WELDED TO 8mm BASE PLATE WITH 6mm FILLET WELD.
- BASE PLATE BOLTED TO H SECTION WITH X4 M16 GRADE 4.8 GALVANISED BOLTS

MEMBER	No OF	BARS PER MEMB	DIA	LENGTH	TOTAL NUM-BER	MARK	S C	BENDING							
								A	B	C	D	Et			
CANOPY BASE	6	20	12	1300	120	01	35	1100							
	4	16	1200	24	02	37	900								
	3	R10	1550	18	SA1	60	350								

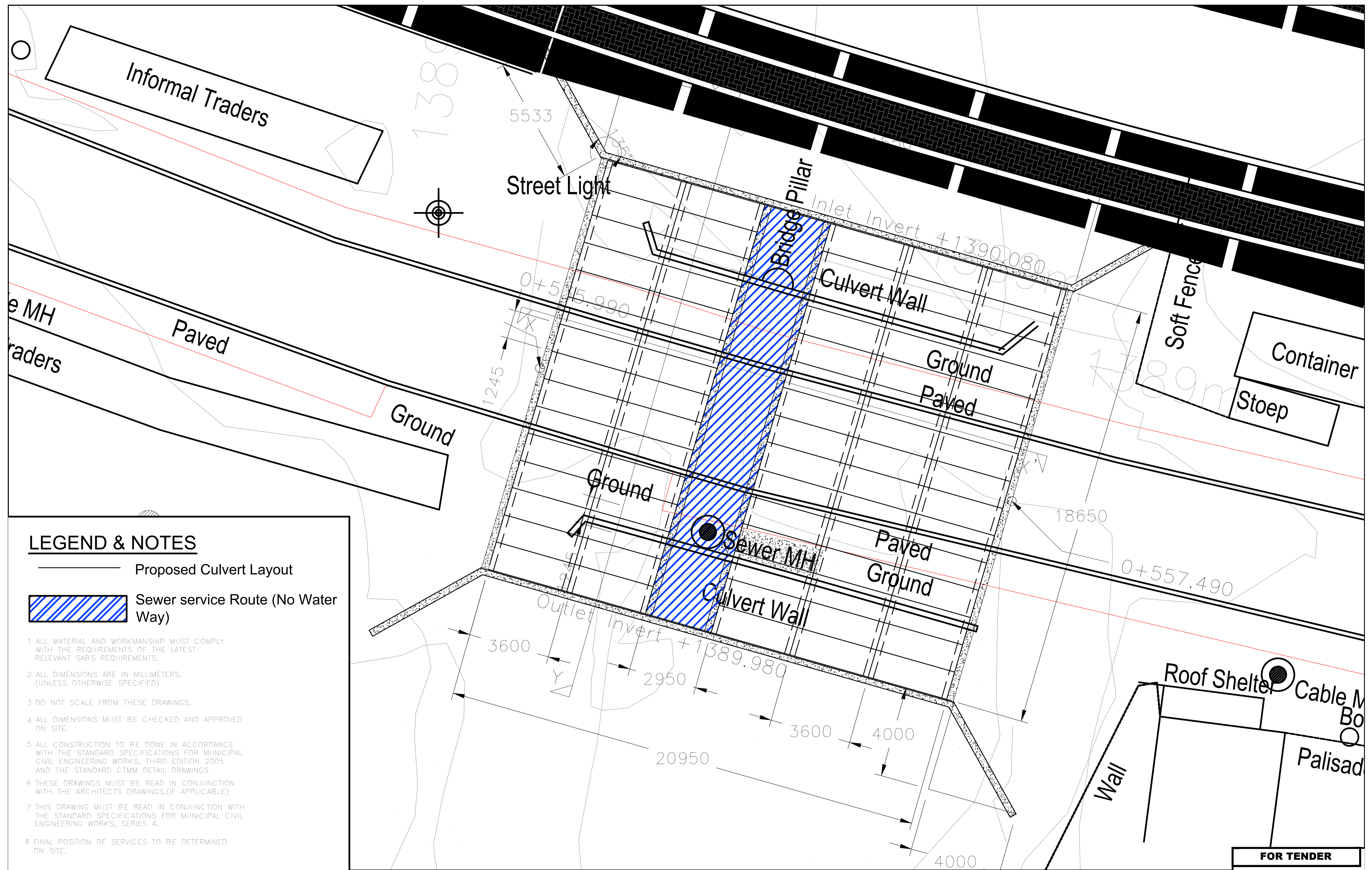


DETAIL 2		REVISION	
R	8	10	12
Y	18	198	46
TOT	18	198	46


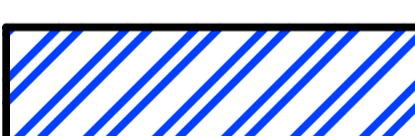


FOR TENDER

DRAWING TYPE TENDER DRAWINGS		DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 61877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No -	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		No		DATE: 02/02/2024		DATE: 18/02/2024		DISTRICT JOHANNESBURG		REVISION 0	
		AMENDMENTS		ISSUED FOR TENDER		TRADING STALLS DETAILS		JOB No 203		Dwg No 0	
								Schedule No BS-01-001		2021-009-TN-TD-005	



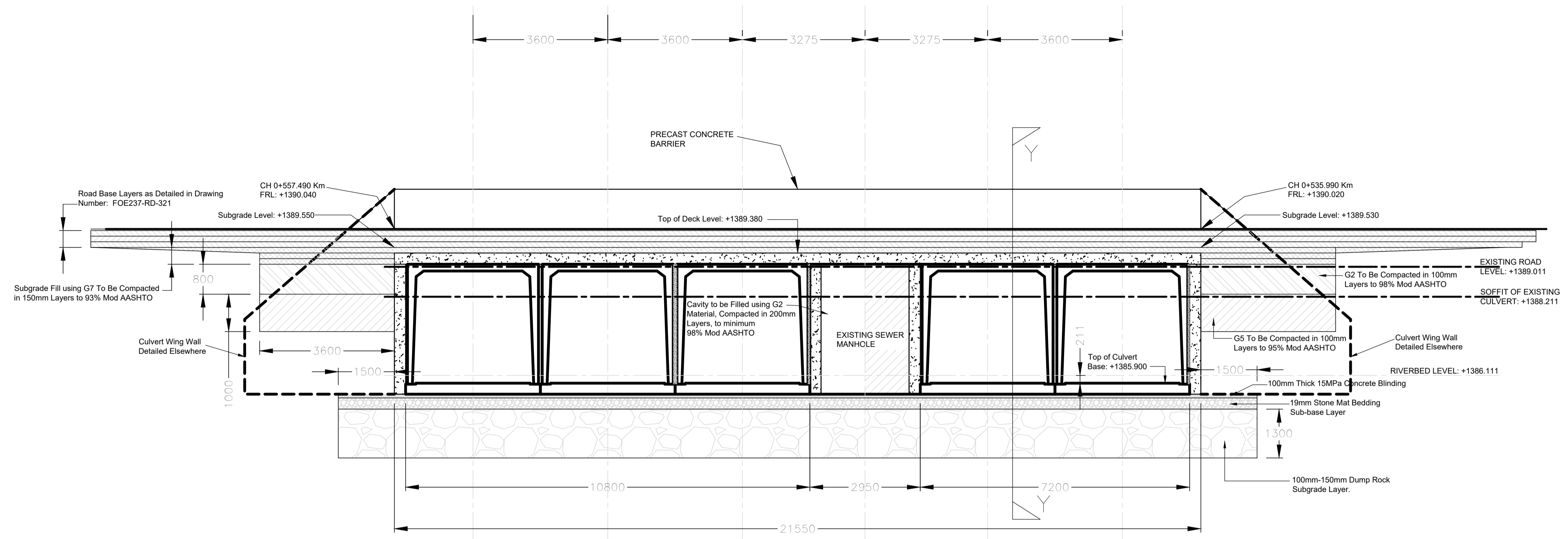
LEGEND & NOTES

-  Proposed Culvert Layout
-  Sewer service Route (No Water Way)

- 1 ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SAB'S REQUIREMENTS.
- 2 ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED)
- 3 DO NOT SCALE FROM THESE DRAWINGS.
- 4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- 5 ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CTMM DETAIL DRAWINGS
- 6 THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
- 7 THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
- 8 FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

FOR TENDER

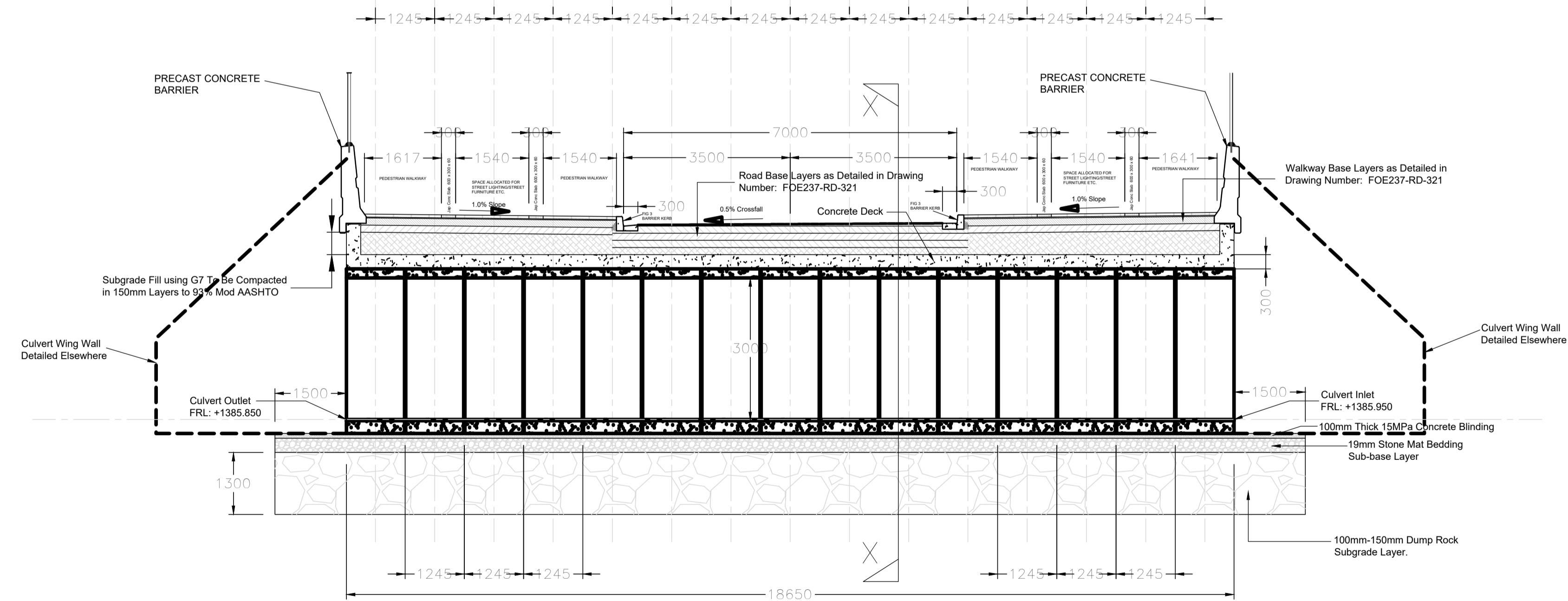
DRAWING TYPE TENDER DRAWINGS		DRAWN BY S Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL		DRAWING CHECKED S Mathabula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No -	
M. JANTJIES for CONSULTANT (NAME AND SIGNATURE)		DESIGNED BY S Mathabula		Tel: (012) 991 1993 Fax: (086) 763 7045 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024 ECSA Pr. No. 200870199		DATE		AMENDMENTS		JDA Johannesburg Development Agency		DISTRICT JOHANNESBURG		REVISION 0	
						DIEPSLOOT DEVELOPMENT PROJECT		-		Dwg No 2021-009-TN-TD-006	
						JB MARKS CULVERT LAYOUT		-		-	



SECTION X - X' - JB MARKS CULVERT

LEGEND & NOTES

- 1 ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
- 2 ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED)
- 3 DO NOT SCALE FROM THESE DRAWINGS.
- 4 ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- 5 ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD CTMM DETAIL DRAWINGS
- 6 THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE ARCHITECTS DRAWINGS.(IF APPLICABLE)
- 7 THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
- 8 FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.



SECTION Y - Y' - JB MARKS CULVERT

FOR TENDER

DRAWING TYPE TENDER DRAWINGS				DRAWN BY S. Shoko		CONSULTANTS: AJA CONSULTING CIVIL ENGINEERS		CLIENT: JOHANNESBURG DEVELOPMENT AGENCY		FILE No -		TYPE OF PLANNING TENDER DRAWINGS	
DRAWING APPROVAL				DRAWING CHECKED S. Mathebula		P. O. Box 2890 FAERIE GLEN 0043		P. O. Box 51877 MARSHALLTOWN 2001		AGREEMENT No -		CONTRACT No -	
M. JANTJES				DESIGNED BY S. Mathebula		Tel: (012) 991 1993 Fax: (086) 763 7046 info@ajacce.co.za www.ajacce.co.za		Tel: (011) 688 7851 info@jda.org.za www.jda.org.za		ROAD No.s -		SCALE AS INDICATED	
DATE: FEB 2024		ECSA Pr. No. 200870199		DATE: 02/02/2024		ISSUED FOR TENDER		JB MARKS CULVERT SECTION		DISTRICT JOHANNESBURG		REVISION 0	
		No		DATE		AMENDMENTS						Dwg No 2021-009-TN-TD-007	