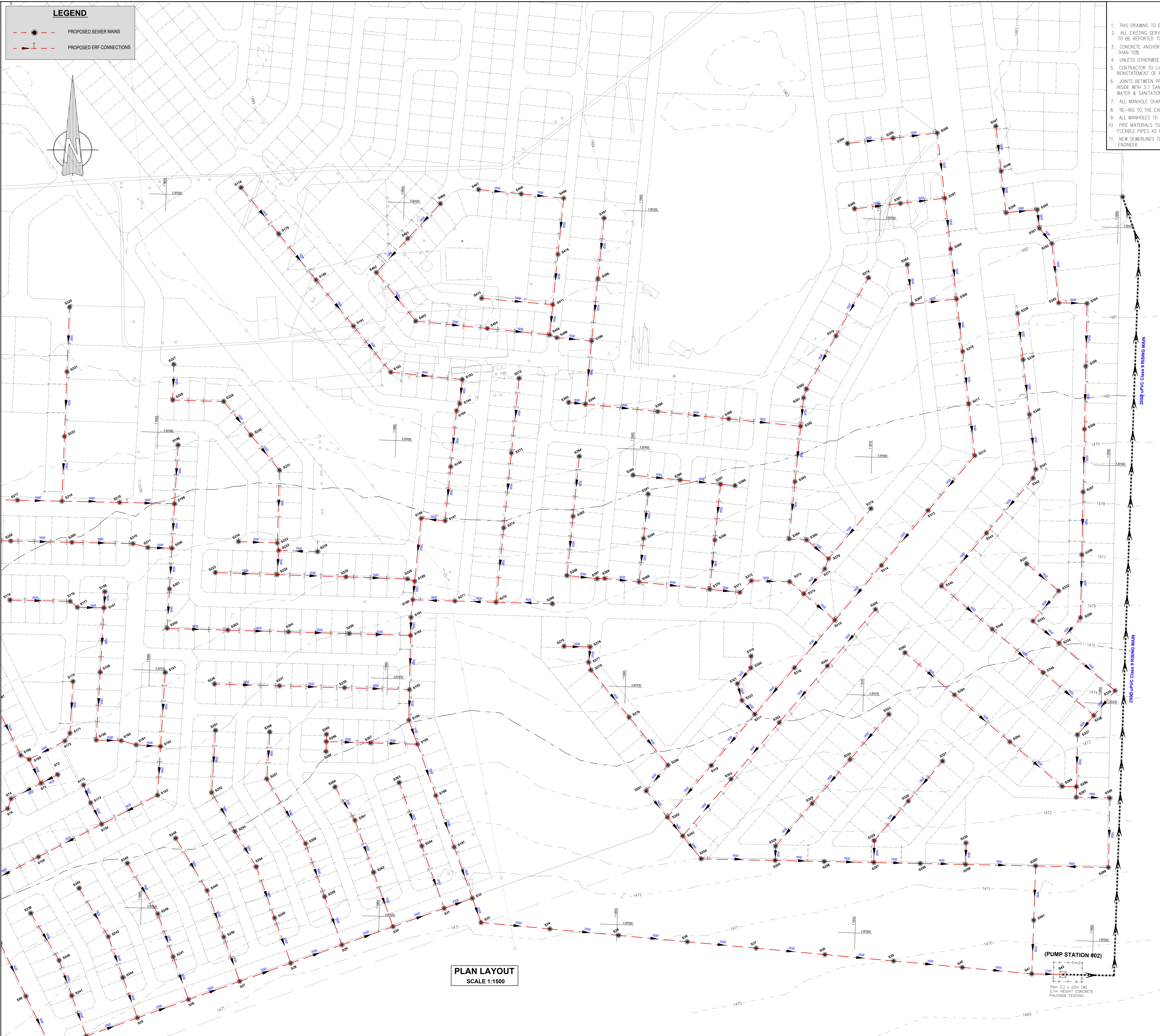


MOODRAAI SEWER CO-ORDINATE LIST			PIPE DATA LIST		
Lo 29					
Moodraai Sewers					
MH No.	Y.Lo	X.Lo	MH - MH	Distance (m)	Diam (mm)
S272	109522.833	297430.087	S275 - S276	27.683	160mm uPVC Class 34
S273	109528.177	297450.906	S276 - S277	16.184	160mm uPVC Class 34
S274	109533.521	297458.725	S277 - S278	8.652	160mm uPVC Class 34
S275	109465.991	297470.772	S278 - S279	63.432	160mm uPVC Class 34
S276	109438.338	297470.938	S279 - S280	64.920	160mm uPVC Class 34
S277	109439.405	297472.885	S280 - S281	35.602	160mm uPVC Class 34
S278	109436.646	297473.885	S281 - S282	35.646	160mm uPVC Class 34
S279	109395.011	297478.141	S282 - S283	25.427	160mm uPVC Class 34
S280	109352.400	297483.719	S283 - S284	30.847	160mm uPVC Class 34
S281	109374.518	297488.616	S284 - S285	77.726	160mm uPVC Class 34
S282	109351.122	297488.509	S285 - S286	51.450	160mm uPVC Class 34
S283	109334.433	297490.692	S286 - S287	51.092	160mm uPVC Class 34
S284	109314.186	297492.784	S287 - S288	48.817	160mm uPVC Class 34
S285	109236.467	297492.885	S288 - S289	47.622	160mm uPVC Class 34
S286	109185.022	297492.171	S289 - S290	73.504	160mm uPVC Class 34
S287	109132.936	297492.548	S290 - S291	56.959	160mm uPVC Class 34
S288	109084.124	297492.171	S291 - S41	56.459	160mm uPVC Class 34
S289	109036.506	297492.110	S292 - S293	68.324	160mm uPVC Class 34
S290	108963.010	297492.089	S293 - S294	76.336	160mm uPVC Class 34
S291	108963.049	297498.048	S294 - S295	72.264	160mm uPVC Class 34
S292	109108.083	297470.065	S295 - S296	14.820	160mm uPVC Class 34
S293	109054.503	297474.459	S296 - S297	11.066	160mm uPVC Class 34
S294	108946.639	297479.824	S297 - S298	35.474	160mm uPVC Class 34
S295	108937.968	297483.663	S298 - S299	73.000	160mm uPVC Class 34
S296	108923.149	297483.460	S299 - S290	76.504	160mm uPVC Class 34
S297	108822.998	297484.925	S300 - S301	78.000	160mm uPVC Class 34
S298	108887.527	297484.035	S301 - S302	78.000	160mm uPVC Class 34
S299	108886.513	297492.028	S302 - S303	78.000	160mm uPVC Class 34
S300	109140.485	297459.593	S303 - S283	78.553	160mm uPVC Class 34
S301	109188.886	297470.759	S304 - S305	48.256	160mm uPVC Class 34
S302	109237.287	297478.926	S305 - S306	46.756	160mm uPVC Class 34
S303	109285.689	2974843.092	S306 - S307	69.003	160mm uPVC Class 34
S304	109187.035	297471.883	S307 - S308	53.535	160mm uPVC Class 34
S305	109139.328	297464.427	S308 - S309	52.970	160mm uPVC Class 34
S306	109083.103	297457.397	S309 - S310	55.333	160mm uPVC Class 34
S307	109082.733	297457.616	S310 - S311	55.333	160mm uPVC Class 34
S308	109074.687	297472.543	S311 - S312	54.931	160mm uPVC Class 34
S309	109066.726	297430.911	S312 - S313	75.613	160mm uPVC Class 34
S310	109058.410	297435.616	S313 - S314	75.667	160mm uPVC Class 34
S311	109050.094	297440.320	S314 - S315	75.667	160mm uPVC Class 34
S312	109041.838	297449.827	S315 - S316	65.472	160mm uPVC Class 34
S313	109088.756	297455.923	S316 - S317	64.132	160mm uPVC Class 34
S314	109135.707	2974613.262	S317 - S318	70.541	160mm uPVC Class 34
S315	109182.659	297472.600	S318 - S282	71.351	160mm uPVC Class 34
S316	109223.394	297472.944	S319 - S320	12.427	160mm uPVC Class 34
S317	109263.078	2974774.236	S320 - S321	21.824	160mm uPVC Class 34
S318	109306.848	2974829.555	S321 - S322	18.134	160mm uPVC Class 34
S319	109289.247	2974713.222	S322 - S317	20.028	160mm uPVC Class 34
S320	109069.074	2974725.447	S323 - S324	62.826	160mm uPVC Class 34
S321	109282.631	2974742.750	S324 - S325	61.000	160mm uPVC Class 34
S322	109277.226	2974760.060	S325 - S326	58.948	160mm uPVC Class 34
S323	109122.420	2974769.320	S326 - S328	54.788	160mm uPVC Class 34
S324	109161.694	2974816.268	S328 - S287	22.991	160mm uPVC Class 34
S325	109199.826	2974865.881	S330 - S289	22.656	160mm uPVC Class 34
S326	109236.675	2974911.891	S331 - S332	44.002	160mm uPVC Class 34
S327	109064.369	2974816.448	S332 - S333	41.491	160mm uPVC Class 34
S328	109099.006	2974859.696	S333 - S334	35.737	160mm uPVC Class 34
S329	109133.255	2974902.460	S334 - S335	77.284	160mm uPVC Class 34
S330	109036.818	2974901.456	S335 - S336	34.352	160mm uPVC Class 34
S331	108983.502	2974866.250	S336 - S337	26.522	160mm uPVC Class 34
S332	108948.999	2974633.527	S337 - S286	54.495	160mm uPVC Class 34
S333	108974.746	2974666.092	S338 - S339	49.924	160mm uPVC Class 34
S334	108946.724	2974688.270	S339 - S340	57.984	160mm uPVC Class 34
S335	108886.124	2974736.234	S340 - S341	57.820	160mm uPVC Class 34
S336	108907.440	2974763.172	S341 - S342	9.799	160mm uPVC Class 34
S337	108923.897	2974783.970	S342 - S343	75.683	160mm uPVC Class 34
S338	109020.050	2974343.827	S343 - S344	73.139	160mm uPVC Class 34
S339	108944.894	2974392.186	S344 - S345	70.000	160mm uPVC Class 34
S340	108985.976	2974449.520	S345 - S346	70.000	160mm uPVC Class 34
S341	108977.282	2974506.683	S346 - S348	70.027	160mm uPVC Class 34
S342	108979.793	2974516.155	S347 - S348	47.647	160mm uPVC Class 34
S343	109026.759	2974753.502	S348 - S349	43.921	160mm uPVC Class 34
S344	109072.147	2974632.853	S349 - S350	33.011	160mm uPVC Class 34
S345	109017.252	2974676.287	S350 - S351	19.817	160mm uPVC Class 34
S346	108962.356	2974719.721	S351 - S352	20.439	160mm uPVC Class 34
S347	109031.814	2974748.284	S352 - S353	62.792	160mm uPVC Class 34
S348	109024.651	2974951.170	S353 - S354	29.783	160mm uPVC Class 34
S349	109018.048	2974238.592	S354 - S355	66.001	160mm uPVC Class 34
S350	108985.334	2974234.179	S355 - S356	66.000	160mm uPVC Class 34
S351	108982.355	2974253.171	S356 - S357	66.000	160mm uPVC Class 34
S352	108968.892	2974269.149	S357 - S358	66.000	160mm uPVC Class 34
S353	108959.457	2974331.228	S358 - S359	66.057	160mm uPVC Class 34
S354	108929.677	2974330.807	S359 - S334	34.992	160mm uPVC Class 34
S355	108928.144	2974386.802	S360 - S361	48.457	160mm uPVC Class 34
S356	108927.810	2974462.795	S361 - S307	47.052	160mm uPVC Class 34
S357	108926.876	2974528.788	S362 - S363	41.930	160mm uPVC Class 34
S358	108925.943	2974594.782	S363 - S309	47.003	160mm uPVC Class 34
S359	108925.008	2974650.832	S364 - S365	48.462	160mm uPVC Class 34
S360	109177.156	2974239.978	S365 - S366	62.924	160mm uPVC Class 34
S361	109129.250	2974232.691	S366 - S367	32.002	160mm uPVC Class 34
S362	109119.500	2974296.526	S367 - S368	7.761	160mm uPVC Class 34
S363	109113.195	2974337.979	S368 - S369	36.303	160mm uPVC Class 34
S364	109456.835	2974509.736	S369 - S370	74.604	160mm uPVC Class 34
S365	109461.129	2974573.073	S370 - S371	31.702	160mm uPVC Class 34
S366	109465.338	2974635.454	S371 - S372	11.118	160mm uPVC Class 34
S367	109431.430	2974637.017	S372 - S373	40.318	160mm uPVC Class 34
S368	109425.682	2974637.165	S373 - S374	19.281	160mm uPVC Class 34
S369	109389.463	2974639.620	S374 - S315	43.002	160mm uPVC Class 34
S370	109353.030	2974644.663	S375 - S376	68.978	160mm uPVC Class 34
S371	109283.401	2974646.806	S376 - S377	11.419	160mm uPVC Class 34
S372	109271.823	2974634.197	S377 - S374	34.301	160mm uPVC Class 34
S373	109231.506	2974633.960	S378 - S379	70.054	160mm uPVC Class 34
S374	109216.384	2974645.922	S379 - S380	64.020	160mm uPVC Class 34
S375	109148.798	2974654.962	S380 - S381	9.528	160mm uPVC Class 34
S376	109191.602	2974608.153	S381 - S382	30.057	160mm uPVC Class 34
S377	109195.101	2974619.023	S382 - S383	58.440	160mm uPVC Class 34
S378	109159.906	2974311.771	S383 - S384	60.459	160mm uPVC Class 34
S379	109191.853	2974374.116	S384 - S385	18.403	160mm uPVC Class 34
S380	109221.049	2974431.092	S385 - S376	30.194	160mm uPVC Class 34
S381	109223.596	2974440.273	S386 - S387	15.301	160mm uPVC Class 34
S382	109225.629	2974470.261	S387 - S388	58.974	160mm uPVC Class 34
S383	109229.581	2974528.567	S388 - S370	53.039	160mm uPVC Class 34
S384	109233.670	2974588.887	S389 - S390	49.912	160mm uPVC Class 34
S385	109215.275	2974589.411	S390 - S387	42.605	160mm uPVC Class 34
S386	109232.257	2974534.946	S391 - S392	48.975	160mm uPVC Class 34
S387	109307.522	2974533.912	S392 - S389	46.030	160mm uPVC Class 34
S388	109311.511	2974592.751	S393 - S394	17.616	160mm uPVC Class 34
S389	109399.828	2974527.657	S394 - S395	76.497	160mm uPVC Class 34
S390	109350.030	2974531.031	S395 - S396	74.843	160mm uPVC Class 34
S391	109383.175	2974546.828	S396 - S382	76.054	160mm uPVC Class 34
S392	109386.351	2974593.695	S397 - S398	63.953	160mm uPVC Class 34
S393	109470.079	2974553.707	S398 - S399	65.855	160mm uPVC Class 34
S394	109452.524	2974554.896	S399 - S394	66.671	160mm uPVC Class 34
S395	109376.181	2974640.066	S400 - S401	50.384	160mm uPVC Class 34
S396	109301.509	2974465.122	S401 - S402	48.498	160mm uPVC Class 34
S397	109439.510	2974258.849	S402 - S403	65.828	160mm uPVC Class 34
S398	109443.739	2974372.462	S403 - S404	75.594	160mm uPVC Class 34
S399	109448.094	2974388.373	S404 - S405	65.808	160mm uPVC Class 34
S400	109611.873	2974249.600	S405 - S406	7.978	160mm uPVC Class 34
S401	109644.874	2974287.671	S406 - S399	36.784	160mm uPVC Class 34
S402	109676.640	2974324.318	S407 - S408	44.970	160mm uPVC Class 34
S403	109633.428	2974373.977	S408 - S409	44.970	160mm uPVC Class 34
S404	109558.007	2974379.086	S409 - S410	59.202	160mm uPVC Class 34
S405	109492.350	2974383.534	S410 - S411	53.207	160mm uPVC Class 34
S406	109484.911	2974386.145	S411 - S405	31.942	160mm uPVC Class 34
S407	109572.352	2974233.428	S412 - S411	75.040	160mm uPVC Class 34
S408	109527.485	2974236.470			
S409	109482.619	2974239.512			
S410	109486.609	2974298.579			
S411	109490.194	2974351.665			
S412	109565.127	2974347.636			

TOTAL LENGTHS OF PIPING		
MH Centre to MH Centre		
Diameter (mm)	Length (m)	
315mm uPVC Class 34	32.55	
250mm uPVC Class 34	607.71	
200mm uPVC Class 34	430.52	
160mm uPVC Class 34	19745.34	
Total :	20816.11	



- NOTES:**
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DWG NO. KAZ001/...
 2. ALL EXISTING SERVICES TO BE VERIFIED ON SITE BEFORE COMMENCEMENT OF WORK. ANY DISCREPANCY TO BE REPORTED TO THE ENGINEER FOR RECTIFICATION.
 3. CONCRETE ANCHOR BLOCKS SPACED AT 10m c/c ARE REQUIRED AT STEEP SLOPES EQUAL TO OR GREATER THAN 10%.
 4. UNLESS OTHERWISE STATED, ALL MANHOLES