

## **HEALTH & SAFETY INFORMATION**

IN ADDITION TO THE RISK NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DESIGN, NOTE THE FOLLOWING SIGNIFICANT RISKS AND INFORMATION

CONSTRUCTION RISKS:

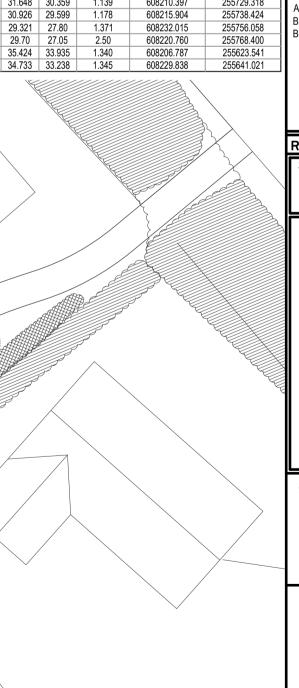
BURIED SERVICES - CONTRACTOR TO ESTABLISH LOCATION AND DEPTH OF ALL EXISTING SERVICES PRIOR TO CONSTRUCTION

DEEP EXCAVATIONS - CONTRACTOR TO IDENTIFY LOCATIONS AND CORDEN OFF AREAS/MAKE SAFE PRIOR TO CONSTRUCTION

WORKING IN HIGHWAY - CONTRACTOR ADOPT A SAFE METHOD OF WORKING WHILST UNDERTAKING WORK EG. PPE, CONES ETC AND TO ARRANGE TRAFFIC MANAGEMENT IF APPROPRIATE.

THE DESIGN TEAM HAVE HIGHLIGHTED UNUSUAL AND SIGNIFICANT RISKS ONLY THAT MAY NOT BE OBVIOUS TO A COMPETENT CONTRACTOR. THEY ARE TO ASSIST WITH RISK REDUCTION ONLY AND ARE NOT NECESSARILY COMPREHENSIVE IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING TO AN APPROPRIATE RISK ASSESSMENT AND METHOD ON SITE

E:	1						
	MANHOLE	MANHOLE	COVER	INVERT	DEPTH TO		
	DIAMETER	TYPE	LEVEL	LEVEL	SOFFIT	EASTING	NORTHING
	(mm)		(m)	(m)	(m)	(m)	(m)
1	1200	Type E	29.90	28.640	1.035	608189.162	255748.541
	1350	Type B	35.979	34.524	1.305	608184.637	255610.507
	1350	Type B	34.418	32.960	1.233	608238.265	255650.705
	1350	Type B	34.268	32.679	1.364	608243.126	255659.035
	1200	Type E	34.088	32.459	1.404	608241.792	255669.945
	1200	Type E	33.587	32.129	1.233	608223.544	255693.690
	1200	Type E	33.303	31.869	1.209	608210.532	255703.948
	1350	Type B	36.616	35.098	1.368	608149.005	255622.908
	1350	Type B	35.996	34.526	1.320	608135.145	255632.212
	1350	Type B	35.587	34.155	1.282	608130.589	255640.561
	1350	Type B	35.134	33.763	1.221	608129.284	255651.271
	900x675	Type D	33.70	32.80	0.75	608103.534	255689.249
	1200	Type E	33.950	32.592	1.133	608111.301	255678.445
	1200	Type B	34.261	32.41	1.551	608120.098	255672.374
	1200	Type B	34.626	32.279	2.047	608133.07	255670.260
	1200	Type B	34.856	32.226	2.330	608144.902	255669.950
	1200	Type B	34.442	32.123	2.019	608167.281	255685.589
	1200	Type E	33.622	31.838	1.484	608190.035	255702.748
	1200	Type E	33.043	31.419	1.324	608198.123	255712.364
	1350	Type B	31.236	29.622	1.314	608211.157	255735.962
	1350	Type E	29.90	28.457	1.068	608206.60	255746.338
	1350	Type B	30.340	28.80	1.315	608245.914	255744.982
	1350	Type B	29.530	28.637	0.593	608235.238	255752.791
	1350	Type B	30.356	28.534	1.522	608220.635	255757.698
	1350	Type E	29.90	28.275	1.250	608210.223	255766.262
	1350	Type B	29.50	28.181	0.944	608215.053	255779.425
	1200	Type E	36.167	34.846	1.170	608180.399	255606.528
	1200	Type E	35.926	34.44	1.336	608190.074	255610.867
	1200	Type E	34.461	32.92	1.391	608240.362	255649.001
	1200	Type E	34.261	32.72	1.391	608245.105	255658.029
	1200	Type E	34.051	32.709	1.192	608244.550	255669.548
	1200	Type E	33.582	32.223	1.209	608227.699	255692.854
	1200	Type E	33.288	31.937	1.201	608214.422	255704.507
	1200	Type B	36.284	34.631	1.503	608138.062	255626.733
	1200	Type E	35.923	34.517	1.255	608130.775	255633.383
	1200	Type E	35.542	34.173	1.219	608127.248	255642.521
	1200	Type E	35.053	33.781	1.122	608127.421	255655.070
	1200	Type E	34.195	33.00	1.045	608117.022	255671.105
	1200	Туре В	34.515	32.84	1.525	608129.243	255667.648
	1200	Туре В	34.828	32.645	2.033	608144.368	255667.318
	1200	Туре В	34.774	32.479	2.145	608158.229	255675.373
	1200	Type B	33.705	31.919	1.636	608189.674	255698.390
	1200	Type B	32.890	31.14	1.600	608201.368	255712.885
	1200	Type E	31.648	30.359	1.139	608210.397	255729.318
	1200	Type E	30.926	29.599	1.178	608215.904	255738.424
	1200	Type E	29.321	27.80	1.371	608232.015	255756.058
	1200	Type B	29.70	27.05	2.50	608220.760	255768.400
	1200	Type E	35.424	33.935	1.340	608206.787	255623.541
	1200	Type E	34.733	33.238	1.345	608229.838	255641.021



## Notes GENERAL

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ENGINEERS AND, ARCHITECTS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORKS.

ALL WORKMANSHIP AND MATERIALS ARE TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT EUROCODES, CODES OF PRACTICE AND GOOD BUILDING PRACTICE.

3. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER AND THE LOCAL AUTHORITY.

4. SETTING OUT DETAILS ARE SHOWN ON THE ARCHITECTS DRAWINGS UNLESS NOTED OTHERWISE. ENGINEERS DRAWINGS INDICATE STRUCTURAL ELEMENTS ONI Y

. DO NOT SCALE THIS DRAWING. ALL DIMENSIONS ARE IN MILLIMETRES. THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE BEFORE CARRYING OUT ANY WORKS.

ALL EXISTING DETAILS AND DIMENSIONS INDICATED ON THIS DRAWING ARE FOR GUIDANCE ONLY AND ARE TO BE CHECKED ON SITE BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST TAKE ALL NECESSARY

PRECAUTIONS TO ENSURE THE STABILITY OF EXISTING STRUCTURES AND THE WORKS AT ALL TIMES DURING CONSTRUCTION.

8. ALL SERVICES ARE TO BE LOCATED AND PROTECTED AS NECESSARY BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF THE WORKS.

THIS DRAWING IS FOR THE PRIVATE AND CONFIDENTIAL USE OF THE CLIENT FOR WHOM IT WAS UNDERTAKEN AND IT SHOULD NOT BE REPRODUCED IN WHOLE OR IN PART OR RELIED UPON BY THIRD PARTIES FOR ANY USE WITHOUT THE EXPRESS WRITTEN AUTHORITY OF J P CHICK AND PARTNERS LIMITED. RAINAGE NOTES

ALL PRIVATE DRAINAGE WORKS SHALL BE IN ACCORDANCE WITH 'THE BUILDING REGULATIONS APPROVED DOCUMENT H' AND BRITISH STANDARD EN

2. PRIOR TO COMMENCEMENT OF THE WORKS THE CONTRACTOR SHALL LIAISE WITH ALL RELEVANT AUTHORITIES TO OBTAIN THEIR REQUIREMENTS AND TO OBTAIN APPROVAL FOR HIS METHOD OF WORKING AND WHERE APPROPRIATE HIS INTENDED CHOICE OF MATERIALS.

3. ALL MATERIALS, UNLESS OTHERWISE SPECIFIED, SHALL COMPLY WITH THE RELEVANT BRITISH STANDARD. SOURCES OF MATERIALS ARE TO BE AGREED WITH THE EMPLOYERS REPRESENTATIVE/ENGINEER IN ADVANCE OF THE WORKS

4. PRIOR TO COMMENCEMENT OF THE WORKS ALL DRAINAGE OUTFALL POINTS, WHETHER EXISTING SEWER, DRAIN OR WATERCOURSE, SHALL BE VERIFIED ON SITE BY THE CONTRACTOR IF THE OUTFALL POINT IS FOUND TO BE HIGHER OR SIGNIFICANTLY LOWER THAN SHOWN ON THE DRAWINGS THEN THE ENGINEER IS TO BE NOTIFIED (SIGNIFICANT REDESIGN OF DRAINAGE AND LEVELS MAY BE NECESSARY)

5. ALL WORKS TO NEW OR EXISTING PUBLIC SEWERS SHALL BE TO THE APPROVAL OF THE WATER AUTHORITY AND IN ACCORDANCE WITH `SEWERS FOR ADOPTION' THE LATEST EDITION.

6. ALL COVER LEVELS SHOWN ON THIS DRAWING ARE APPROXIMATE. EXACT LEVELS OF NEW COVERS AND FRAMES TO BE DETERMINED ON SITE TO MATCH LEVEL AND PROFILE OF FINISHED SURFACE.

7. ALL COVERS, GRATINGS AND FRAMES TO CHAMBERS, GULLIES, CHANNELS etc. SHALL BE OF THE CORRECT LOAD CLASS TO SUIT THEIR LOCATION.

LOAD CLASS A15 VEHICLES). LOAD CLASS B125 LOAD CLASS C250

LOAD CLASS D400

PRIVATE DRIVES. LIGHTLY TRAFFICKED ROADS. MAIN ROADS

PEDESTRIAN AREAS (NOT ACCESSIBLE BY

8. THE CONTRACTORS ATTENTION IS DRAWN TO DIAGRAMS 7 AND 8 OF `THE BUILDING REGULATIONS APPROVED DOCUMENT H' SHOWING DETAILS OF DRAINS LAID BELOW AND NEAR TO BUILDINGS. WHERE GROUND BEAMS ARE USED THEIR LEVEL SHALL BE SET TO AVOID CLASHING WITH DRAIN CONNECTIONS.

9. FOR THE EXACT LOCATION OF SOIL PIPES, STUBSTACKS W.C. 'S AND OTHER DRAINAGE CONNECTIONS REFER TO M&E/ARCHITECTS DRAWINGS.

10. ALL PIPES TO BE 100mmØ @ 1:80 UNLESS NOTED OTHERWISE.

11. ALL BEDDING AND SURROUND TO BE GRANULAR U.N.O. IN LANDSCAPED AREAS WHERE PIPES HAVE LESS THAN 600mm COVER PROVIDE CONCRETE BEDDING AND SURROUND. IN ROADS AND CAR PARKS PROVIDE CONCRETE BEDDING AND SURROUND WHERE COVER IS LESS THAN 900mm



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PROPOSED RESIDENTIAL DEVELOPMENT, HILL HOUSE LANE, NEEDHAM MARKET. Drawing Title

## DRAINAGE LAYOUT SHEET 1 of 2

Scale	Checked		Date	
1:250 @ A1				
Date	Drawn By			
MAY 2021	GJB			
Drawing Number IA21/08	5/210		<sup>Rev</sup> P2	

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