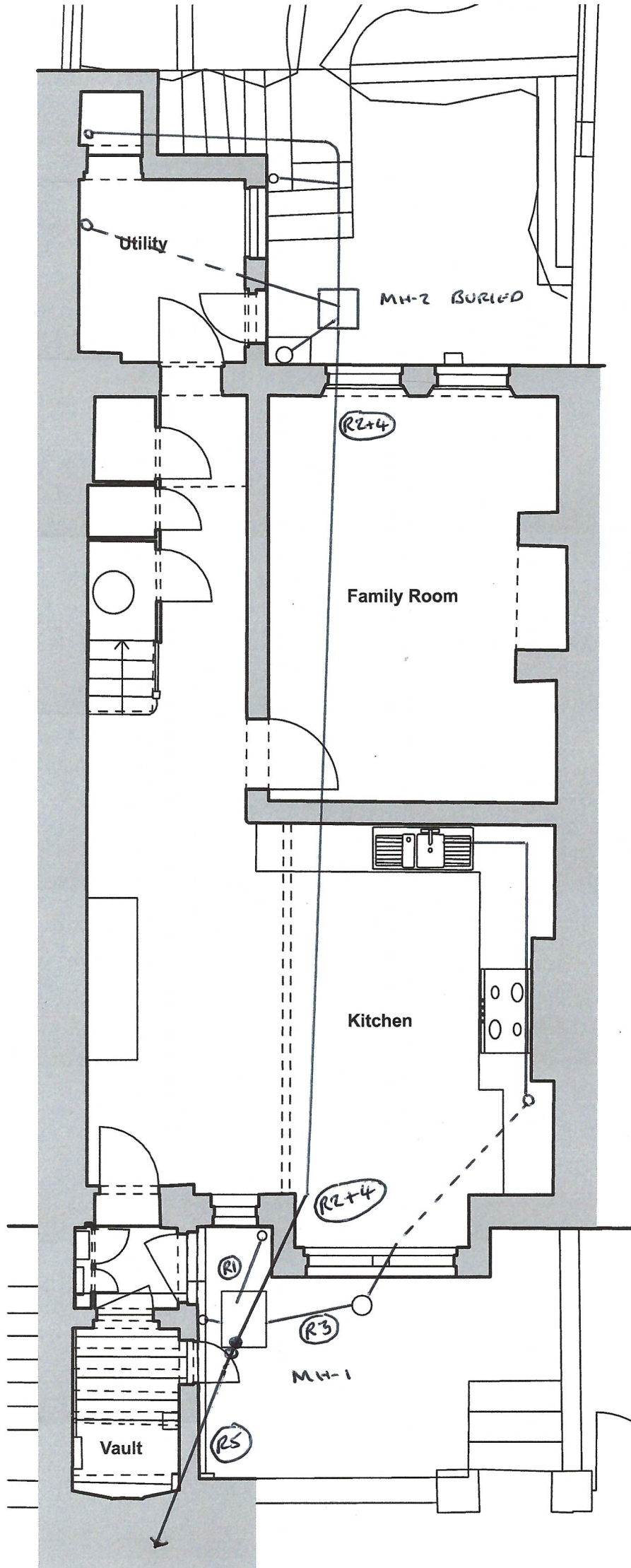




G1



G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

MANHOLE SURVEY

CLIENT. ELLIOTTWOOD	LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY
DATE 07/11/22	JOB. CV.02537

MANHOLE NO.01

COVER 680X530mm

CHAMBER 800X500mm

C100 PVC
DEPTH 280mm

C150 VC
DEPTH 1260mm

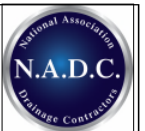


C100 VC
DEPTH 1270mm

C100 VC
DEPTH 980mm



G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

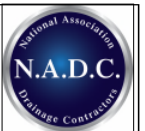
PHOTOS

CLIENT.	ELLIOTTWOOD	LOCATION.	22 KEMPLAT ROAD LONDON NW3 1SY
DATE	07/11/22	JOB.	CV.2537





G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

PHOTOS

CLIENT.	ELLIOTTWOOD	LOCATION.	22 KEMPLAT ROAD LONDON NW3 1SY
DATE	07/11/22	JOB.	CV.2537





G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

PHOTOS

CLIENT. ELLIOTTWOOD	LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY
DATE 07/11/22	JOB. CV.2537





PHOTOS

CLIENT.	ELLIOTTWOOD	LOCATION.	22 KEMPLAT ROAD LONDON NW3 1SY
DATE	07/11/22	JOB.	CV.2537





G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

INSPECTION REPORT

CLIENT. ELLIOTTWOOD

LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY

JOB NO.	RUN NUMBER	DATE	SEWER USE	DEPTH	DIRECTION	PIPE SIZE	MATERIAL	WEATHER	CLEANED	OPERATOR	PAGE
CV.2537	01	07/11/22	COMBINED	280mm	UPSTREAM	100mm	PVC	DRY	NO	GO	1

START

FINISH

ST. MANHOLE No. 01 CONNECTION- 1

FH. UPSTREAM

CHAINAGE	CODE	OBSERVATION
----------	------	-------------

MH-01

000.0	ST	START OF SURVEY
000.0	WL	WATER LEVEL 05%
001.3	LU	LINE OF DRAIN DEVIATES UP (SHARP)
001.3	FH	FINISH OF SURVEY



END OF RUN NO.01

U/ST



INSPECTION REPORT

CLIENT. ELLIOTTWOOD

LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY

JOB NO.	RUN NUMBER	DATE	SEWER USE	DEPTH	DIRECTION	PIPE SIZE	MATERIAL	WEATHER	CLEANED	OPERATOR	PAGE
CV.2537	02	07/11/22	COMBINED	1260mm	UPSTREAM	150mm	V/CLAY	DRY	NO	GO	1

START

FINISH

ST. MANHOLE No. 01 CONNECTION- 2

FH. UPSTREAM

CHAINAGE	CODE	OBSERVATION
----------	------	-------------

MH-01



000.0	ST	START OF SURVEY
000.0	WL	WATER LEVEL 05%
000.3	LL	LINE OF DRAIN DEVIATES LEFT (SLIGHT)
004.4	DEE	ATTACHED DEPOSITS, ENCRUSTATION FROM 11 TO 01 O'CLOCK 05%
011.6	MH	MANHOLE NO.02 BURIED
012.3	REM	GENERAL REMARK (END OF CHAMBER)
013.4	JN	JUNCTION AT 09 O'CLOCK, DIAMETER 100mm
013.4	DEE	ATTACHED DEPOSITS, ENCRUSTATION FROM 05 TO 07 O'CLOCK 10%
014.5	DES	SETTLED DEPOSITS FINE 10%
014.5	FH	FINISH OF SURVEY

END OF RUN NO.02

U/ST



G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

INSPECTION REPORT

CLIENT. ELLIOTTWOOD

LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY

JOB NO.	RUN NUMBER	DATE	SEWER USE	DEPTH	DIRECTION	PIPE SIZE	MATERIAL	WEATHER	CLEANED	OPERATOR	PAGE
CV.2537	03	07/11/22	COMBINED	980mm	UPSTREAM	100mm	V/CLAY	DRY	NO	GO	1

START

FINISH

ST. MANHOLE No. 01 CONNECTION- 3

FH. UPSTREAM

CHAINAGE	CODE	OBSERVATION
----------	------	-------------

MH-01

000.0	ST	START OF SURVEY
000.0	WL	WATER LEVEL 05%
000.5	H	HOLE IN DRAIN AT 01 O'CLOCK
000.7	LU	LINE OF DRAIN DEVIATES UP (SHARP)
000.7	FH	FINISH OF SURVEY (GULLY)



GULLY

END OF RUN NO.03



INSPECTION REPORT

CLIENT. ELLIOTTWOOD

LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY

JOB NO.	RUN NUMBER	DATE	SEWER USE	DEPTH	DIRECTION	PIPE SIZE	MATERIAL	WEATHER	CLEANED	OPERATOR	PAGE
CV.2537	04	07/11/22	COMBINED	1260mm	UPSTREAM	150mm	V/CLAY	DRY	NO	GO	1

START

FINISH

ST. MANHOLE No. 01 CONNECTION- 2

FH. UPSTREAM

CHAINAGE	CODE	OBSERVATION
----------	------	-------------

MH-01

RE SURVEY AFTER MORE JETTING

000.0	ST	START OF SURVEY
000.0	WL	WATER LEVEL 05%
000.3	LL	LINE OF DRAIN DEVIATES LEFT (SLIGHT)
004.4	DEE	ATTACHED DEPOSITS, ENCRUSTATION FROM 11 TO 01 O'CLOCK 05%
011.6	MH	MANHOLE NO.02 BURIED
012.3	REM	GENERAL REMARK (END OF CHAMBER)
013.4	JN	JUNCTION AT 09 O'CLOCK, DIAMETER 100mm
013.4	DEE	ATTACHED DEPOSITS, ENCRUSTATION FROM 05 TO 07 O'CLOCK 10%
014.1	LL	LINE OF DRAIN DEVIATES LEFT (SLIGHT)
014.3	JN	JUNCTION AT 09 O'CLOCK, DIAMETER 100mm
014.5	FH	FINISH OF SURVEY

END OF RUN NO.04

U/ST



INSPECTION REPORT

CLIENT. ELLIOTTWOOD

LOCATION. 22 KEMPLAT ROAD LONDON NW3 1SY

JOB NO.	RUN NUMBER	DATE	SEWER USE	DEPTH	DIRECTION	PIPE SIZE	MATERIAL	WEATHER	CLEANED	OPERATOR	PAGE
CV.2537	05	07/11/22	COMBINED	1270mm	DOWNSTREAM	100mm	V/CLAY	DRY	NO	GO	1

START

FINISH

ST. MANHOLE No. 01 CONNECTION- X FH. MAIN SEWER

CHAINAGE	CODE	OBSERVATION
----------	------	-------------

MH-01

ACCESS 100mm RODDING EYE

000.0	ST	START OF SURVEY
000.0	WL	WATER LEVEL 05%
000.4	JN	JUNCTION AT 06 O'CLOCK,DIAMETER 150mm TRAP
000.4	SC	DIMENSION OF DRAIN CHANGES TO 150mm
001.0	LL	LINE OF DRAIN DEVIATES LEFT (SLIGHT)
001.1	JN	JUNCTION AT 03 O'CLOCK,DIAMETER 100mm
002.1	RFJ	ROOTS FINE AT JOINT
003.6	RFJ	ROOTS FINE AT JOINT
004.3	RFJ	ROOTS FINE AT JOINT
005.6	RFJ	ROOTS FINE AT JOINT
006.9	RFJ	ROOTS FINE AT JOINT
008.0	LL	LINE OF DRAIN DEVIATES LEFT (SLIGHT)
008.0	LD	LINE OF DRAIN DEVIATES DOWN (SHARP)
009.2	FH	FINISH OF SURVEY MAIN SEWER

END OF RUN NO.04

MAIN SEWER



G.O. DRAINAGE SERVICES LTD



53 PREMIER AVENUE GRAYS RM16 2SJ TEL:01375 373302 MOB:07792 815977 E-MAIL: godrainage@aol.com

SUMMARY AND RECOMMENDATIONS

CLIENT.	ELLIOTTWOOD	LOCATION.	22 KEMPLAT ROAD LONDON NW3 1SY
DATE	07/11/22	JOB.	CV.2537

RUN NO.01 NO WORK NEEDED

RUN NO.02 DEBRIS SCALE

RUN NO.03 HOLE IN PIPE

RUN NO.04 DEBRIS SCALE

RUN NO.05 ROOTS FINE AT JOINTS

DRAIN & PIPEWORK CCTV SURVEYS

-

**DRAINS
PIPEWORK
CULVERTS**

**DUCTS
CHUTES
CHIMNEY FLUES
TANKS**

HIGH PRESSURE WATER JETTING

-

**SEWER & DRAIN BLOCKAGES
DESCALING
SILT REMOVAL
ROOT CUTTING
GREASE REMOVAL**

-



G.O. DRAINAGE SERVICES LTD



D Existing Surface Water Runoff Rate Calculation

Elliott Wood Partnership LTD		Page 1
241 The Broadway London SW19 1SD		
Date 16/11/2022 14:18 File 2220303 - Existing Drainage M...	Designed by h.hunter Checked by	
Innovyze	Network 2020.1.3	

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	100	PIMP (%)	100
M5-60 (mm)	21.000	Add Flow / Climate Change (%)	0
Ratio R	0.438	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	12.219	0.700	17.5	0.007	4.00	0.0	0.600	o	150	Pipe/Conduit	
S1.001	3.260	0.041	80.0	0.005	0.00	0.0	0.600	o	150	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	50.00	4.08	87.650	0.007	0.0	0.0	0.0	2.42	42.8	0.9
S1.001	50.00	4.13	86.840	0.012	0.0	0.0	0.0	1.12	19.9	1.6