

CALCULATIONS:

Percolation Rate = <2 Min./Inch
 Flow = 4 (Bedrooms) x 110 (G.P.D.) x 1.0 (No Garbage Disposal)
 = 440 Gals. per Day

For <2 Min./Inch Perc. rate, Soil Type I
 Sidewall Area = 0.74 Gal./Sq. Ft.
 Bottom Area = 0.74 Gal./Sq. Ft.

USE 2 TRENCHES
 Each Trench → 46 Feet Long 2.5 Feet Wide 2 Feet Deep

SIDEWALL AREA
 (46 Ft. Long x 2 Ft. Deep) x (2 Sides) x (2 Trenches) = 368 Sq. Ft.

BOTTOM AREA
 (46 Ft. Long x 2.5 Ft. Wide) x (2 Trenches) = 230 Sq. Ft.

Total = 598 Sq. Ft.

Actual Allowable G.P.D. based on design dimensions:
 Sidewall = 368 Sq. Ft. x 0.74 Gal./Sq. Ft. = 272 Gal.
 Bottom = 230 Sq. Ft. x 0.74 Gal./Sq. Ft. = 170 Gal.

SYSTEM CAPACITY = 442 G.P.D.

NOTE:
 ALL COMPONENTS OF THE SEPTIC SYSTEM TO BE STAKED OUT BY A REGISTERED LAND SURVEYOR PRIOR TO CONSTRUCTION

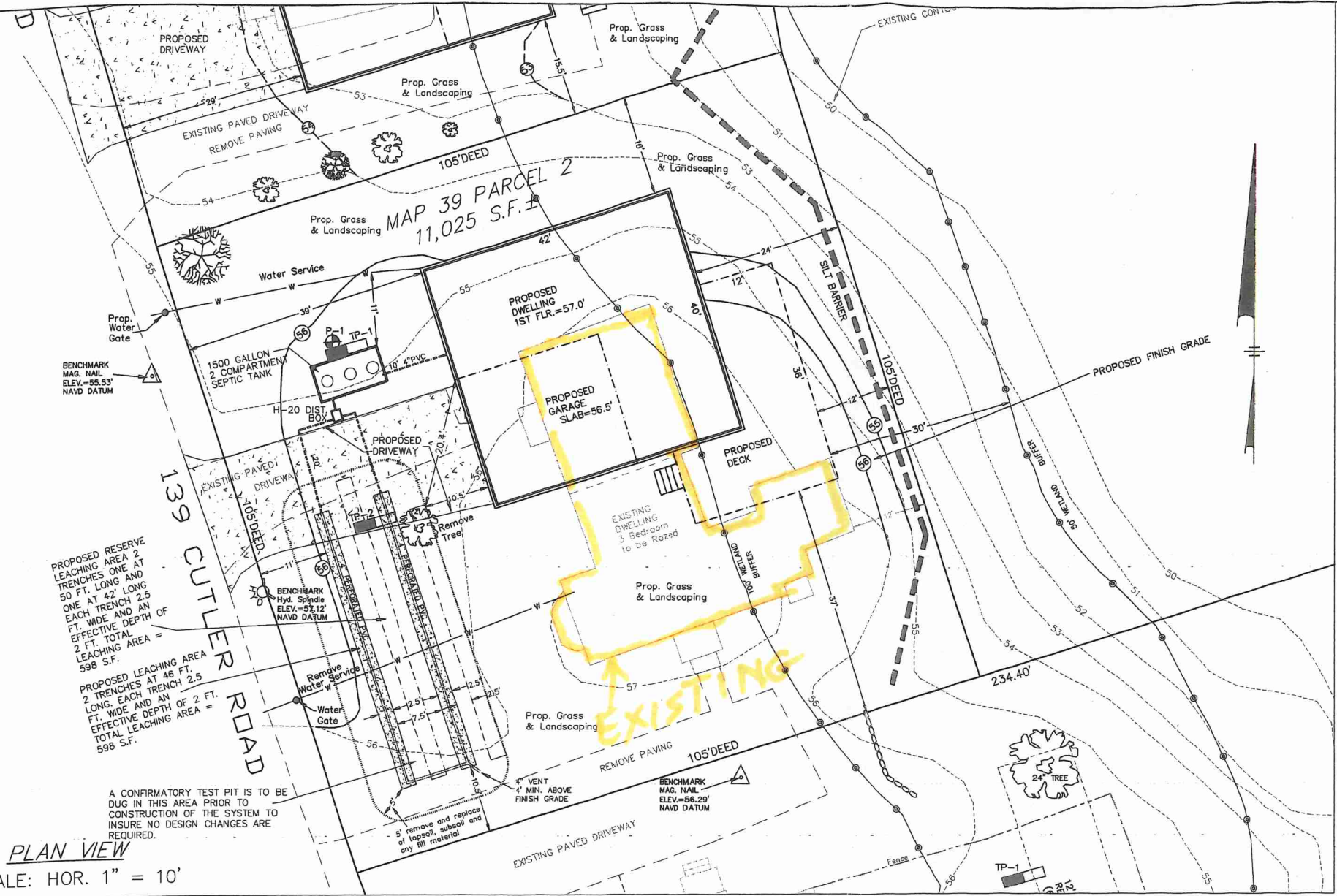
NOTE:
 NO CHANGES ARE TO BE MADE IN THE FIELD WITHOUT THE APPROVAL OF THE BOARD OF HEALTH OR ITS DESIGNEE AND THE DESIGN ENGINEER

MAGNETIC LOCATING/MARKING TAPE SHALL BE INSTALLED OVER ALL COMPONENTS OF THE SUBSURFACE SYSTEM PRIOR TO BACKFILLING

ATLANTIC ENGINEERING AND SURVEY CONSULTANTS INC. HAS BEEN RETAINED TO DESIGN A SUBSURFACE SEWAGE DISPOSAL SYSTEM, BUT HAS NOT BEEN RETAINED TO CONSTRUCT OR SUPERVISE THE CONSTRUCTION OF THE SYSTEM. AS SUCH NO GUARANTEE OR WARRANTY EXPRESSED OR IMPLIED IS MADE TO ANY OWNER OF THIS SYSTEM INSTALLED PURSUANT TO THE PLAN.

CONSTRUCTOR MUST NOTIFY ATLANTIC ENGINEERING & SURVEY CONSULTANTS, INC. OF ANY SITE CONDITIONS DIFFERING FROM THOSE INDICATED HEREON.

THE LOCATION OF THE EXISTING SEPTIC SYSTEM IS UNKNOWN. IF IT IS ENCOUNTERED DURING THE COURSE OF CONSTRUCTION IT IS TO BE REMOVED/ABANDONED IN ACCORDANCE WITH TITLE 5.



PROPOSED RESERVE LEACHING AREA 2 TRENCHES ONE AT 42' LONG AND 50 FT. LONG AND ONE AT 42' LONG AND 50 FT. LONG EACH TRENCH 2.5 FT. WIDE AND AN EFFECTIVE DEPTH OF 2 FT. TOTAL LEACHING AREA = 598 S.F.

PROPOSED LEACHING AREA 2 TRENCHES AT 46 FT. LONG, EACH TRENCH 2.5 FT. WIDE AND AN EFFECTIVE DEPTH OF 2 FT. TOTAL LEACHING AREA = 598 S.F.

A CONFIRMATORY TEST PIT IS TO BE DUG IN THIS AREA PRIOR TO CONSTRUCTION OF THE SYSTEM TO INSURE NO DESIGN CHANGES ARE REQUIRED.

PLAN VIEW
 SCALE: HOR. 1" = 10'

SOILS TEST DATA					SEPT. 15, 2020				
PERFORMED BY: ATLANTIC ENGINEERING					LESLIE WHELAN(BOH AGENT)				
SOIL EVALUATOR: JOHN PAULSON									
TP-1	ELEV.=54.88				TP-2	ELEV.=55.25			
HORIZON	DEPTH	COLOR	TEXTURE	ELEV.	HORIZON	DEPTH	COLOR	TEXTURE	ELEV.
A	0-12	7.5YR-3/2	FSL		FILL/A	0-8			
B	12-24	7.5YR-6/4	FSL		FILL/A	8-14			
C-1	24-46	10YR-6/5	LS		FILL	14-26			
C-2	46-84	10YR-5/4	FS		A/b	26-34			
C-3	84-96	10YR-4/4	S 10% COBBLES		C-1	34-49	10YR-5/4	LS	
MOTTLES	NA			NA	C-2	49-96	10YR-4/4	S 5% COBBLES	
WATER	NA	WEEPING	NA		WATER	NA	WEEPING	NA	

PERCOLATION TEST DATA	
9/15/2020	
PERC TEST # P1	DEPTH = 15" + 18"
	RATE: 3 MINUTES/INCH
DESIGN RATE: 3 MIN./INCH	

LEGEND

Original Contour 100

Finish Contour 100

Existing Grade 100X0

Finish Grade 100.0

DESIGN CRITERIA: 110 G.P.D./BR.
LOCAL CODE: 110 G.P.D./BR.
TYPE OF BUILDING: (4 Br. Design)

SEWAGE FLOW ESTIMATE: 440 G.P.D.
GARBAGE GRINDER NOT ALLOWED
SEPTIC TANK: 1500 Gallons



DATE: JAN. 12, 2021

Rev. 10/04/2021 NEW HOUSE

Rev. 11/4/21 BOH COMMENTS

ENGINEER:
ATLANTIC ENGINEERING & SURVEY CONSULTANTS INC.
 97 TENNEY STREET * GEORGETOWN, MA. 01833
 TEL. # (978) 352-7870 FAX # (978) 352-9940

PROPOSED SEPTIC DISPOSAL SYSTEM

139 CUTLER ROAD
HAMILTON, MA

NEW CONST.: REPAIR:

DATE: JAN. 12, 2021 ASSESSOR REF: MAP 39, LOT 2

OWNER: FLAMINIO LANZILLO APPLICANT: FLAMINIO LANZILLO
 78 MILL STREET 78 MILL STREET
 MIDDLETON, MA 01949 MIDDLETON, MA 01949

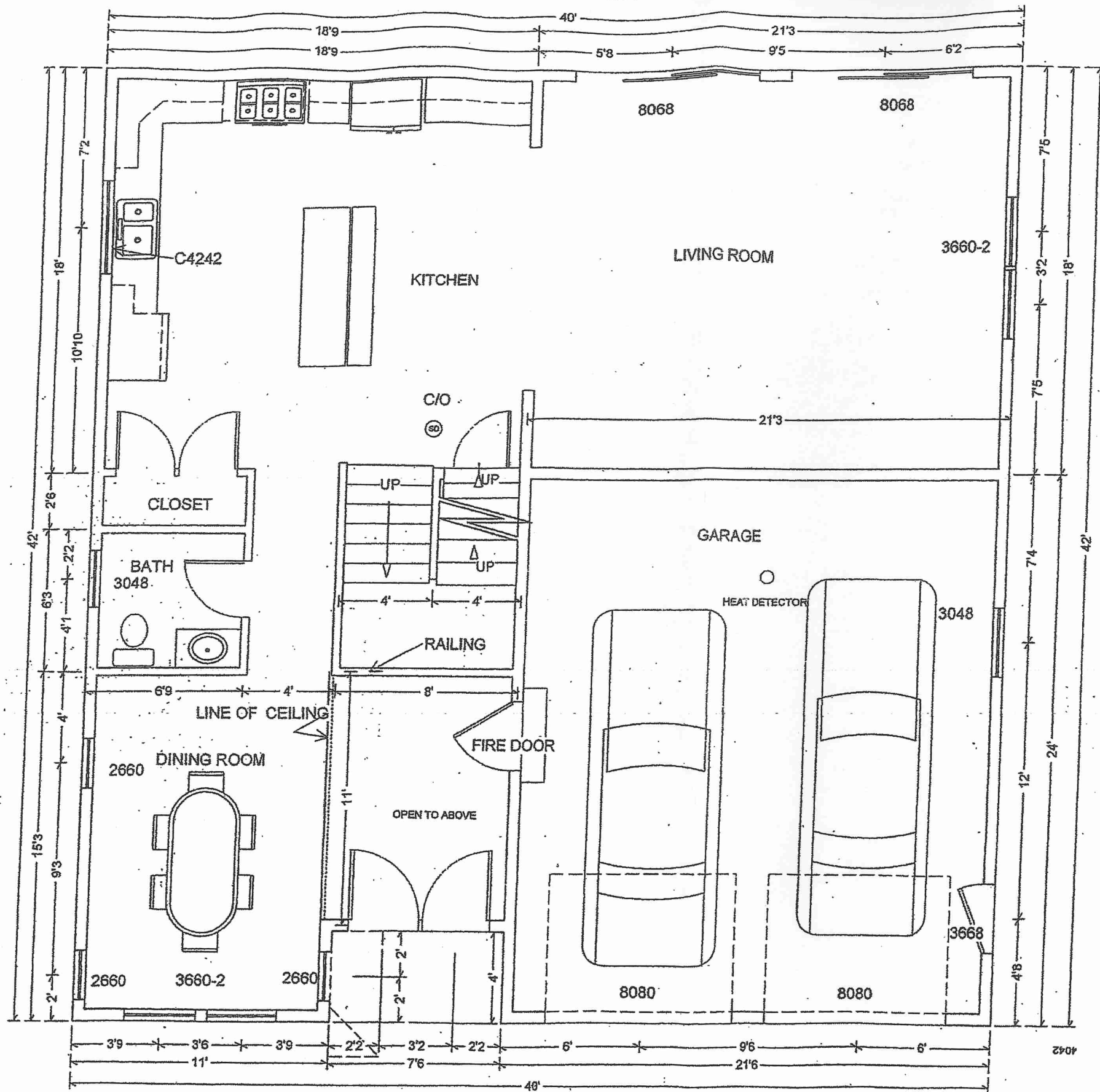
JOB NO: A2107-01 DRAWING FILE NO: SE094\139-145CUTLER.DWG

SHEET 1 of 2

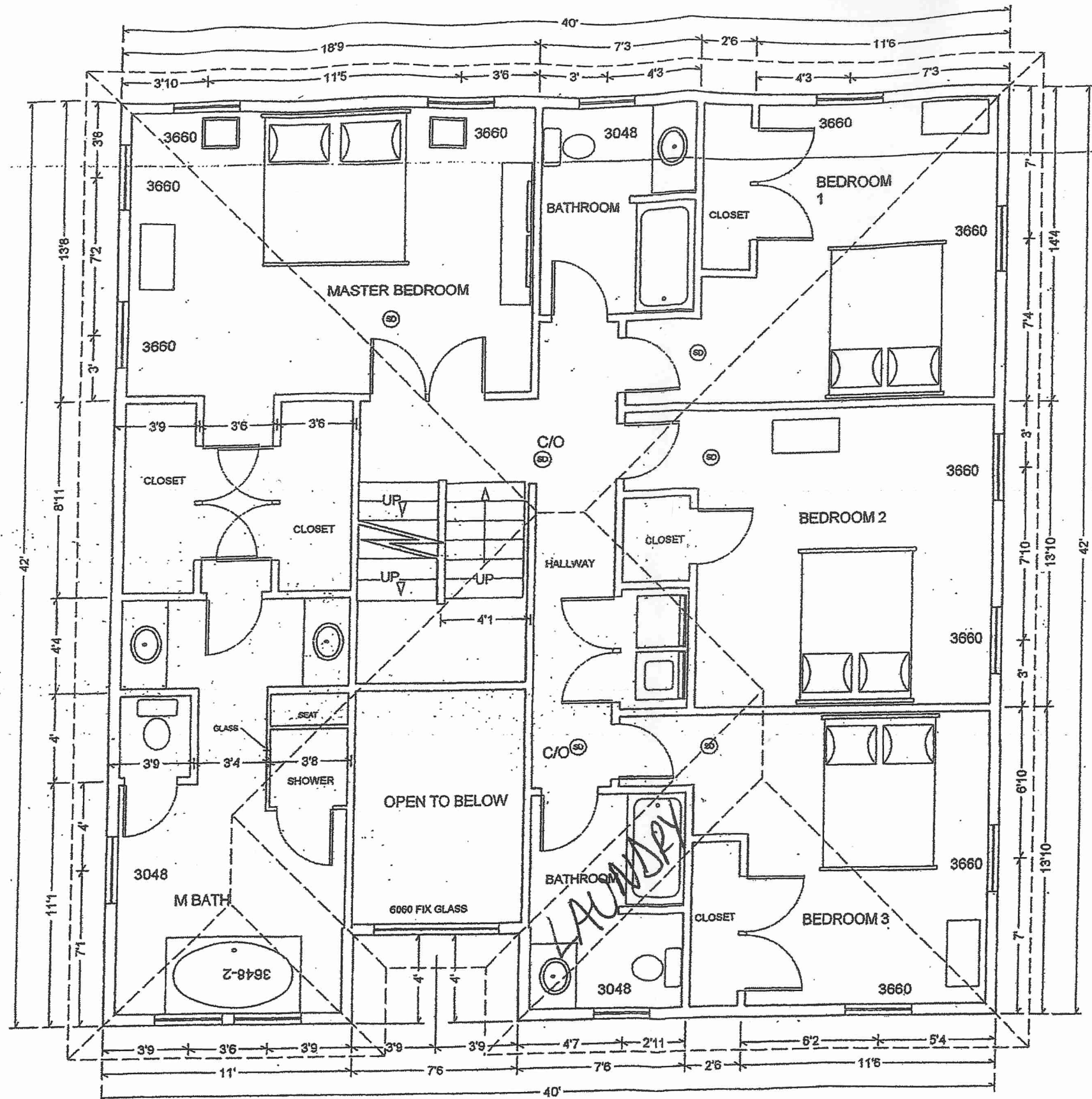


139 Cutler Rd Hamilton

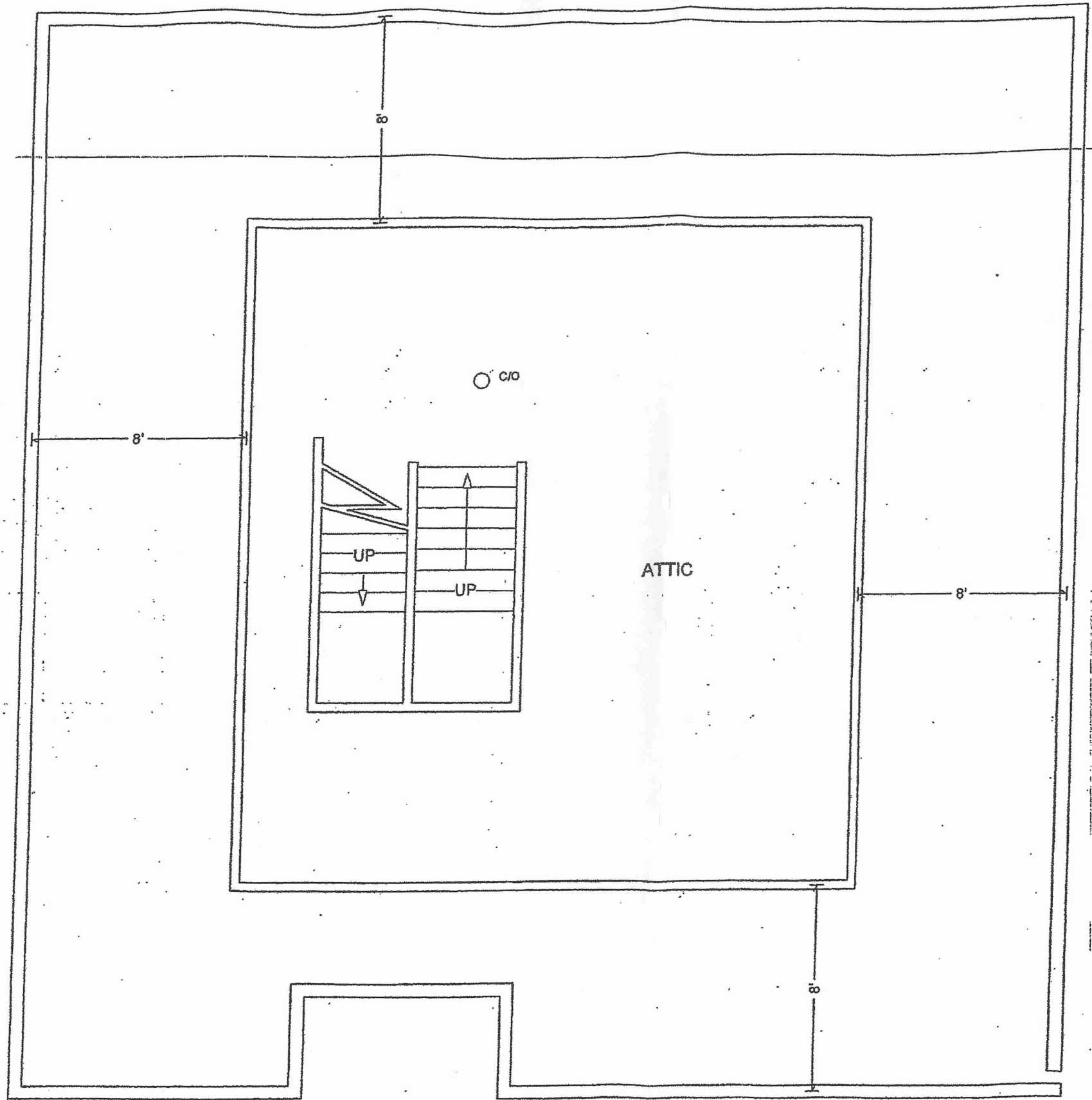
SCALE:	APPROVED BY:	DRAWN BY:
DATE:		REVISED:
FRONT ELEVATION		
1	DRAWING NUMBER	PAGE #1



SCALE:	APPROVED BY:	DRAWN BY:
DATE:		REVISED:
1 ST FLOOR PLAN		
DRAWING NUMBER		PAGE # 2



SCALE:	APPROVED BY:	DRAWN BY:
DATE:		REVISED:
2 ND FLOOR PLAN		
		PAGE # 9



SCALE:	APPROVED BY:	DRAWN BY:
DATE:		REVISED:
ATTIC PLAN		
DRAWING NUMBER		PAGE 5