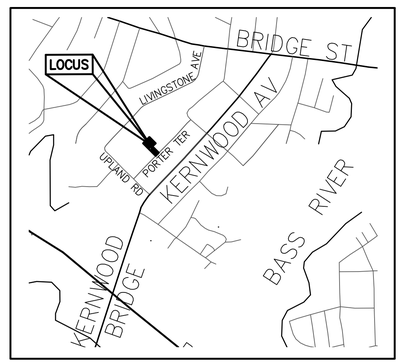
DEFINITIVE SUBDIVISION PLAN

21 PORTER TERRACE

Beverly, MA



VICINITY MAP

SCALE: 1" = 800'

OWNER:

JEFFERY HOLLORAN
100 CABOT STREET, BEVERLY MA

WAIVERS:

1. SECTION III.C.2: PLAN SCALE REQUIRED IS 1"=40'. PLAN SCALE OF 1"=20' PROVIDED.
2. SECTION IV.A.2.B: MIN. 300' CENTERLINE RADIUS REQUIRED. EXISTING WAY HAS NO RADIUS.
3. SECTION IV.A.3: MIN. 50' R.O.W. & 32' PAVED WIDTH. A 40' R.O.W. EXISTS & 24' PAVED WIDTH IS PROPOSED.
4. SECTION IV.A.5.B: CUL-DE-SAC REQUIRED AT DEAD END STREET. EXIST: 24'X24' TURNAROUND EASEMENT EXISTS @ 126 LEXINGTON AVE.
5. SECTION IV.J: UNDERGROUND UTILITIES. OVERHEAD ELECTRIC, TELEPHONE, AND CABLE SERVICES PROPOSED.
6. SECTION V.D.: SIDEWALKS. NONE PROPOSED.
7. SECTION V.E.: GRANITE CURBS. BITIMINOUS BERM OR NO BERM PROPOSED.
8. SECTION V.G.: STREET TREES. NONE PROPOSED.
9. SECTION V.K.: FIRE ALARM SYSTEM. NONE PROPOSED.

FOR REGISTRY USE

I, _____, CLERK OF THE CITY OF BEVERLY, DO HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ DATE

_____ CLERK OF CITY OF BEVERLY

SHEET INDEX

SHEET 1..... TITLE SHEET
SHEET 2..... PLAN OF LAND
SHEET 3..... SITE PLAN
SHEET 4..... DETAILS

BEVERLY PLANNING BOARD

_____
_____
_____
_____
_____
_____
_____

DATE: _____

DEFINITIVE SUBDIVISION OF 21 PORTER TERRACE

Beverly, Massachusetts 01915

ASSESSORS:

MAP	LOT
9	373

PREPARED FOR:

JEFFREY HOLLORAN

100 Cabot Street
Beverly, Massachusetts 01915

HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

185 CENTRE STREET, DANVERS, MA 01923
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM

COMMONWEALTH OF MASSACHUSETTS
DEBORAH L. COLBERT
ENVIRONMENTAL
No. 37073
REGISTERED PROFESSIONAL ENGINEER

NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DATE:	10/10/19	DESIGN BY:	TJR
SCALE:	AS SHOWN	DRAWN BY:	TJR/JJP
APPRVD. BY:	DLC	CHECK BY:	JP

TITLE SHEET

PLOT DATE: Oct 10, 2019 1:28 pm
PATH: F:\Civil 3D Projects\22493 - Holloran - Beverly\DWG\

DWG: 22493 DS.dwg	1
LAYOUT: TS	
SHEET: 1 OF 4	
PROJECT NO.:	22493

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE PROFESSIONAL LAND SURVEYOR

FOR REGISTRY USE

LEGEND

	EDGE OF PAVEMENT
I.ROD	IRON ROD
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
(HELD)	HELD DIMENSION

ASSESSORS: MAP 9, LOT 373

REFERENCES:

DEED BOOK 37067, PAGE 331
DEED BOOK 37400, PAGE 139 (DECISION ON VARIANCE)
1) PLAN BOOK 24, PLAN 16
2) DEFINITIVE SUBDIVISION PLAN FOR LIVINGSTONE AVENUE IMPROVEMENT, REVISED TO MARCH 2019 BY GRIFFIN ENGINEERING GROUP LLC ON FILE AT THE CITY OF BEVERLY PLANNING BOARD

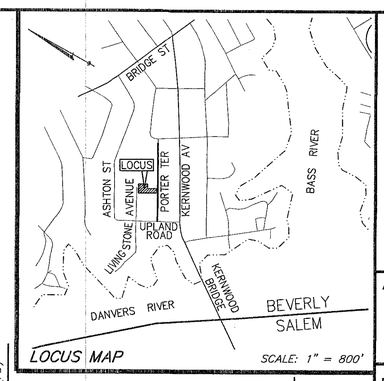
RECORD OWNER: BEVERLY BUILDERS, LLC

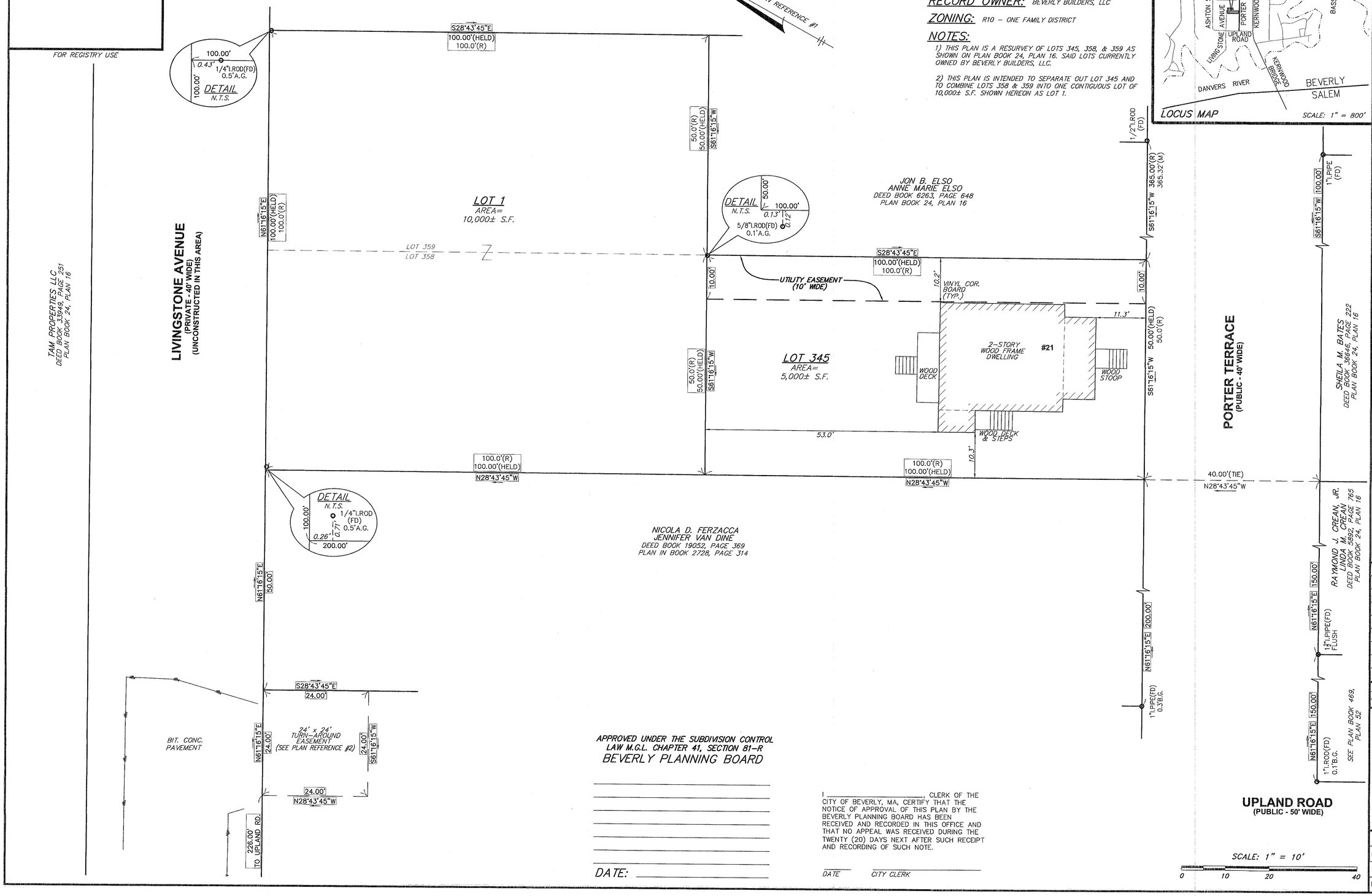
ZONING: R10 – ONE FAMILY DISTRICT

NOTES:

1) THIS PLAN IS A RESURVEY OF LOTS 345, 358, & 359 AS SHOWN ON PLAN BOOK 24, PLAN 16. SAID LOTS CURRENTLY OWNED BY BEVERLY BUILDERS, LLC.

2) THIS PLAN IS INTENDED TO SEPARATE OUT LOT 345 AND TO COMBINE LOTS 358 & 359 INTO ONE CONTIGUOUS LOT OF 10,000± S.F. SHOWN HEREON AS LOT 1.





APPROVED UNDER THE SUBDIVISION CONTROL LAW M.G.L. CHAPTER 41, SECTION 81-R
BEVERLY PLANNING BOARD

DATE: _____

I _____, CLERK OF THE CITY OF BEVERLY, MA, CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE BEVERLY PLANNING BOARD HAS BEEN RECEIVED AND RECORDED IN THIS OFFICE AND THAT NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SUCH NOTE.

DATE CITY CLERK

DEFINITIVE SUBDIVISION OF 21 PORTER TERRACE

Beverly, Massachusetts 01915

ASSESSORS:

MAP	LOT
9	373

PREPARED FOR:

JEFFREY HOLLORAN

100 Cabot Street
Beverly, Massachusetts 01915

HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

185 CENTRE STREET, DANVERS, MA 01923
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM

COMMONWEALTH OF MASSACHUSETTS JOSEPH M. SANTARSIERO NO. 46843 PROFESSIONAL LAND SURVEYOR

10-10-19

NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DATE: 10/10/19	DRAWN BY: EME
SCALE: 1" = 10'	CHECK BY: JMS

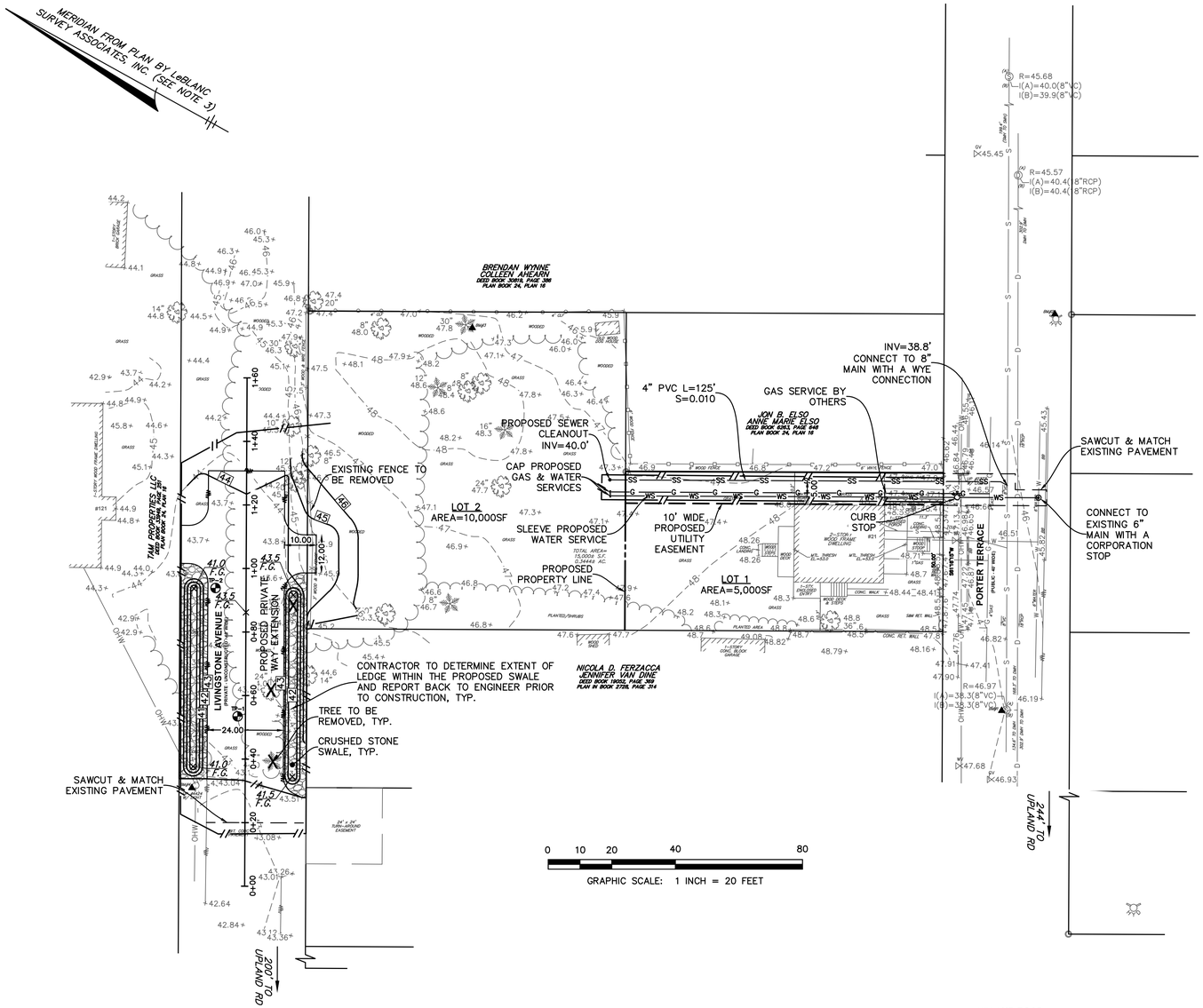
PLAN OF LAND IN BEVERLY, MA

PLOT DATE: Oct 10, 2019 4:23 pm
PATH: F:\Civil 3D Projects\22493 – Holloran – Beverly\DWG\

DWG: 22493sd.dwg
LAYOUT: SD
SHEET: 2 OF 4

2

PROJECT NO.: 22493



LEGEND

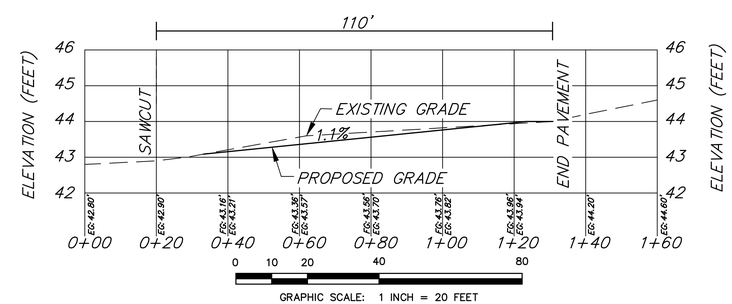
EXISTING		PROPOSED
102	SURFACE CONTOUR	
	EDGE OF PAVEMENT	
x x x	WIRE FENCE	
	CHAIN LINK FENCE	
	VINYL FENCE	
86.75 / 86.25	CURB WITH TOP AND BOTTOM CURB ELEVATION	
S 8"CI S	SEWERLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION	SS 8" PVC SS
D 18"RCP D	DRAINLINE & MANHOLE WITH PIPE SIZE, MATERIAL & FLOW DIRECTION	
WV W	WATER MAIN WITH GATE VALVE, FIRE HYDRANT, CURB STOP AND CORPORATION STOP	WV WS
GV G 4"MAIN	GAS MAIN WITH SIZE & GATE VALVE	GV G
UPOLE #4424 OHW	UTILITY POLE WITH DESIGNATION & OVERHEAD WIRES	
	EDGE OF WOODED AREA	
	STONE RETAINING WALL	
98.8 / 93.2	RETAINING WALL WITH TOP AND BOTTOM ELEVATIONS	
	STONE WALL	
× 100.7	SPOT ELEVATION	43.5 F.G.
47.7 24"	PROMINENT DECIDUOUS TREE WITH SIZE	
46.7 8"	PROMINENT CONIFEROUS TREE WITH SIZE	
RCP	REINFORCED CONCRETE PIPE	
VC	VITRIFIED CLAY PIPE	
E	ELECTRIC METER	
CU	CONNECTION UNKNOWN	
I.ROD	IRON ROD	
BB	BITUMINOUS CONCRETE BERM	
BIT. CONC.	BITUMINOUS CONCRETE	
	PROPERTY LINE	
	UTILITY EASEMENT	
	SILTATION BARRIER	
	SAWCUT	
	TREE TO BE REMOVED	X
	CRUSHED STONE AREA	

SOIL TESTING RESULTS:

TP-1 (GROUND ELEV.=43.50)
0-10" Ap FINE SANDY LOAM TOP SOIL
10-24" Bw FINE SANDY LOAM
REFUSAL AT 24" (ELEV.=41.50)
NO GROUNDWATER, NO WEEPING, NO REDOX

TP-2 (GROUND ELEV.=43.65)
0-2" Ap LOAMY SAND TOP SOIL
2-15" Ab SANDY LOAM FILL
15-44" Bw FINE SANDY LOAM
44-78" 2C GRAVELLY SANDY LOAM
REFUSAL AT 78" (ELEV.=37.15)
REDOX AT 50" (ELEV.=39.48)
NO GROUNDWATER, NO WEEPING

PROFILE VIEW OF PROPOSED ROADWAY CENTERLINE



FOR REGISTRY USE

I, _____, CLERK OF THE CITY OF BEVERLY, DO HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

DATE _____ CLERK OF CITY OF BEVERLY _____

▲	ELEVATION BENCH MARKS DATUM: CITY OF BEVERLY DATUM	
NO.	DESCRIPTION	ELEV.
1.	SMH – PRICK PUNCH (SET) IN RIM	46.97
2.	HYDRANT – BOLT OVER MAIN OUTLET	48.45
3.	30" CONIFEROUS TREE – MAG (SET) 3' A.G.	50.88
4.	U.POLE #4244 – CUT SPIKE (SET) 2' A.G.	45.97

BEVERLY PLANNING BOARD

_____
_____
_____
_____
_____
_____
_____

DATE: _____

DEFINITIVE SUBDIVISION OF 21 PORTER TERRACE

Beverly, Massachusetts 01915

ASSESSORS:

MAP 9 LOT 373

PREPARED FOR:

JEFFREY HOLLORAN

100 Cabot Street
Beverly, Massachusetts 01915

HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

185 CENTRE STREET, DANVERS, MA 01923
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM

COMMONWEALTH OF MASSACHUSETTS
DEBORAH L. COLBERT
ENVIRONMENTAL
No. 37073
REGISTERED PROFESSIONAL ENGINEER

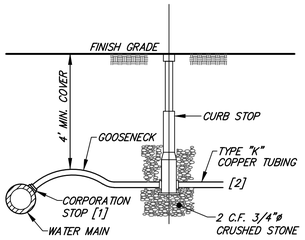
NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DATE:	10/10/19	DESIGN BY:	TJR
SCALE:	AS SHOWN	DRAWN BY:	TJR/JJP
APPRVD. BY:	DLC	CHECK BY:	JP

SITE PLAN

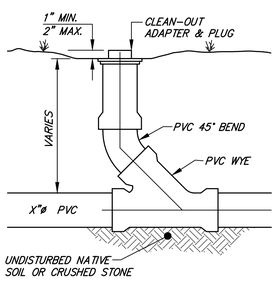
PLOT DATE: Oct 10, 2019 1:30 pm
PATH: F:\Civil 3D Projects\22493 – Holloran – Beverly\DWG\

DWG: 22493 DS.dwg	3
LAYOUT: SP	
SHEET: 3 OF 4	
PROJECT NO.:	22493

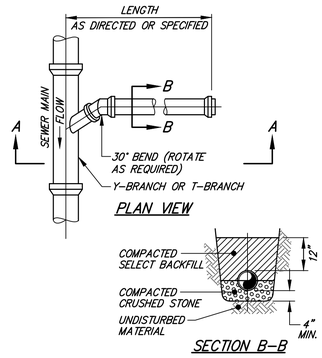


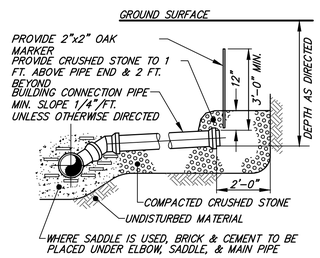
NOTES:
[1] WATER SERVICES LARGER THAN ONE INCH ARE TO BE RESTRAINED TO MAIN WITH APPROVED SADDLE.
[2] COORDINATE BUILDING CONNECTION WITH PLUMBING DRAWINGS.

WATER SERVICE
TYPICAL PROFILE
NOT TO SCALE

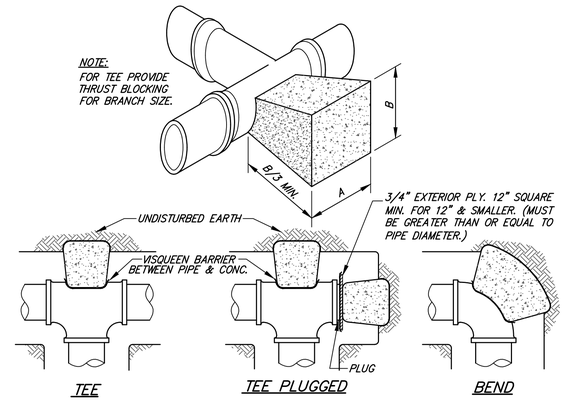


SEWER CLEANOUT
TYPICAL CROSS SECTION
NOT TO SCALE





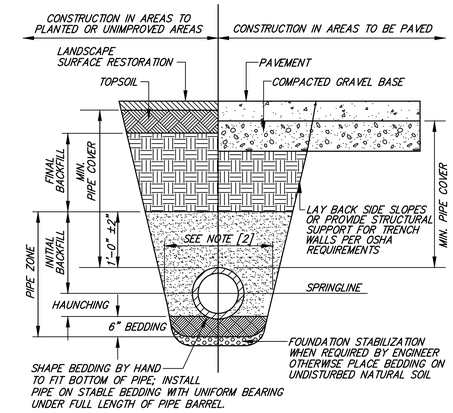
SEWER CONNECTION
NOT TO SCALE



DIMENSION FOR THRUST BLOCKING								
FITTING	TEES & PLUGS		90° BENDS		45° BENDS & "Y's"		22 1/2° BENDS	
SIZES	A	B	A	B	A	B	A	B
4"	1'-6"	1'-6"	1'-6"	1'-9"	1'-3"	0'-6"	1'-0"	0'-6"
6"	2'-0"	1'-0"	2'-0"	2'-0"	1'-3"	1'-6"	1'-0"	1'-5"
8"	2'-0"	1'-6"	2'-3"	2'-3"	1'-8"	1'-8"	1'-0"	1'-3"
10"	2'-6"	2'-3"	2'-9"	2'-10"	2'-3"	1'-10"	1'-3"	2'-0"
12"	3'-0"	2'-9"	3'-6"	3'-3"	2'-6"	2'-4"	2'-0"	1'-6"
14"	3'-5"	3'-0"	4'-0"	3'-8"	3'-6"	2'-4"	2'-0"	2'-3"

1. THIS TABLE IS BASED ON 200 P.S.I. MAIN PRESSURE AND 2000 P.S.F. SOIL-BEARING PRESSURE. ADJUST BEARING AREAS IN ACCORDANCE WITH SOIL CONDITIONS AND PRESSURES ENCOUNTERED.
2. USE VISQUEEN BARRIER BETWEEN PIPE AND CONCRETE AS SHOWN IN DETAIL ABOVE.
3. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.
4. BLOCKING SIZE/FREQUENCY SHALL BE INCREASED IF REQUIRED BY ENGINEER.

THRUST BLOCK SCHEDULE
NOT TO SCALE



FOUNDATION, BEDDING, & BACKFILL MATERIALS		
PIPE MATERIAL	HDP, PVC	RC, DI
FOUNDATION STABILIZATION	[6]	[6]
BEDDING	[1]	[1]
HAUNCHING	[1]	[1]
INITIAL BACKFILL	[1]	[1]
FINAL BACKFILL	[4]	[4]
MIN. PIPE COVER	[5]	[5]

NOTES:
[1] PLACE 3/4"± GRADED GRANULAR BACKFILL AT OPTIMUM MOISTURE IN HORIZONTAL, 8"-DEEP, LOOSE LAYERS; COMPACT TO 95% PER ASTM D-1557.
[2] MINIMUM WIDTH OF TRENCH MEASURED AT THE SPRINGLINE OF THE PIPE, INCLUDING ANY NECESSARY SHEATHING:

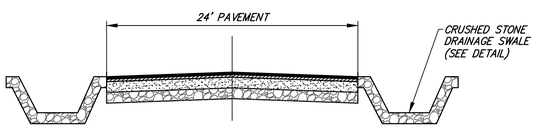
PIPE I.D.	WIDTH
LESS THAN 21"	O.D. + 12"
21" TO 42"	O.D. + 24"
GREATER THAN 42"	O.D. + 30"

[3] INSTALL PIPE IN CENTER OF TRENCH.
[4] IN PLANTED OR UNIMPROVED AREAS, USE ON-SITE EXCAVATED MATERIAL FOR FINAL BACKFILL. COMPACT TO 95% PER ASTM D-1557. IN PAVED AREAS, OBTAIN ENGINEER APROVAL OF ON-SITE EXCAVATED MATERIALS FOR USE AS FINAL BACKFILL.
[5] MINIMUM COVER OVER TOP OF PIPE:

PIPE MATERIAL	HDP, PVC	RC, DI
WATER	5'-0"	5'-0"
SEWER	4'-0"	4'-0"
DRAIN	1'-6"	1'-0"

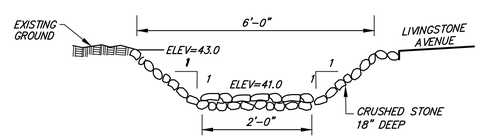
[6] FOR FOUNDATION STABILIZATION, USE 2"± CRUSHED STONE.

PIPE TRENCH
TYPICAL CROSS SECTION
NOT TO SCALE

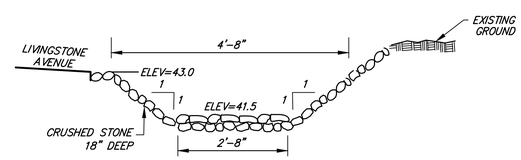


ROADWAY
1 1/2" TOP COURSE
1 1/2" BINDER COURSE
6" DENSE GRADED CRUSHED STONE
6" GRAVEL

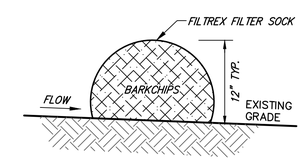
TYPICAL ROADWAY CROSS SECTION
NOT TO SCALE



DRAINAGE SWALE (N. SIDE OF LIVINGSTONE AVE)
NOT TO SCALE



DRAINAGE SWALE (S. SIDE OF LIVINGSTONE AVE)
NOT TO SCALE



SILTATION BARRIER
CROSS SECTION
NOT TO SCALE

FOR REGISTRY USE

I, _____, CLERK OF THE CITY OF BEVERLY, DO HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

_____ DATE

_____ CLERK OF CITY OF BEVERLY

BEVERLY PLANNING BOARD

_____

_____

_____

_____

_____

_____

DATE: _____

DEFINITIVE SUBDIVISION OF 21 PORTER TERRACE

Beverly, Massachusetts 01915

ASSESSORS:

MAP 9 LOT 373

PREPARED FOR:

JEFFREY HOLLORAN

100 Cabot Street
Beverly, Massachusetts 01915

HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Wetland Scientists

185 CENTRE STREET, DANVERS, MA 01923
VOICE (978) 777-3050, FAX (978) 774-7816
WWW.HANCOCKASSOCIATES.COM

COMMONWEALTH OF MASSACHUSETTS
DEBORAH L. COLBERT
ENVIRONMENTAL
No. 37073
REGISTERED PROFESSIONAL ENGINEER

NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DATE:	10/10/19	DESIGN BY:	TJR
SCALE:	AS SHOWN	DRAWN BY:	TJR/JJP
APPRVD. BY:	DLC	CHECK BY:	JP

DETAILS

PLOT DATE: Oct 10, 2019 1:31 pm
PATH: F:\Civil 3D Projects\22493 - Holloran - Beverly\DWG\

DWG: 22493 DS.dwg	4
LAYOUT: DET	
SHEET: 4 OF 4	
PROJECT NO.:	22493