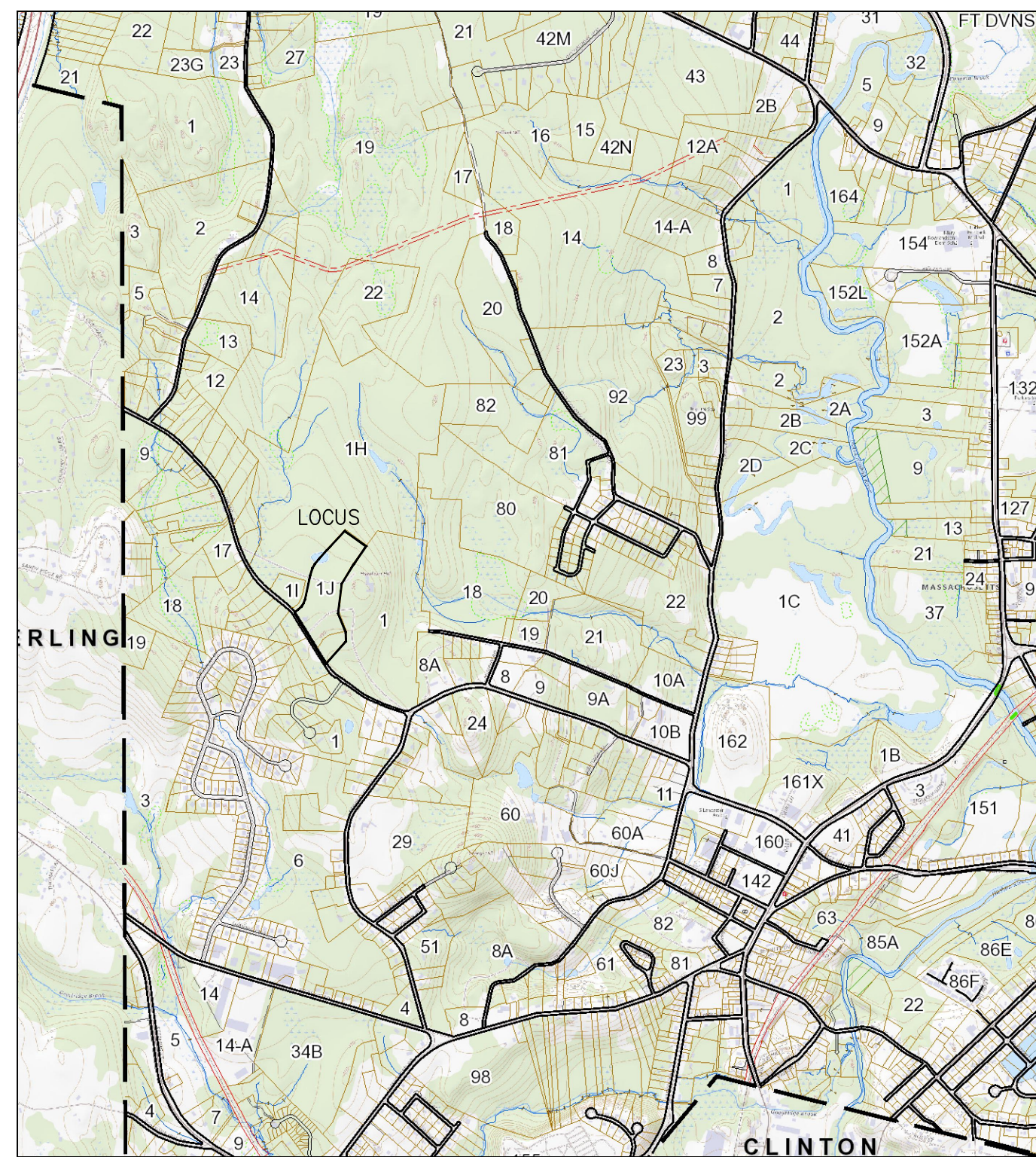


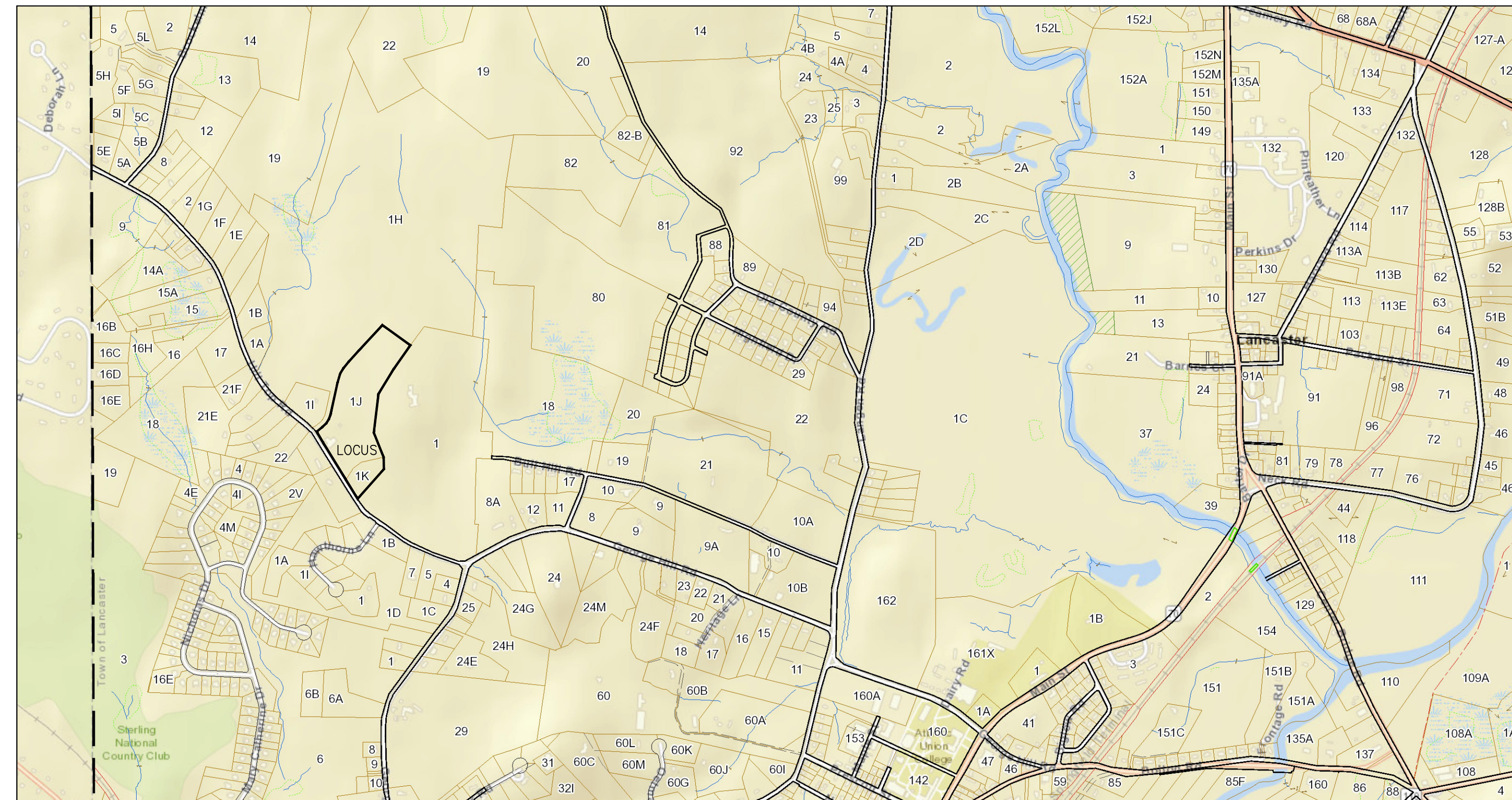
STORMWATER MANAGEMENT PLAN

FOR 201 HILL TOP ROAD LANCASTER, MA

DECEMBER 6, 2021



USGS MAP
SCALE: 1" = 2,000'



LOCUS PLAN
SCALE: 1" = 1,000'

NOTES:

1. PROPERTY LINE, TOPOGRAPHY AND EXISTING CONDITIONS INFORMATION PROVIDED BY DILLIS & ROY CIVIL DESIGN GROUP, INC.
2. WETLAND DELINEATION BY B&C ASSOCIATES, INC. ON JUNE 17, 2021.
3. STUMP AND WETLAND FLAG LOCATION BY TURNING POINT ENGINEERING ON JUNE 17, 2021 & SEPTEMBER 1, 2021. LEC WETLAND FLAG SURVEY LOCATION PERFORMED ON 10/5/21.
4. BASE SURVEY INFORMATION, WETLAND DELINEATIONS, BUFFER ZONES; PROVIDED BY TURNING POINT ENGINEERING; SUTTON, MA.; www.tpecivildesign.com

HARRINGTON ASSOCIATES, LLC

ENGINEERING | PLANNING | DEVELOPMENT

20 MAIN STREET; WEDGEWOOD OFFICES SUITE 9
ACTON, MA 01720; TEL: (978) 989-1373
EMAIL: rjharrington4@gmail.com



PLAN INDEX:

- | | |
|---------|-----------------------------------|
| SHEET 1 | TITLE SHEET |
| SHEET 2 | EXISTING CONDITION PLAN |
| SHEET 3 | SITE DEVELOPMENT PLAN |
| SHEET 4 | EROSION AND SEDIMENT CONTROL PLAN |

PROJECT INFORMATION:

ZONING DISTRICT: RESIDENTIAL
ASSESSOR MAP 32 PARCEL 1J & 1K
BOOK 64130 PAGE 220
BOOK 64130 PAGE 223
PLAN BOOK 954, PLAN 11
PLAN BOOK 951, PLAN 82 (EASEMENTS)

APPLICANT/RESPONSIBLE PARTY:

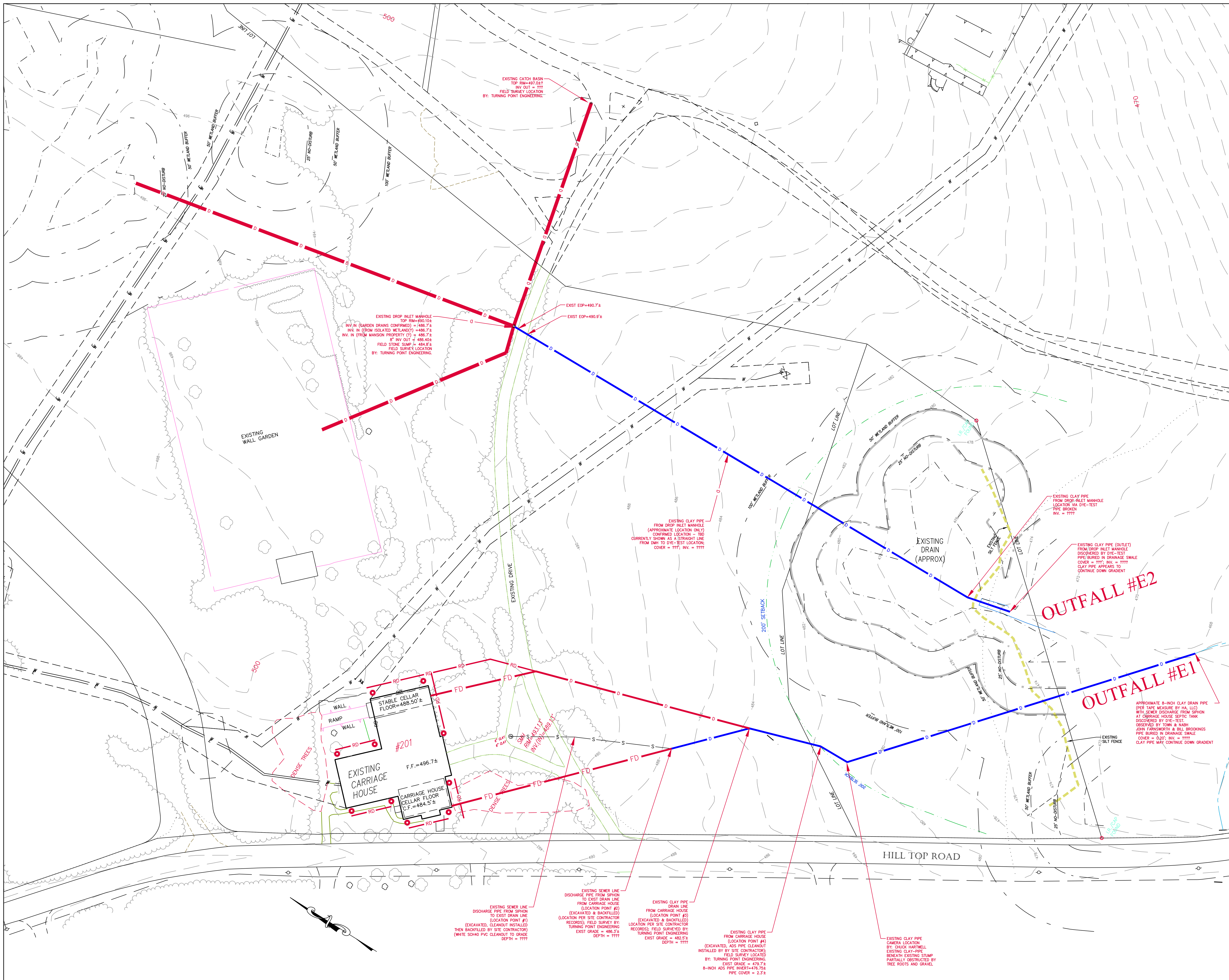
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SITE OPERATOR:

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BADGER GENERAL CONTRACTING CO., INC.
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LEGEND

IR.	IRON ROD
S.F.	SQUARE FEET
---	EXISTING INTERMEDIATE CONTOUR
---	EXISTING INDEX CONTOUR
○	STONEWALL
○	WETLAND FLAG

REVISIONS		
REV.	DATE	DESCRIPTION
1.	12.6.21	STORMWATER CONTROL BYLAW

TITLE

EXISTING CONDITION PLAN
201 HILL TOP ROAD, LANCASTER, MA

PREPARED FOR: LORING
DATE: OCTOBER 25, 2021
SCALE: 1" = 40'

HARRINGTON ASSOCIATES, LLC
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EMAIL: rharrington4@gmail.com

(IN FEET)

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EXISTING CATCH BASIN
TOP RIM=497.01'
INV. OUT=497.01'
FIELD SURVEY LOCATION
BY: TURNING POINT ENGINEERING

EXISTING DROP INLET MANHOLE
TOP RIM=490.10'
INV. IN (FROM GARDEN DRAIN CONFIRMED)=486.72'
INV. IN (FROM ISOLATED WETLAND)=486.72'
INV. IN (FROM MANSION PROPERTY (1))=486.72'
8" INV. OUT=486.40'
FIELD STONE SUMP # 484.82'
FIELD SURVEY LOCATION
BY: TURNING POINT ENGINEERING

EXIST EOP=490.72'
EXIST EOP=490.92'

EXISTING CLAY PIPE
FROM DROP INLET MANHOLE
(APPROXIMATE LOCATION ONLY)
CONFIRMED LOCATION - TRD
CURRENTLY SHOWN AS A STRAIGHT LINE
FROM DMH TO DYE-TEST LOCATION;
COVER = 111', INV. = 1111'

EXISTING CLAY PIPE
FROM DROP-INLET MANHOLE
LOCATION VIA DYE-TEST
INV. = 1111'

EXISTING CLAY PIPE (OUTLET)
FROM DROP INLET MANHOLE
DISCOVERED BY DYE-TEST
PIPE BURIED IN DRAINAGE SWALE
COVER = 111', INV. = 1111'
CLAY PIPE APPEARS TO
CONTINUE DOWN GRADIENT

OUTFALL #E2

OUTFALL #E1

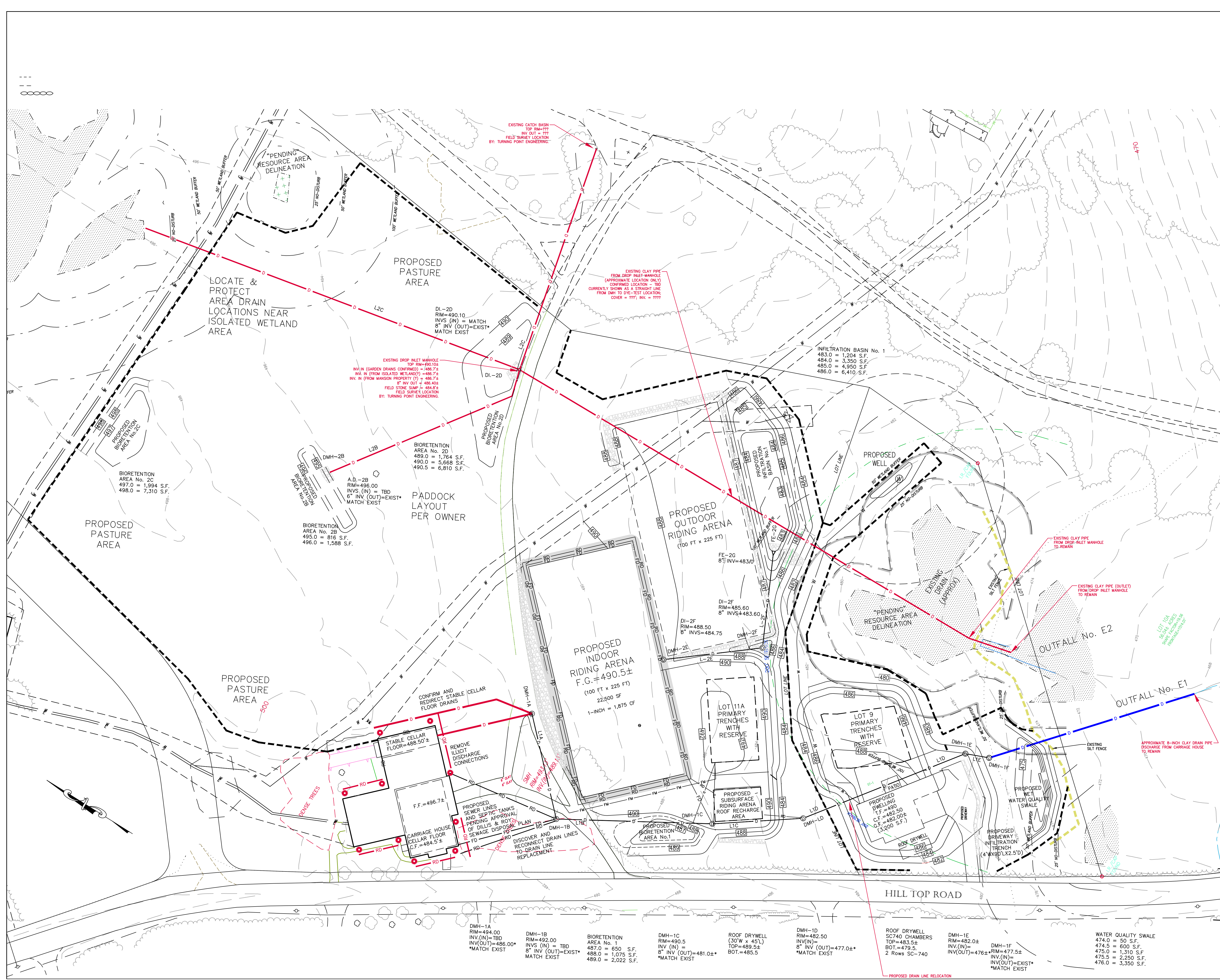
APPROXIMATE 8-INCH CLAY DRAIN PIPE
(PER TAPE MEASURE BY H.A. LLC)
WITH SEWER DISCHARGE FROM SPHON
AT CARRIAGE HOUSE SEPTIC TANK
DISCOVERED BY DYE-TEST.
OBSERVED BY TOWN & NASH
JOHN FARNWORTH & BILL BROOKINGS
PIPE BURIED IN DRAINAGE SWALE
COVER = 920', INV. = 1111'
CLAY PIPE MAY CONTINUE DOWN GRADIENT

EXISTING SEWER LINE
DISCHARGE PIPE FROM SPHON
TO EXIST DRAIN LINE
FROM CARRIAGE HOUSE
(LOCATION POINT #2)
(EXCAVATED & BACKFILLED)
(LOCATION PER SITE CONTRACTOR
RECORDS); FIELD SURVEY BY:
TURNING POINT ENGINEERING
EXIST GRADE = 488.52'
DEPTH = 1111'

EXISTING CLAY PIPE
FROM CARRIAGE HOUSE
(LOCATION POINT #3)
(EXCAVATED & BACKFILLED)
(LOCATION PER SITE CONTRACTOR
RECORDS); FIELD SURVEY BY:
TURNING POINT ENGINEERING
EXIST GRADE = 482.52'
DEPTH = 1111'

EXISTING CLAY PIPE
FROM CARRIAGE HOUSE
(LOCATION POINT #4)
BY: CHUCK HARTWELL
EXISTING CLAY-PIPE
BEHIND EXISTING STUMP
PARTIALLY OBSTRUCTED BY
TREE ROOTS AND GRAVEL
INSTALLED BY SITE CONTRACTOR;
FIELD SURVEY LOCATED
BY: TURNING POINT ENGINEERING
EXIST GRADE = 479.72'
8-INCH ADS PIPE INVERT=476.72'
PIPE COVER = 2.3'

EXISTING CLAY PIPE
CAMERA LOCATION
BY: CHUCK HARTWELL
EXISTING CLAY-PIPE
BEHIND EXISTING STUMP
PARTIALLY OBSTRUCTED BY
TREE ROOTS AND GRAVEL



- NOTES:**
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LEGEND

I.R.	IRON ROD
S.F.	SQUARE FEET
STUMP	STUMP
- - - 478 - - -	EXISTING INTERMEDIATE CONTOUR
- - - 480 - - -	EXISTING INDEX CONTOUR
- - - 480 - - -	PROPOSED CONTOUR
D	PROPOSED DRAIN LINE
A.D.	AREA DRAIN
C.F.	CELLAR FLOOR
DI	DROP INLET CATCH BASIN
DMH	DRAIN MANHOLE
F.D.	FOUNDATION DRAIN
FE	FLARED END
F.F.	FIRST FLOOR
G.F.	GARAGE FLOOR
INV	INVERT
L-1	DRAIN LINE NAME
R.D.	ROOF DRAIN
T.F.	TOP FOUNDATION

REVISIONS		
REV.	DATE	DESCRIPTION
1.	12.6.21	STORMWATER CONTROL BYLAW

TITLE

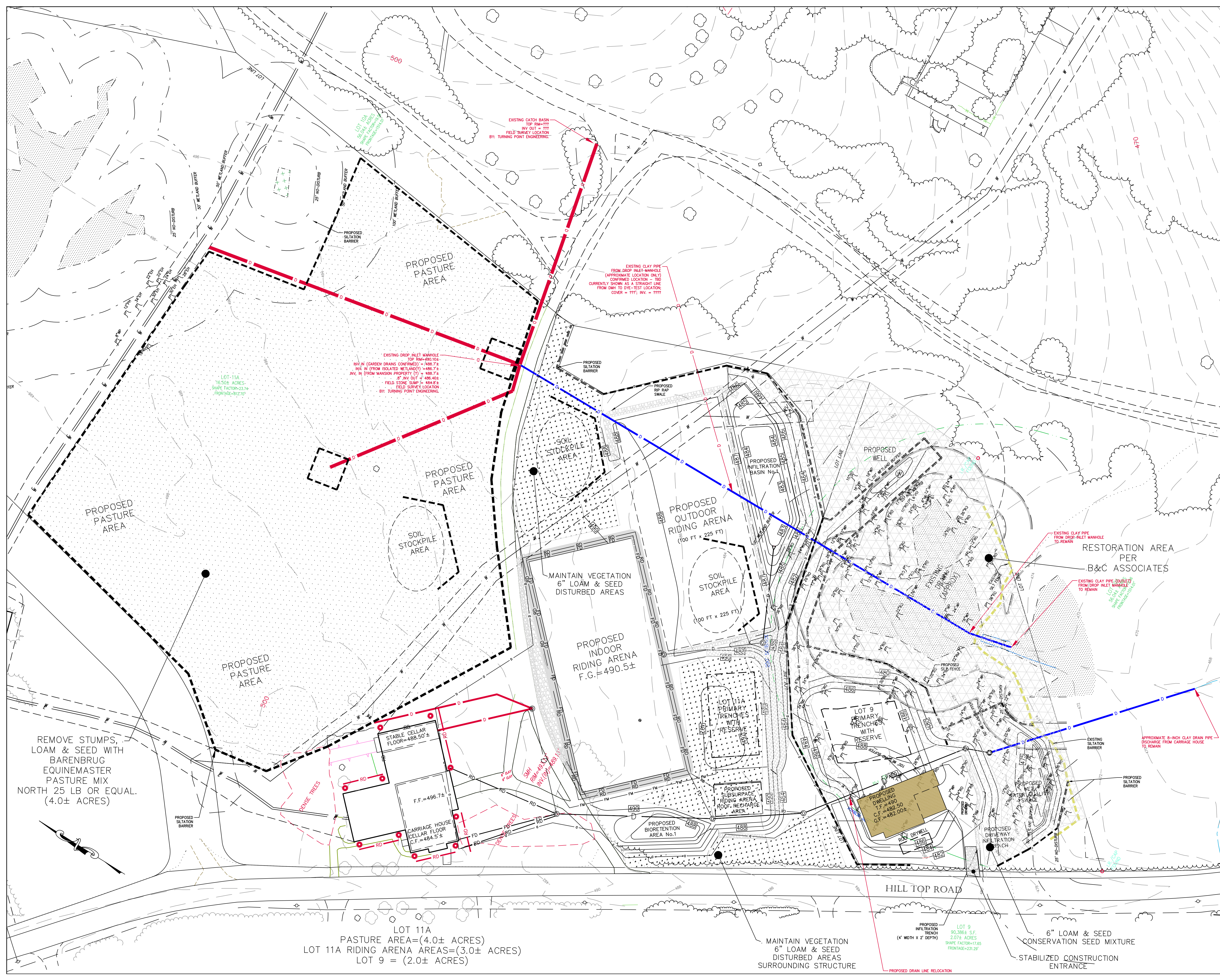
SITE DEVELOPMENT PLAN
201 HILL TOP ROAD, LANCASTER, MA

PREPARED FOR: LORING
DATE: OCTOBER 25, 2021
SCALE: 1" = 40'

HARRINGTON ASSOCIATES, LLC
ENGINEERING | PLANNING | DEVELOPMENT
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DMH-1A RIM=494.00 INV.(IN)=TBD INV.(OUT)=486.00* *MATCH EXIST	DMH-1B RIM=492.00 INV.(IN)=TBD 8" INV.(OUT)=EXIST* MATCH EXIST	BIORETENTION AREA No. 1 487.0 = 650 S.F. 488.0 = 1,075 S.F. 489.0 = 2,022 S.F.	DMH-1C RIM=490.5 INV.(IN)= 8" INV.(OUT)=481.0±* *MATCH EXIST	ROOF DRYWELL (30'W x 45'L) TOP=489.5± BOT=485.5	DMH-1D RIM=482.50 INV.(IN)= 8" INV.(OUT)=477.0±* *MATCH EXIST	ROOF DRYWELL SC740 CHAMBERS TOP=483.5± BOT=479.5. 2 Rows SC-740	DMH-1E RIM=482.0± INV.(IN)= INV.(OUT)=476± DMH-1F RIM=477.5± INV.(IN)= INV.(OUT)=EXIST* *MATCH EXIST	WATER QUALITY SWALE 474.0 = 50 S.F. 474.5 = 600 S.F. 475.0 = 1,310 S.F. 475.5 = 2,250 S.F. 476.0 = 3,350 S.F.
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- LEGEND**
- IR. IRON ROD
 - S.F. SQUARE FEET
 - STUMP
 - - - 478 - - - EXISTING INTERMEDIATE CONTOUR
 - - - 480 - - - EXISTING INDEX CONTOUR
 - ○ ○ ○ ○ STONEWALL
 - ○ ○ ○ ○ WETLAND FLAG
 - WP WHITE PINE
 - RO RED OAK
 - RM RED MAPLE
 - B BEECH
 - BB BLACK BIRCH
 - EH EASTERN HEMLOCK
 - PH PIGNUT HICKORY

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REVISIONS		
REV.	DATE	DESCRIPTION
1	12.6.21	STORMWATER CONTROL BYLAW

TITLE

EROSION AND SEDIMENT CONTROL PLAN
 201 HILL TOP ROAD, LANCASTER, MA

PREPARED FOR: LORING
DATE: 11.22.2021
SCALE: 1" = 40'

HARRINGTON ASSOCIATES, LLC
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 EMAIL: rharrington4@gmail.com

(IN FEET)

NOI-EROSION.dwg HA-95

REMOVE STUMPS, LOAM & SEED WITH BARENBRUG EQUINEMASTER PASTURE MIX NORTH 25 LB OR EQUAL. (4.0± ACRES)

LOT 11A
 PASTURE AREA=(4.0± ACRES)
 LOT 11A RIDING AREAS=(3.0± ACRES)
 LOT 9 = (2.0± ACRES)

MAINTAIN VEGETATION 6" LOAM & SEED DISTURBED AREAS SURROUNDING STRUCTURE

6" LOAM & SEED CONSERVATION SEED MIXTURE

STABILIZED CONSTRUCTION ENTRANCE

PROPOSED INFILTRATION TRENCH (4' WIDTH X 2' DEPTH)

LOT 9 90,386± S.F. 2.07± ACRES SHAPE FACTOR=17.65 FRONTAGE=231.29'

PROPOSED DWELLING T.F.=490.0 C.F.=482.50 G.F.=482.00±