PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET
TOPSFIELD, MASSACHUSETTS
(ASSESSOR'S MAP 68, LOTS 47 & 48)

SCHEDULE OF PLAN SET DRAWINGS:

1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	OVERALL LOTTING PLAN (REV)
3B	OVERALL LOTTING PLAN – NO WAIVER (REV)
4	SITE PLAN I
5	SITE PLAN II
6	SITE PLAN III
7	SITE PLAN IV
8	SITE PLAN V
9	SITE PLAN VI
10	ROADWAY A PLAN & PROFILE
11	ROADWAY A PLAN & PROFILE
12	ROADWAY B PLAN & PROFILE
13	ROADWAY B & A1 PLAN & PROFILE
14	CROSS–SECTIONS AND ALTERNATIVE LAYOUT (REV)
15	SOIL TEST LOGS
16	CONVENTIONAL LOTTING PROOF PLAN (ROWLEY BRIDGE ENTRANCE)
16B	CONVENTIONAL LOTTING PROOF PLAN (HILL STREET ENTRANCE)
16C	CONVENTIONAL ROADWAY PLAN 1
16D	CONVENTIONAL ROADWAY PLAN 2
16E	CONVENTIONAL ROAD PROFILE 1
16F	CONVENTIONAL ROAD PROFILE 2
16G	CONVENTIONAL ROAD PROFILE 3
16H	CONVENTIONAL ROAD PROFILE 4
16I	CONVENTIONAL ROADWAY CROSS–SECTION

LEGEND

	EXISTING	PROPOSED
CONTOURS MAJOR	100	100
MINOR		98
OVERHEAD ELECTRIC SERVICE	OHV	
WATER MAIN OR SERVICE	W	W
DRAIN PIPE		D
CATCH BASIN		
DRAIN MANHOLE		
WATER GATE		
UTILITY POLE		
FIRE HYDRANT		
STREET LIGHT		
TREE		
FENCE	X	
PROPERTY BOUNDARY		
TREELINE		
LIMIT OF BVW		
100' WETLAND BUFFER		
STONE WALL		
DRIVEWAY		

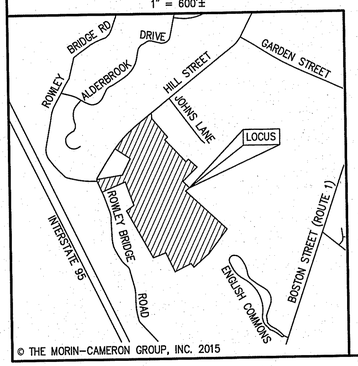
KEY MAP

SCALE: 1" = 200'

0 100 200 400

LOCUS MAP:

1" = 600'±



© THE MORIN–CAMERON GROUP, INC. 2015

OWNERS:

116 HILL STREET (TAX MAP 68, LOT 47):
KAREN L. & PAUL S. JOHNSON
116 HILL STREET
TOPSFIELD, MA 01983
(DEED BOOK 13754 PAGE 188)

120 HILL STREET (TAX MAP 68, LOT 48):
JAMES W. & DEBRA L. DIBENEDETTO
120 HILL STREET
TOPSFIELD, MA 01983
(DEED BOOK 23054 PAGE 343)

APPLICANT:

NEW MEADOWS DEVELOPMENT, LLC
69 NORTH MAIN STREET
MIDDLETON, MA 01949

PARCEL AREA:

116 HILL STREET: 596,500 SF± (13.7 ACRES)
120 HILL STREET: 2,343,600 SF± (53.8 ACRES)
TOTAL AREA: 2,940,100± S.F. (67.5 ACRES)

SUBDIVISION WAIVERS REQUESTED:

	SECTION	REQUIRED	PROVIDED
1. MODIFY TYPICAL CROSS SECTION	5.1.2		
2. DEAD–END STREET	5.1.4.a	650 LF	2,158 LF

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET
(ASSESSOR'S MAP 68, LOTS 47 & 48)
TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015
NOVEMBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS I ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS I LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8588, F: 978-887-3480, W: WWW.MORINCAMERON.COM

ABBREVIATIONS

APPROX	APPROXIMATE	ISF	IRREGULAR SHAPE FACTOR
BIT	BITUMINOUS	LA	LOT AREA
BVW	BORDERING VEGETATED WETLAND	MIN	MINIMUM
CB	CATCH BASIN	N/F	NOW OR FORMERLY
CCB	CAPE COD BERM	NO	NUMBER
CONC	CONCRETE	OHW	OVERHEAD WIRES
DI	DUCTILE IRON	PROP	PROPOSED
DIA	DIAMETER	REQ'D	REQUIRED
DMH	DRAIN MANHOLE	RET	RETAINING
DOC	DOCUMENT	SF	SQUARE FEET
EP	EDGE OF PAVEMENT	SGC	SLOPED GRANITE CURB
ELEV	ELEVATION	ST	STREET
EXIST	EXISTING	TBD	TO BE DETERMINED
FA	FOOTPRINT AREA	TP	TEST PIT
FT	FEET	TYP	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE	WF	WETLAND FLAG

ZONING TABLE FOR OUTLYING RESIDENTIAL & AGRICULTURAL DISTRICT (ORA) & OPEN SPACE BYLAW

DESCRIPTION	ORA REQUIREMENT	OPEN SPACE REQUIREMENT
LOT AREA (LA)	87,120 SF	43,560 SF
FRONTAGE	200 FT.	80 FT. (1)
LOT DEPTH	200 FT. AVERAGE	200 FT. AVERAGE
LOT WIDTH	160 FT.	130 FT.
FRONT SETBACK	20 FT.	20 FT.
SIDE SETBACK	20 FT.	20 FT.
REAR SETBACK	40 FT.	40 FT.
MAXIMUM HEIGHT/STORIES	35 FT./2.5	35 FT./2.5
MAXIMUM BUILDING AREA	15%	15%
MINIMUM OPEN SPACE	50%	50%
MINIMUM BUILDABLE AREA (BA)	30,000 SF	20,000 SF

NOTES:

1. 50 FT. ON CUL–DE–SAC PROVIDED 130 FT IS PROVIDED BETWEEN LOT LINES AT THE DWELLING.

GENERAL NOTES:

1. ELEVATIONS BASED ON NGVD 1929.
2. TOPOGRAPHIC FEATURES AND LOCATIONS WERE OBTAINED FROM TOPSFIELD GIS DATA, AND SUPPLEMENTED WITH DATA FROM A PARTIAL FIELD SURVEY PERFORMED BY THE MORIN–CAMERON GROUP INC IN JULY 2015.
3. WETLAND RESOURCE AREAS WERE FLAGGED BY DEROSA ENVIRONMENTAL CONSULTING INC. AND LOCATED BY THE MORIN–CAMERON GROUP INC. IN JULY 2015. SEE APPROVED *"PLAN TO ACCOMPANY ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION 116–120 HILL STREET, TOPSFIELD, MASSACHUSETTS"* PREPARED BY THE MORIN–CAMERON GROUP INC. ON AUGUST 5, 2015, DEP FILE NUMBER 307–0725 APPROVED BY THE TOPSFIELD CONSERVATION COMMISSION ON SEPTEMBER 9, 2015.
4. PROPERTY LINE INFORMATION COMPILED FROM VARIOUS PLANS AND DEEDS AND SHOULD BE CONSIDERED APPROXIMATE.
5. THIS PLAN HAS BEEN PREPARED FOR OUR CLIENTS USE ONLY FOR THE SPECIFIC PURPOSE OF FILING A PRELIMINARY SUBDIVISION APPLICATION. IT IS NOT TO BE USED OR RELIED UPON AS A CONSTRUCTION DOCUMENT OR ANY OTHER USE BY OTHERS WITHOUT THE WRITTEN CONSENT OF THE MORIN–CAMERON GROUP, INC.

ANTICIPATED PERMITS:

1. DEFINITIVE SUBDIVISION
2. OPEN SPACE SPECIAL PERMIT
3. TOPSFIELD STORMWATER AND EROSION CONTROL PERMIT
4. SCENIC ROAD PERMIT
5. EPA NPDES PERMIT

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER

PROJ. #3352
DRAWING: 3352 MAIN

COVER SHEET

DRAWING NO.
1 OF 16

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER

COMMONWEALTH OF MASSACHUSETTS
PHILLIP A. YETMAN
No. 51910
REGISTERED
PROFESSIONAL LAND SURVEYOR

P.L.S.

PLAN REFERENCES:

1.) PLAN BOOK 20 PLAN 35
2.) PLAN BOOK 162 PLAN 16
3.) PLAN BOOK 286 PLAN 38
4.) PLAN BOOK 291 PLAN 62
5.) PLAN BOOK 310 PLAN 69

DEED REFERENCES:

1.) DEED BOOK 23054 PAGE 343 (120 HILL ST)
2.) DEED BOOK 13754 PAGE 188 (116 HILL ST)

GENERAL NOTES:

1. ELEVATIONS BASED ON NGVD 1929.
2. TOPOGRAPHIC FEATURES AND LOCATIONS WERE OBTAINED FROM TOPSFIELD GIS DATA, AND SUPPLEMENTED WITH DATA FROM A PARTIAL FIELD SURVEY PERFORMED BY THE MORIN-CAMERON GROUP INC IN JULY 2015.
3. WETLAND RESOURCE AREAS WERE FLAGGED BY DEROSA ENVIRONMENTAL CONSULTING LLC. AND LOCATED BY THE MORIN-CAMERON GROUP INC. IN JULY 2015. SEE *PLAN TO ACCOMPANY ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION* PREPARED BY THE MORIN-CAMERON GROUP INC. ON AUGUST 5, 2015.
4. PROPERTY LINE INFORMATION COMPILED FROM VARIOUS PLANS AND DEEDS AND SHOULD BE CONSIDERED APPROXIMATE.
5. THIS PLAN HAS BEEN PREPARED FOR OUR CLIENTS USE ONLY FOR THE SPECIFIC PURPOSE OF FILING A PRELIMINARY SUBDIVISION APPLICATION. IT IS NOT TO BE USED OR RELIED UPON AS A CONSTRUCTION DOCUMENT OR ANY OTHER USE BY OTHERS WITHOUT THE WRITTEN CONSENT OF THE MORIN-CAMERON GROUP, INC.

PLAN

SCALE: 1" = 100'

0 50 100 200

© THE MORIN-CAMERON GROUP, INC. 2015

EXISTING CONDITIONS PLAN

DRAWING NO.

2 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8588, F: 978-887-3480, W: WWW.MORINCAMERON.COM

LOTTING PLAN DESIGN NOTES:

1. AVERAGE LOT SIZE = 54,000± SF (LOTS 1–20).
2. LOT 21 – EXISTING DWELLINGS AND ACCESSORY STRUCTURES LOCATED AT 120 HILL STREET TO REMAIN.
3. ROAD PARCEL CONSISTS OF 4.61± ACRES.
4. OPEN SPACE PROVIDED = 33.8± ACRES (50.1% OF TRACT).

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER

PLAN
SCALE: 1" = 100'
0 50 100 200

© THE MORIN-CAMERON GROUP, INC. 2015

OVERALL LOTTING PLAN

DRAWING NO. 3 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015
NOVEMBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8588, F: 978-887-3480, W: WWW.MORINCAMERON.COM

LOTTING PLAN DESIGN NOTES:

1. AVERAGE LOT SIZE = 54,000± SF (LOTS 1–20).
2. LOT 21 – EXISTING DWELLINGS AND ACCESSORY STRUCTURES LOCATED AT 120 HILL STREET TO REMAIN.
3. ROAD PARCEL CONSISTS OF 4.43± ACRES.
4. OPEN SPACE PROVIDED = 33.9± ACRES (50.1% OF TRACT).

GRADING NOTE:

1. REFER TO SHEET 14 FOR PROPOSED GRADING OF ALTERNATIVE ENTRANCE LAYOUT

PLAN
SCALE: 1" = 100'
0 50 100 200

© THE MORIN–CAMERON GROUP, INC. 2015

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
No. 47601
REGISTERED PROFESSIONAL ENGINEER

PROJ. #3352
DRAWING: 3352 MAIN

OVERALL LOTTING PLAN – NO WAIVER –

DRAWING NO.
3B OF 16

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8585, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	25.11'	15.00'
C2	94.26'	300.00'
C3	48.43'	300.00'
C4	23.56'	15.00'
C5	63.13'	175.00'
C6	353.71'	250.00'
C7	392.62'	1150.00'
C8	144.94'	175.00'
C9	16.91'	12.00'
C10	122.30'	600.00'
C11	293.84'	775.00'
C12	15.50'	15.00'
C13	340.33'	65.00'
C14	15.98'	15.00'
C15	273.58'	725.00'
C16	112.11'	550.00'
C17	139.82'	725.00'
C18	351.98'	1200.00'
C19	86.42'	1200.00'
C20	163.98'	550.00'
C21	38.18'	250.00'
C22	24.72'	15.00'
C23	23.56'	15.00'
C24	45.09'	125.00'
C25	282.97'	200.00'
C26	409.69'	1200.00'
C27	76.73'	125.00'
C28	39.04'	20.00'
C29	130.18'	675.00'
C30	337.32'	1150.00'
C31	90.02'	1250.00'
C32	149.08'	500.00'

SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

SHEET 4 – SITE PLAN I

PLAN
SCALE: 1" = 40'
0 20 40 80

© THE MORIN-CAMERON GROUP, INC. 2015

SITE PLAN I

DRAWING NO.
4 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	25.11'	15.00'
C2	94.26'	300.00'
C3	48.43'	300.00'
C4	23.56'	15.00'
C5	63.13'	175.00'
C6	353.71'	250.00'
C7	392.62'	1150.00'
C8	144.94'	175.00'
C9	16.91'	12.00'
C10	122.30'	600.00'
C11	293.84'	775.00'
C12	15.50'	15.00'
C13	340.33'	65.00'
C14	15.98'	15.00'
C15	273.58'	725.00'
C16	112.11'	550.00'
C17	139.82'	725.00'
C18	351.98'	1200.00'
C19	86.42'	1200.00'
C20	163.98'	550.00'
C21	38.18'	250.00'
C22	24.72'	15.00'
C23	23.56'	15.00'
C24	45.09'	125.00'
C25	282.97'	200.00'
C26	409.69'	1200.00'
C27	76.73'	125.00'
C28	39.04'	20.00'
C29	130.18'	675.00'
C30	337.32'	1150.00'
C31	90.02'	1250.00'
C32	149.08'	500.00'

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

SHEET 5 – SITE PLAN II

PLAN
SCALE: 1" = 40'
0 20 40 80

© THE MORIN-CAMERON GROUP, INC. 2015

SITE PLAN II

DRAWING NO. 5 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8588, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	25.11'	15.00'
C2	94.26'	300.00'
C3	48.43'	300.00'
C4	23.56'	15.00'
C5	63.13'	175.00'
C6	353.71'	250.00'
C7	392.62'	1150.00'
C8	144.94'	175.00'
C9	16.91'	12.00'
C10	122.30'	600.00'
C11	293.84'	775.00'
C12	15.50'	15.00'
C13	340.33'	65.00'
C14	15.98'	15.00'
C15	273.58'	725.00'
C16	112.11'	550.00'
C17	139.82'	725.00'
C18	351.98'	1200.00'
C19	86.42'	1200.00'
C20	163.98'	550.00'
C21	38.18'	250.00'
C22	24.72'	15.00'
C23	23.56'	15.00'
C24	45.09'	125.00'
C25	282.97'	200.00'
C26	409.69'	1200.00'
C27	76.73'	125.00'
C28	39.04'	20.00'
C29	130.18'	675.00'
C30	337.32'	1150.00'
C31	90.02'	1250.00'
C32	149.08'	500.00'

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

SHEET 6 – SITE PLAN III

PLAN
SCALE: 1" = 40'
0 20 40 80

SITE PLAN III

DRAWING NO. 6 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8566, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	25.11'	15.00'
C2	94.26'	300.00'
C3	48.43'	300.00'
C4	23.56'	15.00'
C5	63.13'	175.00'
C6	353.71'	250.00'
C7	392.62'	1150.00'
C8	144.94'	175.00'
C9	16.91'	12.00'
C10	122.30'	600.00'
C11	293.84'	775.00'
C12	15.50'	15.00'
C13	340.33'	65.00'
C14	15.98'	15.00'
C15	273.58'	725.00'
C16	112.11'	550.00'
C17	139.82'	725.00'
C18	351.98'	1200.00'
C19	86.42'	1200.00'
C20	163.98'	550.00'
C21	38.18'	250.00'
C22	24.72'	15.00'
C23	23.56'	15.00'
C24	45.09'	125.00'
C25	282.97'	200.00'
C26	409.69'	1200.00'
C27	76.73'	125.00'
C28	39.04'	20.00'
C29	130.18'	675.00'
C30	337.32'	1150.00'
C31	90.02'	1250.00'
C32	149.08'	500.00'

SCOTT P. CAMERON CIVIL No. 47601 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

SHEET 7 – SITE PLAN IV

PLAN
SCALE: 1" = 40'
0 20 40 80

© THE MORIN-CAMERON GROUP, INC. 2015

SITE PLAN IV

DRAWING NO. 7 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8588, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	25.11'	15.00'
C2	94.26'	300.00'
C3	48.43'	300.00'
C4	23.56'	15.00'
C5	63.13'	175.00'
C6	353.71'	250.00'
C7	392.62'	1150.00'
C8	144.94'	175.00'
C9	16.91'	12.00'
C10	122.30'	600.00'
C11	293.84'	775.00'
C12	15.50'	15.00'
C13	340.33'	65.00'
C14	15.98'	15.00'
C15	273.58'	725.00'
C16	112.11'	550.00'
C17	139.82'	725.00'
C18	351.98'	1200.00'
C19	86.42'	1200.00'
C20	163.98'	550.00'
C21	38.18'	250.00'
C22	24.72'	15.00'
C23	23.56'	15.00'
C24	45.09'	125.00'
C25	282.97'	200.00'
C26	409.69'	1200.00'
C27	76.73'	125.00'
C28	39.04'	20.00'
C29	130.18'	675.00'
C30	337.32'	1150.00'
C31	90.02'	1250.00'
C32	149.08'	500.00'

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER

SHEET 8 – SITE PLAN V

SHEET 5 MATCH LINE

SHEET 7 MATCH LINE

MATCH LINE SHEET 9

LOT 17 LA=68,556 SF ISF=99% FRONTAGE 304'

LOT 16 LA=83,330 SF ISF=92% FRONTAGE 383'

LOT 15 LA=45,869 SF ISF=81% FRONTAGE 136'

LOT 14 LA=44,886 SF ISF=84% FRONTAGE 130'

LOT 13 LA=45,708 SF ISF=86% FRONTAGE 131'

LOT 12 LA= 43,795 SF ISF=84% FRONTAGE 141'

PARCEL 1 LA=26.3 ACRES (15.2 ACRES UPLAND) (OPEN SPACE)

LIMIT OF 100' BUFFER TO BVW (TYP.)

LIMIT OF BORDERING VEGETATED WETLAND (BVW)

INTERMITTENT STREAM

PATH

WELL

PLAN
SCALE: 1" = 40'
0 20 40 80

© THE MORIN-CAMERON GROUP, INC. 2015

SITE PLAN V

DRAWING NO. 8 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	25.11'	15.00'
C2	94.26'	300.00'
C3	48.43'	300.00'
C4	23.56'	15.00'
C5	63.13'	175.00'
C6	353.71'	250.00'
C7	392.62'	1150.00'
C8	144.94'	175.00'
C9	16.91'	12.00'
C10	122.30'	600.00'
C11	293.84'	775.00'
C12	15.50'	15.00'
C13	340.33'	65.00'
C14	15.98'	15.00'
C15	273.58'	725.00'
C16	112.11'	550.00'
C17	139.82'	725.00'
C18	351.98'	1200.00'
C19	86.42'	1200.00'
C20	163.98'	550.00'
C21	38.18'	250.00'
C22	24.72'	15.00'
C23	23.56'	15.00'
C24	45.09'	125.00'
C25	282.97'	200.00'
C26	409.69'	1200.00'
C27	76.73'	125.00'
C28	39.04'	20.00'
C29	130.18'	675.00'
C30	337.32'	1150.00'
C31	90.02'	1250.00'
C32	149.08'	500.00'

SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

SHEET 9 – SITE PLAN VI

PLAN
SCALE: 1" = 40'
0 20 40 80

© THE MORIN-CAMERON GROUP, INC. 2015

SITE PLAN VI

DRAWING NO. 9 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

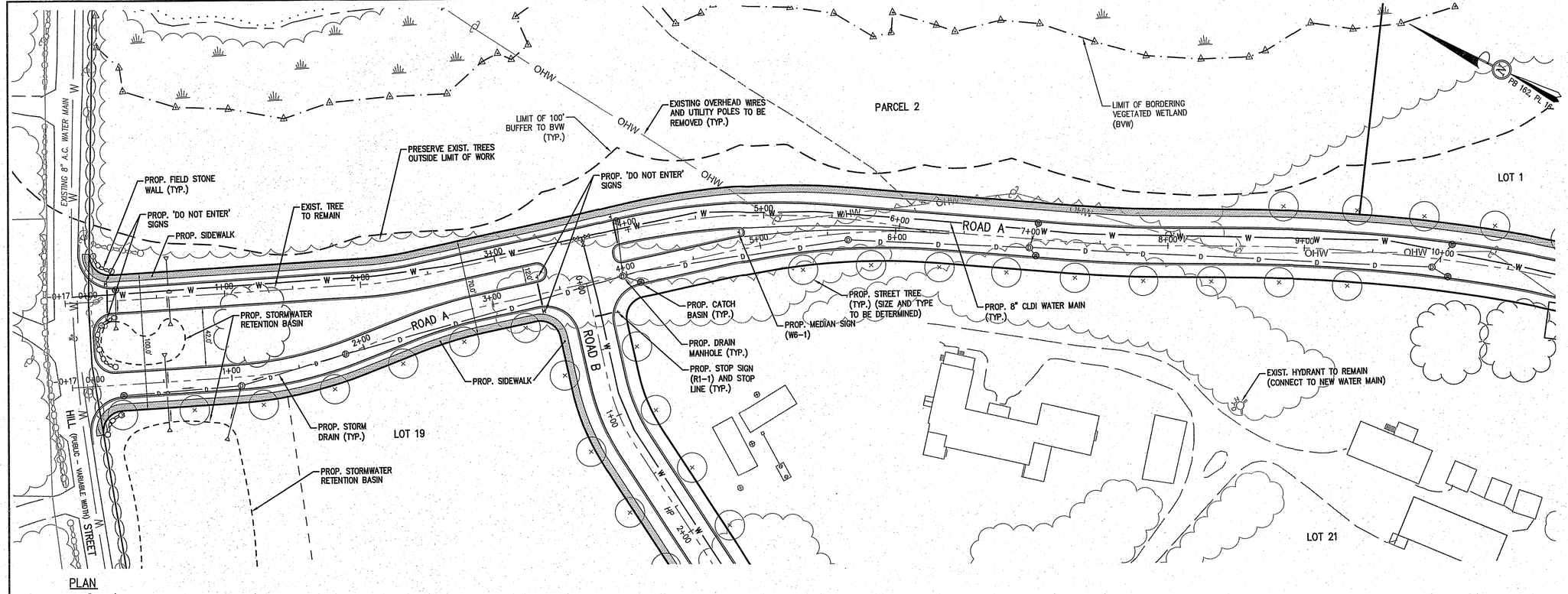
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8588, F: 978-887-3480, W: WWW.MORINCAMERON.COM

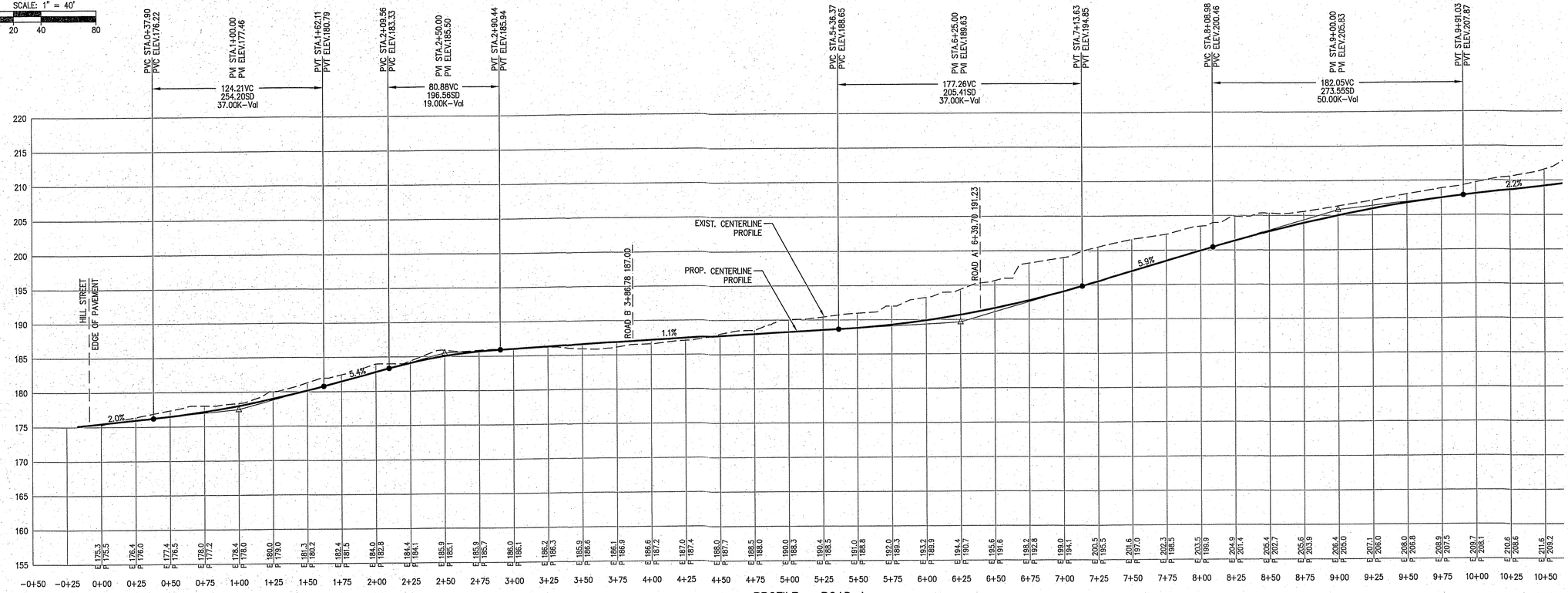
COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

PLAN

SCALE: 1" = 40'

0 20 40 80





PROFILE – ROAD A

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

ROADWAY A PLAN & PROFILE

DRAWING NO. 10 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

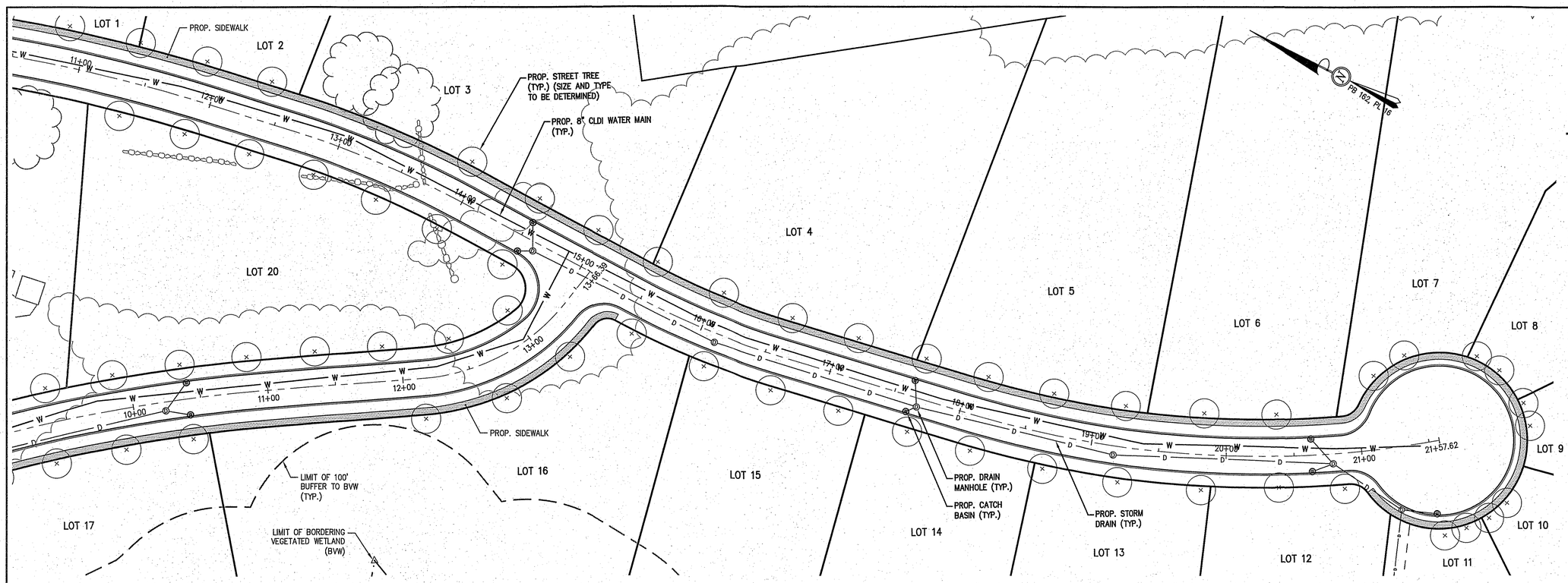
DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8585, F: 978-887-3480, W: WWW.MORINCAMERON.COM

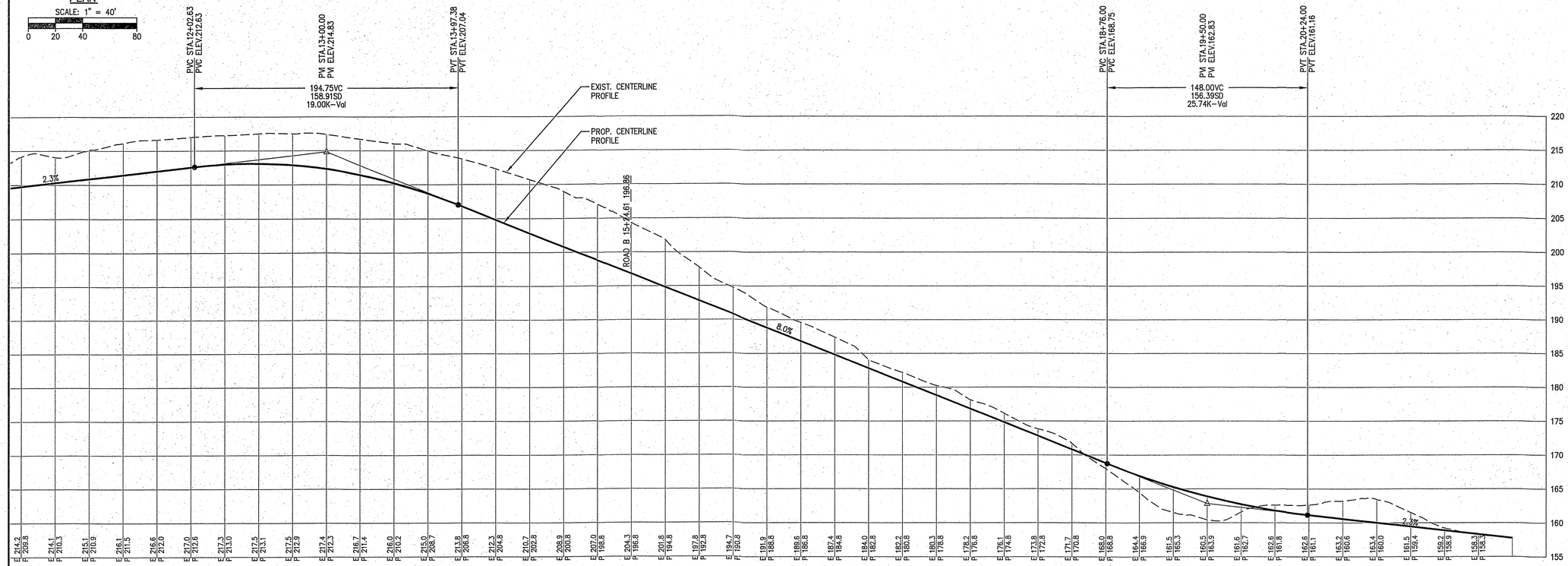
COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER



PLAN

SCALE: 1" = 40'

0 20 40 80



PROFILE – ROAD A

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

ROADWAY A
PLAN & PROFILE

DRAWING NO.
11 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

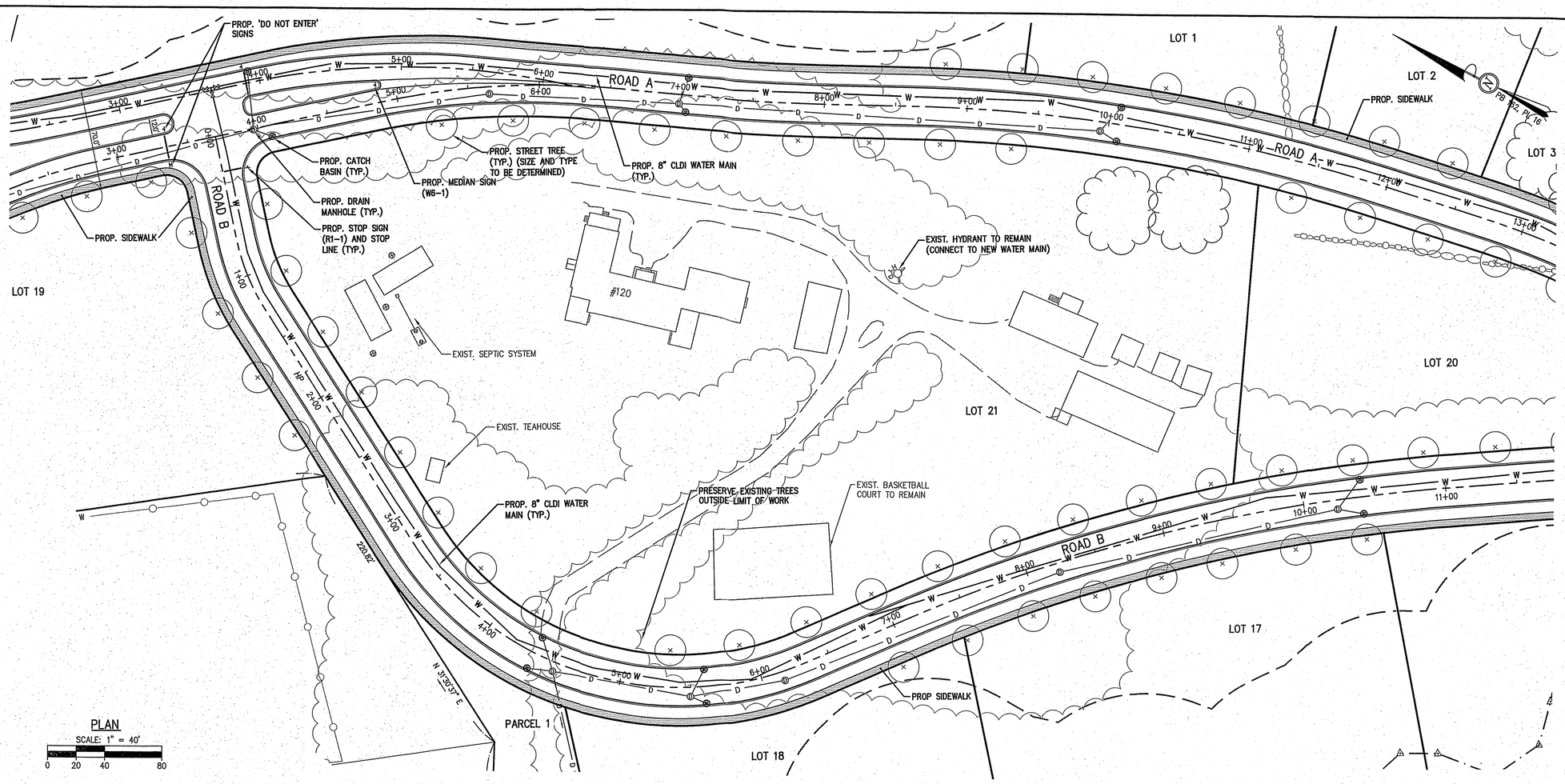
DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

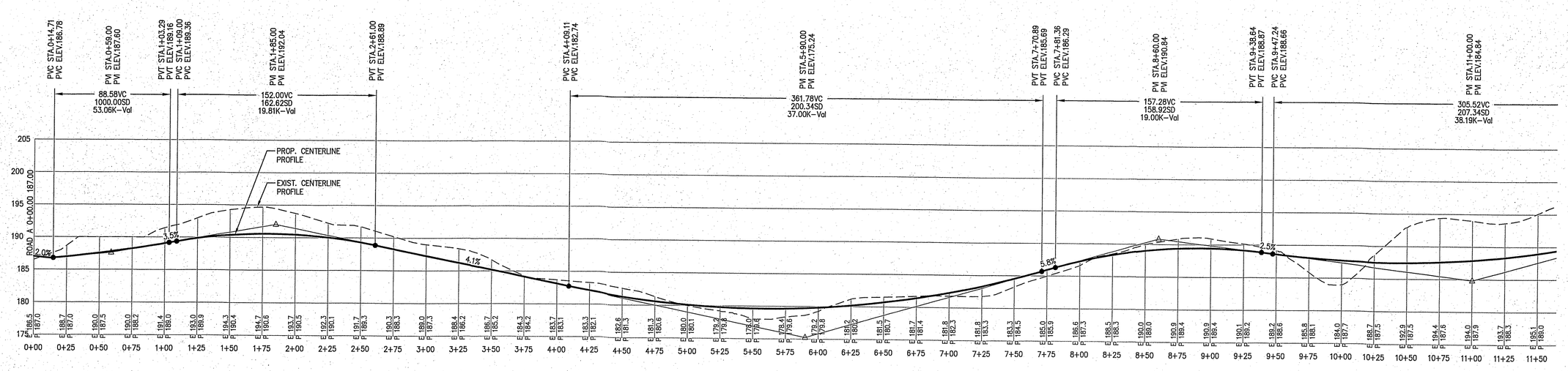
The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER



PLAN
SCALE: 1" = 40'
0 20 40 80



PROFILE – ROAD B
SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

ROADWAY B PLAN & PROFILE

DRAWING NO. 12 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

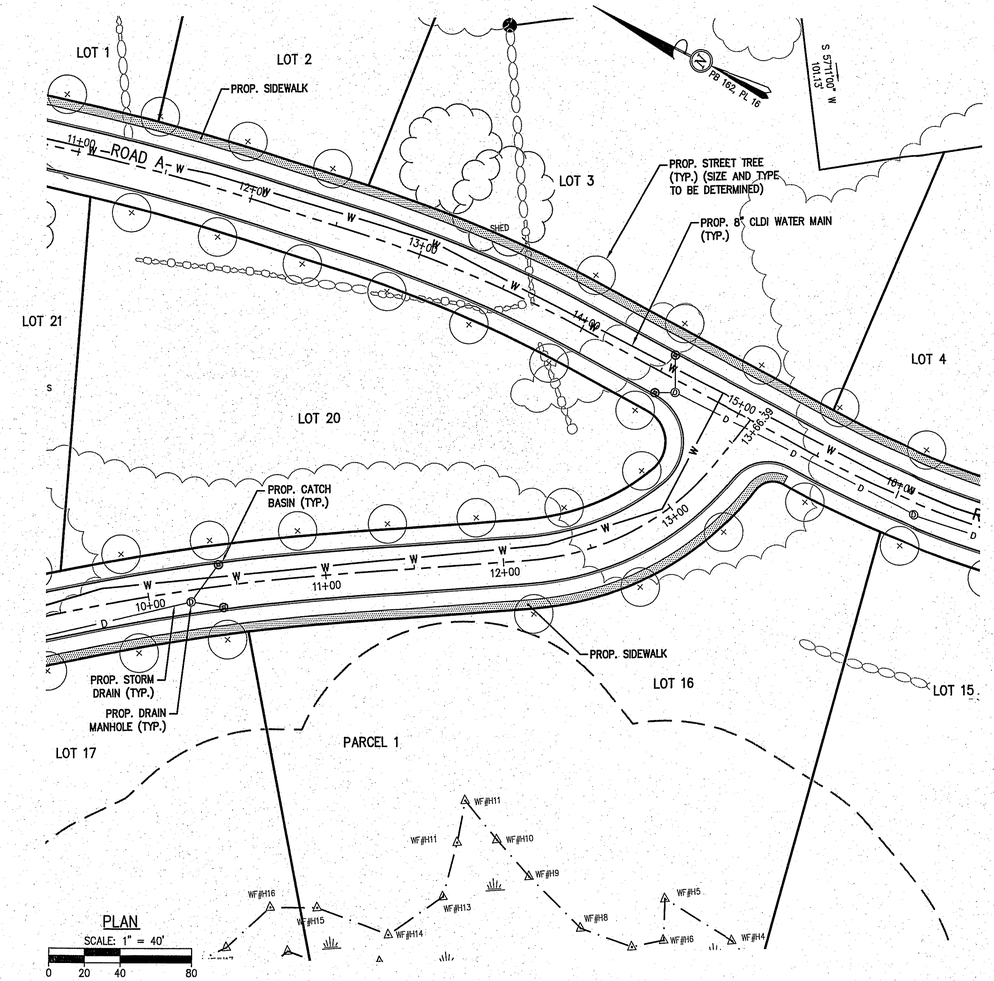
DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
NO. 47601
REGISTERED
PROFESSIONAL ENGINEER

The Morin-Cameron GROUP, INC.

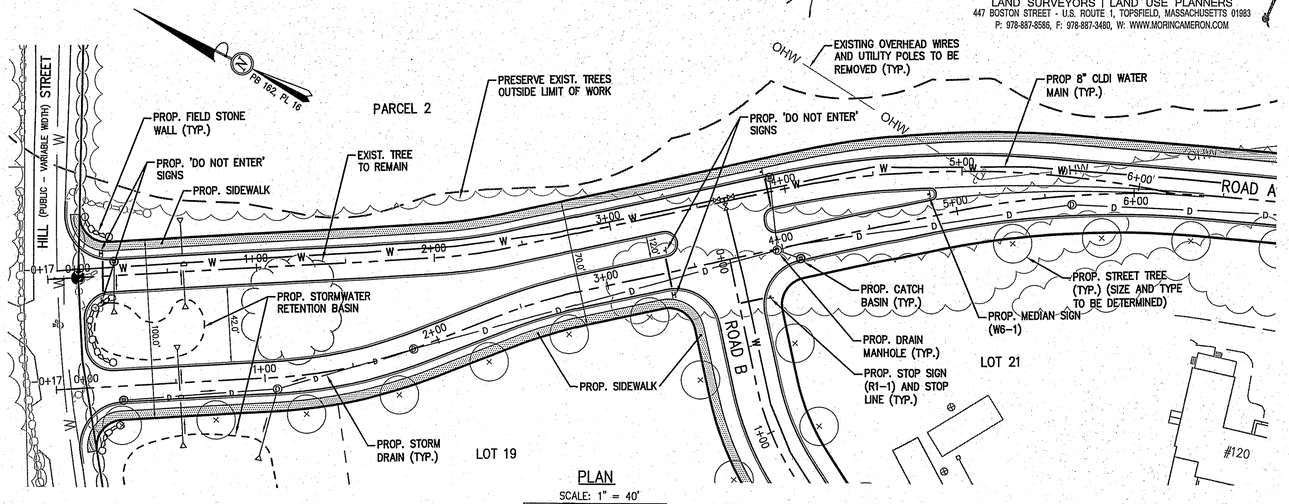
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



PLAN

SCALE: 1" = 40'

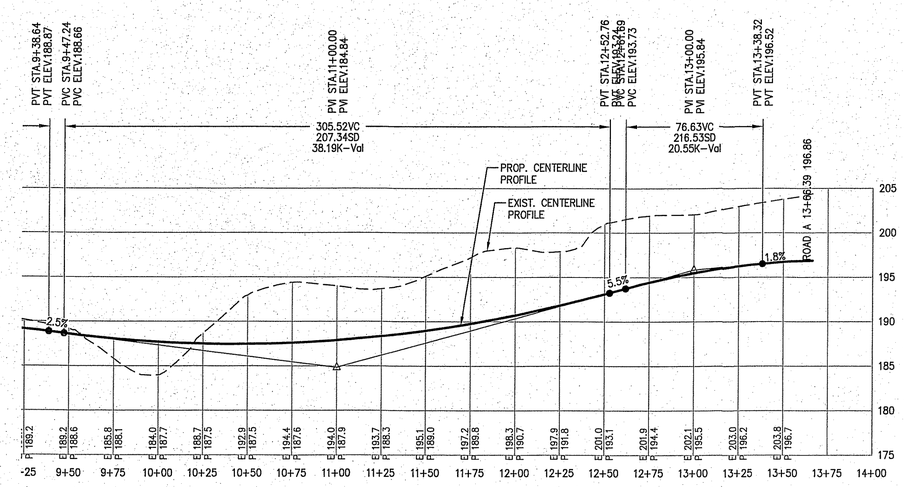
0 20 40 80



PLAN

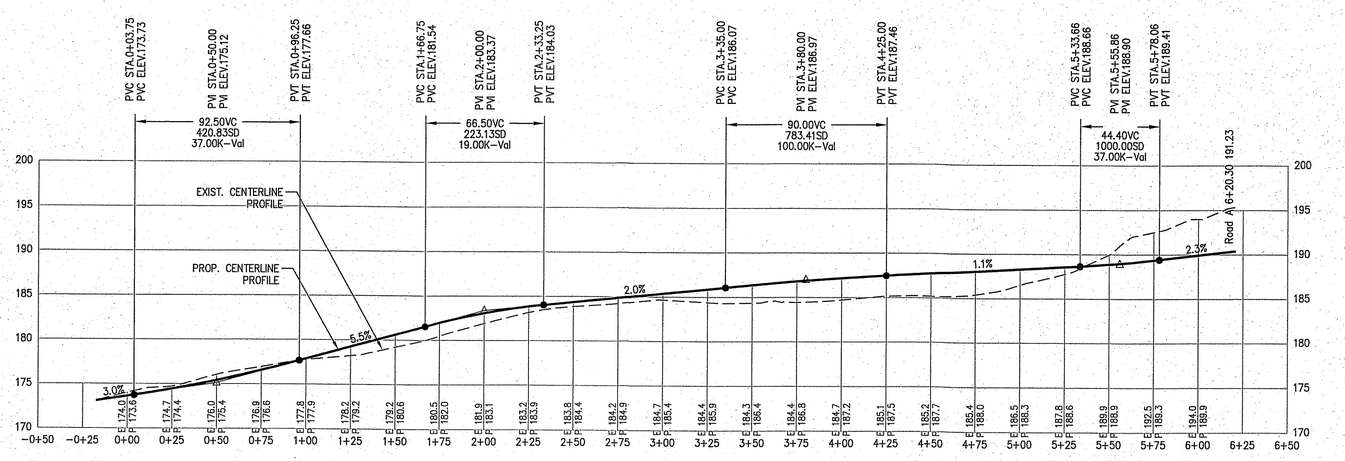
SCALE: 1" = 40'

0 20 40 80



PROFILE – ROAD B

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL



PROFILE – ROAD A1

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

ROADWAY B & A1 PLAN & PROFILE

DRAWING NO.

13 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

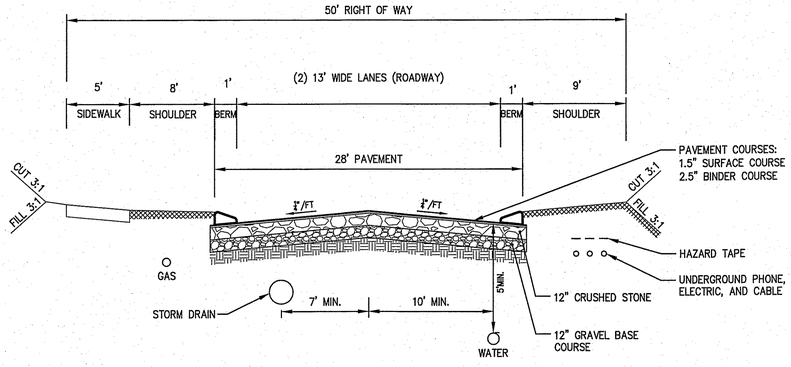
NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015
NOVEMBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

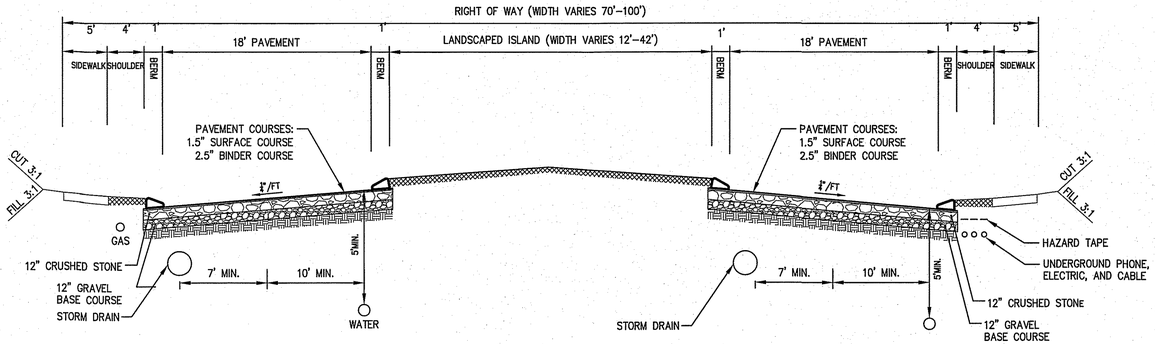
The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



TYPICAL ROADWAY CROSS-SECTION

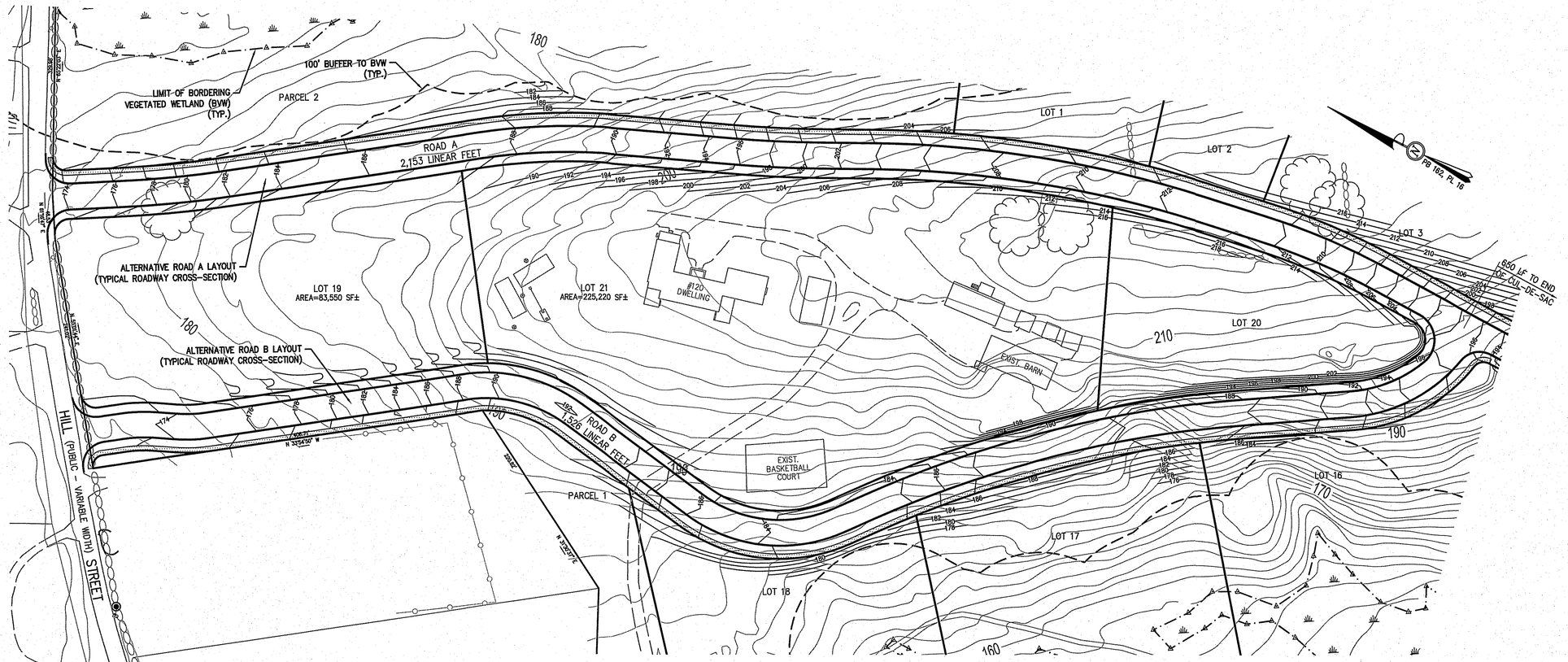
NOT TO SCALE



ENTRANCE ROADWAY CROSS-SECTION

(ROAD A & A1 – STA. 0+00 TO 5+00±)

NOT TO SCALE



ALTERNATIVE ENTRANCE LAYOUT PLAN

SCALE: 1" = 60'

0 30 60 120

NOTE:

THIS DETAIL IS FOR DEMONSTRATION PURPOSES ONLY, FOR THE PURPOSE OF ILLUSTRATING AN OPEN SPACE PLAN THAT DOES NOT REQUIRE ANY WAIVERS UNDER THE TOPSFIELD SUBDIVISION REGULATIONS.

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

CROSS-SECTIONS & ALTERNATIVE LAYOUT

DRAWING NO.

14 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

SOIL LOGS

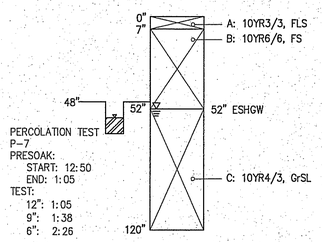
DATE PERFORMED: JUNE 8TH & JUNE 11TH, 2015
PERFORMED BY: SCOTT P. CAMERON, SE #3024
WITNESSED BY: JOHN COULON, TOPSFIELD BOH

ABBREVIATIONS

Cd	WEATHERED BEDROCK
ESHGW	ESTIMATED SEASONAL HIGH GROUNDWATER (TABLE)
FS	FINE SAND
FSL	FINE SANDY LOAM
Gr	GRAVELLY
L	LOAM
LS	LOAMY SAND
MPI	MINUTES PER INCH
SIL	SILT LOAM
SL	SANDY LOAM
TP	TEST PIT

COMMONWEALTH OF MASSACHUSETTS — SCOTT P. CAMERON — CIVIL — No. 47601 — REGISTERED PROFESSIONAL ENGINEER

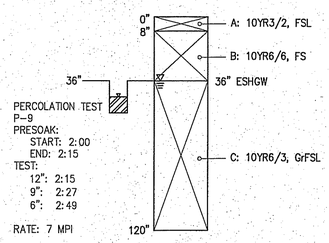
TP 04–14



PERCOLATION TEST P–7
PRESOAK:
START: 12:50
END: 1:05
TEST:
12": 1:05
9": 1:38
6": 2:26

RATE: 16 MPI

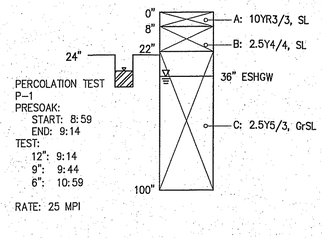
TP 05–14



PERCOLATION TEST P–9
PRESOAK:
START: 2:00
END: 2:15
TEST:
12": 2:15
9": 2:27
6": 2:49

RATE: 7 MPI

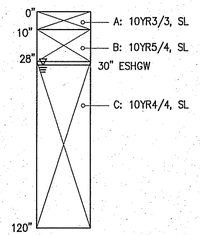
TP 01–15



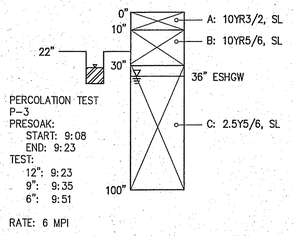
PERCOLATION TEST P–1
PRESOAK:
START: 8:59
END: 9:14
TEST:
12": 9:14
9": 9:44
6": 10:59

RATE: 25 MPI

TP 02–15



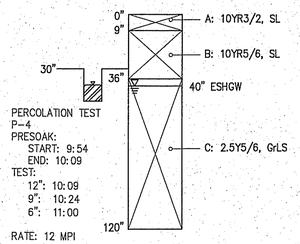
TP 03–15



PERCOLATION TEST P–3
PRESOAK:
START: 9:08
END: 9:23
TEST:
12": 9:23
9": 9:35
6": 9:51

RATE: 6 MPI

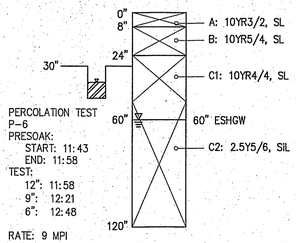
TP 04–15



PERCOLATION TEST P–4
PRESOAK:
START: 9:54
END: 10:09
TEST:
12": 10:09
9": 10:24
6": 11:00

RATE: 12 MPI

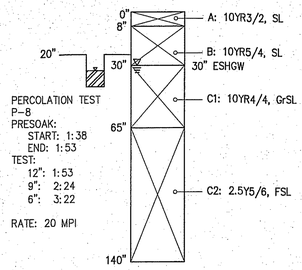
TP 05–15



PERCOLATION TEST P–6
PRESOAK:
START: 11:43
END: 11:58
TEST:
12": 11:58
9": 12:21
6": 12:48

RATE: 9 MPI

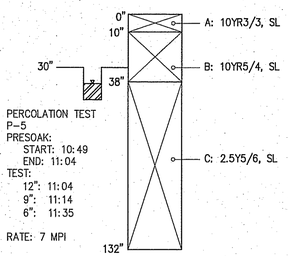
TP 06–15



PERCOLATION TEST P–8
PRESOAK:
START: 1:38
END: 1:53
TEST:
12": 1:53
9": 2:24
6": 3:22

RATE: 20 MPI

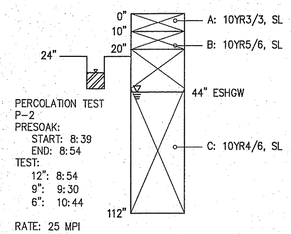
TP 07–15



PERCOLATION TEST P–5
PRESOAK:
START: 10:49
END: 11:04
TEST:
12": 11:04
9": 11:14
6": 11:35

RATE: 7 MPI

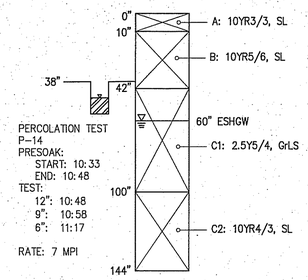
TP 8–15



PERCOLATION TEST P–2
PRESOAK:
START: 8:39
END: 8:54
TEST:
12": 8:54
9": 9:30
6": 10:44

RATE: 25 MPI

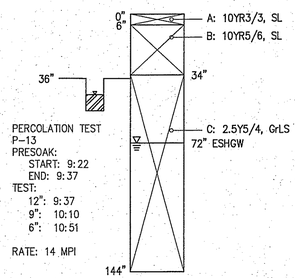
TP 9–15



PERCOLATION TEST P–14
PRESOAK:
START: 10:33
END: 10:48
TEST:
12": 10:48
9": 10:58
6": 11:17

RATE: 7 MPI

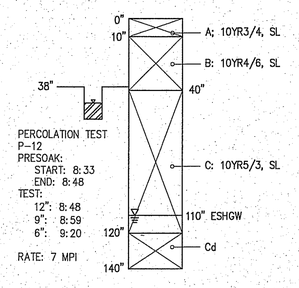
TP 10–15



PERCOLATION TEST P–13
PRESOAK:
START: 9:22
END: 9:37
TEST:
12": 9:37
9": 10:10
6": 10:51

RATE: 14 MPI

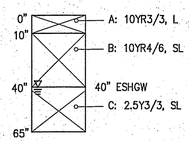
TP 11–15



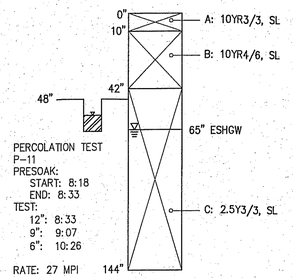
PERCOLATION TEST P–12
PRESOAK:
START: 8:33
END: 8:48
TEST:
12": 8:48
9": 8:59
6": 9:20

RATE: 7 MPI

TP 12–15



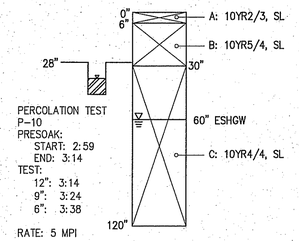
TP 13–15



PERCOLATION TEST P–11
PRESOAK:
START: 8:18
END: 8:33
TEST:
12": 8:33
9": 9:07
6": 10:26

RATE: 27 MPI

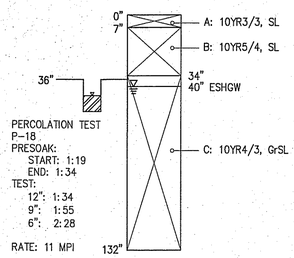
TP 14–15



PERCOLATION TEST P–10
PRESOAK:
START: 2:59
END: 3:14
TEST:
12": 3:14
9": 3:24
6": 3:38

RATE: 5 MPI

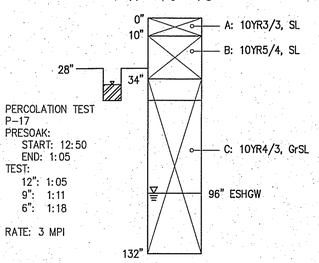
TP 15–15



PERCOLATION TEST P–18
PRESOAK:
START: 1:19
END: 1:34
TEST:
12": 1:34
9": 1:55
6": 2:28

RATE: 11 MPI

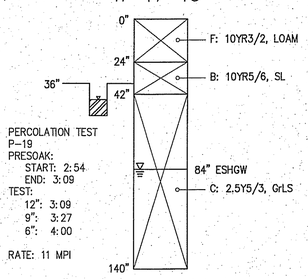
TP 16–15



PERCOLATION TEST P–17
PRESOAK:
START: 12:50
END: 1:05
TEST:
12": 1:05
9": 1:11
6": 1:18

RATE: 3 MPI

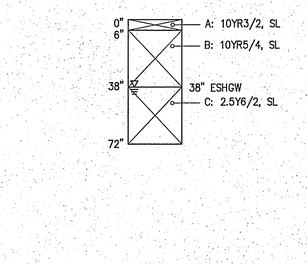
TP 17–15



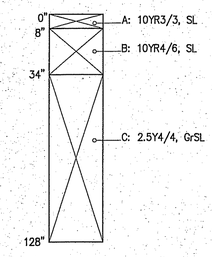
PERCOLATION TEST P–19
PRESOAK:
START: 2:54
END: 3:09
TEST:
12": 3:09
9": 3:27
6": 4:00

RATE: 11 MPI

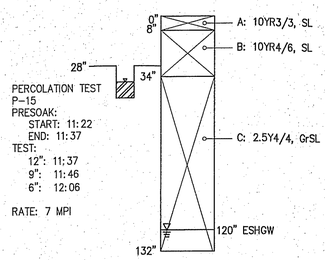
TP 18–15



TP 19–15



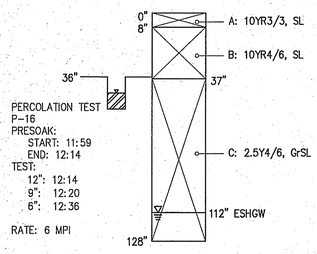
TP 20–15



PERCOLATION TEST P–15
PRESOAK:
START: 11:22
END: 11:37
TEST:
12": 11:37
9": 11:46
6": 12:06

RATE: 7 MPI

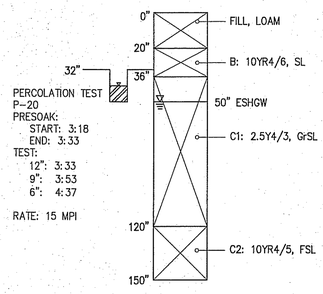
TP 21–15



PERCOLATION TEST P–16
PRESOAK:
START: 11:59
END: 12:14
TEST:
12": 12:14
9": 12:20
6": 12:36

RATE: 6 MPI

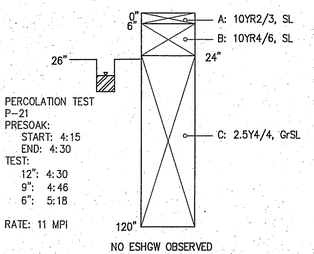
TP 22–15



PERCOLATION TEST P–20
PRESOAK:
START: 3:18
END: 3:33
TEST:
12": 3:33
9": 3:53
6": 4:37

RATE: 15 MPI

TP 23–15

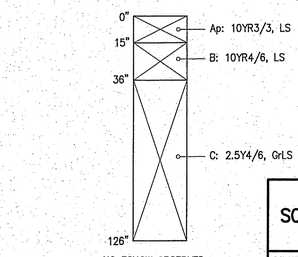


PERCOLATION TEST P–21
PRESOAK:
START: 4:15
END: 4:30
TEST:
12": 4:30
9": 4:46
6": 5:18

RATE: 11 MPI

NO ESHGW OBSERVED

TP 24–15



NO ESHGW OBSERVED

SOIL TEST LOGS

DRAWING NO.
15 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

PLAN NOTE:

THIS DETAIL IS FOR DEMONSTRATION PURPOSES ONLY, FOR THE PURPOSE OF ILLUSTRATING AN OPEN SPACE PLAN THAT DOES NOT REQUIRE ANY WAIVERS UNDER THE TOPSFIELD SUBDIVISION REGULATIONS.

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED
PROFESSIONAL ENGINEER

ESTATE OF KAREN L. AND PAUL S. JOHNSON
"116 HILL STREET"
BOOK 13754 PAGE 188
13.8 ± ACRES
(10.1 ± ACRES UPLAND)

ESTATE OF JAMES W. AND DEBRA L. DIBENEDETTO
"120 HILL STREET"
BOOK 23054 PAGE 343
53.6 ± ACRES
(41.3 ± ACRES UPLAND)

HILL (PUBLIC - VARIABLE WIDTH) STREET

ROWLEY BRIDGE (PUBLIC - VARIABLE WIDTH) ROAD

#120

FB 162, PL 16

LOT 1
LA=92,373 SF
BA=72,687 SF
ISF=69%
821' FRONTAGE

LOT 2
LA=90,536 SF
BA=55,536 SF
ISF=68%
201' FRONTAGE

LOT 3
LA=88,419 SF
BA=58,798 SF
ISF=81%
216' FRONTAGE

LOT 4
LA=87,167 SF
BA=58,884 SF
ISF 90%
280' FRONTAGE

LOT 5
LA=87,239 SF
BA=66,036 SF
ISF=87%
201' FRONTAGE

LOT 6
LA=87,462 SF
BA=71,734 SF
ISF=76%
202' FRONTAGE

LOT 7
LA=87,438 SF
BA=78,111 SF
ISF=44%
266' FRONTAGE

LOT 8
LA=88,208 SF
BA=88,208 SF
ISF=90%
479' FRONTAGE

LOT 9
LA=88,233 SF
BA=88,233 SF
ISF=67%
206' FRONTAGE

LOT 10
LA=87,424 SF
BA=87,424 SF
ISF=78%
200' FRONTAGE

LOT 11
LA=302,336 SF
BA=123,495 SF
ISF=90%
200' FRONTAGE

LOT 12
LA=123,738 SF
BA=86,568 SF
ISF=50%
207' FRONTAGE

LOT 13
LA=164,386 SF
BA=126,095 SF
ISF=63%
207' FRONTAGE

LOT 14
LA=164,584 SF
BA=137,938 SF
ISF=60%
207' FRONTAGE

LOT 15
LA=178,756 SF
BA=106,095 SF
ISF=60%
203' FRONTAGE

LOT 16
LA=185,796 SF
BA=140,338 SF
ISF=58%
239' FRONTAGE

LOT 17
LA=163,560 SF
BA=115,671 SF
ISF=58%
208' FRONTAGE

LOT 18
LA=94,820 SF
BA=73,955 SF
ISF=65%
414' FRONTAGE

LOT 19
LA=108,949 SF
BA=69,577 SF
ISF=40%
719' FRONTAGE

LOT 20
LA=195,336 SF
BA=195,336 SF
ISF=38%
2034' FRONTAGE

LOT 21
LA=93,318 SF
BA=93,318 SF
ISF=54%
1583' FRONTAGE

S 08°00'00" W 100.00'
S 25°58'35" E 431.83'
N 34°05'19" E 34.72'
S 29°52'24" E 191.94'
S 30°29'08" E 375.98'
S 34°08'43" E 220.09'
N 59°25'10" E 22.84'
S 59°55'41" W 376.41'
S 32°35'33" E 162.54'
S 57°11'00" W 101.13'
S 34°25'57" E 1028.30'
S 45°36'56" W 100.01'
S 51°19'04" W 367.56'
S 52°26'04" W 100.39'
S 44°40'36" W 195.58'
S 61°06'10" W 146.37'
N 22°58'22" W 81.51'
S 77°09'34" W 319.24'
N 12°46'39" W 395.19'
S 40°57'21" W 201.52'
S 81°09'26" W 46.16'
N 15°29'37" W 998.55'
N 71°07'40" E 167.88'
N 09°00'00" W 465.30'
S 75°39'41" W 432.85'
S 86°14'39" E 542.82'
N 06°34'02" W 5.50'
N 10°01'44" W 118.97'
N 09°48'02" W 133.55'
N 66°17'45" E 201.65'
N 51°59'37" E 220.83'
N 33°54'50" W 406.71'
N 55°11'44" E 241.02'
N 35°16'40" E 76.55'
N 30°12'28" W 38.05'
N 59°54'44" W 109.61'

© THE MORIN-CAMERON GROUP, INC. 2015

ZONING TABLE FOR OUTLYING RESIDENTIAL & AGRICULTURAL DISTRICT (ORA)

DESCRIPTION	REQUIREMENT
LOT AREA (LA)	87,120 SF
FRONTAGE	200 FT.
LOT DEPTH	200 FT. AVERAGE
LOT WIDTH	160 FT.
FRONT SETBACK	20 FT.
SIDE SETBACK	20 FT.
REAR SETBACK	40 FT.
MAXIMUM HEIGHT/STORIES	40 FT./2.5
MAXIMUM BUILDING AREA	15%
MINIMUM OPEN SPACE	50%
MINIMUM BUILDABLE AREA (BA)	30,000 SF

NOTE:
IRREGULAR SHAPE FACTOR (ISF): LOT AREA > 35% OF A SQUARE LOT OF THE SAME PERIMETER.

PLAN
SCALE: 1" = 100'
0 50 100 200

CONVENTIONAL LOTTING PROOF PLAN

DRAWING NO.
16 OF 16

PROJ. #3352
DRAWING: 3352 MAIN

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

ESTATE OF KAREN L. AND PAUL S. JOHNSON
"116 HILL STREET"
BOOK 13754 PAGE 188
13.8 ± ACRES
(10.1 ± ACRES UPLAND)

ESTATE OF JAMES W. AND DEBRA L. DIBENEDETTO
"120 HILL STREET"
BOOK 23054 PAGE 343
53.6 ± ACRES
(41.3 ± ACRES UPLAND)

LOT 1
LA=138,815 SF
BA=74,309 SF
ISF=77%
576.51' FRONTAGE

LOT 2
LA=103,815 SF
BA=52,417 SF
ISF=42%
299.52' FRONTAGE

LOT 3
LA=87,195 SF
BA=44,832 SF
ISF=44%
200.00' FRONTAGE

LOT 4
LA=87,278 SF
BA=54,779 SF
ISF 67%
200.00' FRONTAGE

LOT 5
LA=87,197 SF
BA=56,684 SF
ISF=53%
200.00' FRONTAGE

LOT 6
LA=87,902 SF
BA=87,902 SF
ISF=69%
422.18' FRONTAGE

LOT 7
LA=96,082 SF
BA=96,082 SF
ISF=52%
271.97' FRONTAGE

LOT 8
LA=91,686 SF
BA=91,686 SF
ISF=56%
200.00' FRONTAGE

LOT 9
LA=137,435 SF
BA=71,192 SF
ISF=77%
200.00' FRONTAGE

LOT 10
LA=197,624 SF
BA=66,464 SF
ISF=88%
200.00' FRONTAGE

LOT 11
LA=174,396 SF
BA=65,676 SF
ISF=65%
200.00' FRONTAGE

LOT 12
LA=139,647 SF
BA=82,082 SF
ISF=59%
200.00' FRONTAGE

LOT 13
LA=162,308 SF
BA=55,854 SF
ISF=59%
218.59' FRONTAGE

LOT 14
LA=160,052 SF
BA=65,809 SF
ISF=52%
200.00' FRONTAGE

LOT 15
LA=168,698 SF
BA=45,632 SF
ISF=54%
200.00' FRONTAGE

LOT 16
LA=162,986 SF
BA=69,759 SF
ISF=55%
208.97' FRONTAGE

LOT 17
LA=128,202 SF
BA=103,880 SF
ISF=86%
288.68' FRONTAGE

LOT 18
LA=161,673 SF
BA=135,173 SF
ISF=45%
351.95' FRONTAGE

LOT 19
LA=87,235 SF
BA=87,235 SF
ISF=79%
1,027.43' FRONTAGE

LOT 20
LA=133,415 SF
BA=133,415 SF
ISF=50%
1,849.41' FRONTAGE

LOT 21
LA=96,253 SF
BA=96,253 SF
ISF=65%
1532' FRONTAGE

ROAD A2
4,940 LINEAR FEET

HILL (PUBLIC VARIABLE WIDTH) STREET

ROWLEY BRIDGE ROAD (PUBLIC VARIABLE WIDTH)

#120

EXISTING SEPTIC SYSTEM

LIMIT OF BORDERING VEGETATED WETLAND (BVW)

LIMIT OF 100' BUFFER TO BVW (TYP.)

INTERMITTENT STREAM

INTERMITTENT STREAM (DRAINAGE DITCH)

PB 182, PL 18

S 08°10'00" W 100.00'

S 25°58'35" E 431.83'

S 30°29'08" E 375.96'

S 29°52'24" E 191.94'

S 34°08'43" E 220.09'

S 32°35'33" E 162.54'

S 34°28'57" E 1028.30'

S 57°10'00" W 101.25'

S 59°55'41" W 372.41'

S 51°19'04" W 567.56'

S 55°58'36" W 153.01'

S 64°40'35" W 195.58'

S 61°05'10" W 148.31'

N 22°58'22" W 81.51'

S 77°09'34" W 319.24'

N 12°46'39" W 395.19'

S 80°57'21" W 201.55'

S 81°09'28" W 45.16'

N 09°00'00" W 465.30'

N 15°29'37" W 998.55'

N 06°34'02" W 5.59'

N 10°01'44" W 118.97'

N 09°48'02" W 153.55'

N 71°07'40" E 157.65'

N 66°11'45" E 201.65'

N 31°30'37" E 220.82'

N 57°07'44" E 257.27'

N 57°07'44" E 249.92'

N 61°42'38" E 257.27'

N 61°42'38" E 139.98'

N 33°54'50" W 406.71'

S 86°12'35" E 542.82'

S 79°39'41" W 432.85'

LIMIT OF 100' BUFFER TO BVW (TYP.)

PLAN
SCALE: 1" = 100'
0 50 100 200

ZONING TABLE FOR OUTLYING RESIDENTIAL & AGRICULTURAL DISTRICT (ORA)

DESCRIPTION	REQUIREMENT
LOT AREA (LA)	87,120 SF
FRONTAGE	200 FT.
LOT DEPTH	200 FT. AVERAGE
LOT WIDTH	160 FT.
FRONT SETBACK	20 FT.
SIDE SETBACK	20 FT.
REAR SETBACK	40 FT.
MAXIMUM HEIGHT/STORIES	40 FT./2.5
MAXIMUM BUILDING AREA	15%
MINIMUM OPEN SPACE	50%
MINIMUM BUILDABLE AREA (BA)	30,000 SF

NOTE:
IRREGULAR SHAPE FACTOR (ISF): LOT AREA > 35% OF A SQUARE LOT OF THE SAME PERIMETER.

PROJ. #3352
DRAWING: 3352 MAIN

CONVENTIONAL LOTTING PROOF PLAN

DRAWING NO.
16B OF 16

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015

REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8585, F: 978-887-3480, W: WWW.MORINCAMERON.COM

LOT 1
LA=138,815 SF
BA=74,309 SF
ISF=77%
576.51' FRONTAGE

LOT 2
LA=103,815 SF
BA=52,417 SF
ISF=42%
299.52' FRONTAGE

LOT 3
LA=87,195 SF
BA=44,632 SF
ISF=44%
200.00' FRONTAGE

LOT 4
LA=97,278 SF
BA=54,779 SF
ISF 67%
200.00' FRONTAGE

LOT 5
LA=87,197 SF
BA=56,684 SF
ISF=53%
200.00' FRONTAGE

LOT 15
LA=168,698 SF
BA=45,632 SF
ISF=54%
200.00' FRONTAGE

LOT 16
LA=162,986 SF
BA=69,759 SF
ISF=55%
208.97' FRONTAGE

LOT 17
LA=128,202 SF
BA=103,880 SF
ISF=86%
288.68' FRONTAGE

LOT 18
LA=161,673 SF
BA=135,173 SF
ISF=45%
351.95' FRONTAGE

LOT 19
LA=87,235 SF
BA=87,235 SF
ISF=79%
1,027.43' FRONTAGE

LOT 20
LA=133,415 SF
BA=133,415 SF
ISF=50%
1,849.41' FRONTAGE

CURVE	ARC LENGTH	RADIUS
C1	10.63'	150.00'
C2	41.11'	150.00'
C3	101.12'	150.00'
C4	110.79'	150.00'
C5	173.91'	275.00'
C6	74.70'	150.00'
C7	22.69'	150.00'
C8	13.29'	200.00'
C9	43.77'	200.00'
C10	140.19'	150.00'
C11	45.58'	150.00'
C12	510.35'	150.00'
C13	130.20'	150.00'
C14	86.97'	150.00'
C15	69.16'	150.00'
C16	116.89'	150.00'
C17	101.95'	150.00'
C18	56.66'	150.00'
C19	284.52'	246.00'
C20	120.10'	150.00'
C21	60.85'	150.00'
C22	62.51'	150.00'

PLAN
SCALE: 1" = 40'
0 20 40 80

SCOTT P. CAMERON CIVIL No. 47601 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

CONVENTIONAL ROADWAY PLAN 1

DRAWING NO.
16C OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM

CURVE	ARC LENGTH	RADIUS
C1	10.63'	150.00'
C2	41.11'	150.00'
C3	101.12'	150.00'
C4	110.79'	150.00'
C5	173.91'	275.00'
C6	74.70'	150.00'
C7	22.69'	150.00'
C8	13.29'	200.00'
C9	43.77'	200.00'
C10	140.19'	150.00'
C11	45.58'	150.00'
C12	510.35'	150.00'
C13	130.20'	150.00'
C14	86.97'	150.00'
C15	69.16'	150.00'
C16	116.89'	150.00'
C17	101.95'	150.00'
C18	56.66'	150.00'
C19	284.52'	246.00'
C20	120.10'	150.00'
C21	60.85'	150.00'
C22	62.51'	150.00'

SHEET 16C MATCH LINE

LOT 4
LA=87,278 SF
BA=54,779 SF
ISF 67%
200.00' FRONTAGE

LOT 5
LA=87,197 SF
BA=56,684 SF
ISF=53%
200.00' FRONTAGE

LOT 6
LA=87,902 SF
BA=87,902 SF
ISF=69%
422.18' FRONTAGE

LOT 7
LA=96,082 SF
BA=96,082 SF
ISF=52%
271.97' FRONTAGE

LOT 8
LA=91,688 SF
BA=91,688 SF
ISF=56%
200.00' FRONTAGE

LOT 9
LA=137,435 SF
BA=71,192 SF
ISF=77%
200.00' FRONTAGE

LOT 10
LA=197,824 SF
BA=66,464 SF
ISF=88%
200.00' FRONTAGE

LOT 11
LA=174,396 SF
BA=65,676 SF
ISF=65%
200.00' FRONTAGE

LOT 12
LA=139,647 SF
BA=82,062 SF
ISF=59%
200.00' FRONTAGE

LOT 13
LA=162,308 SF
BA=55,854 SF
ISF=59%
218.59' FRONTAGE

LOT 14
LA=160,052 SF
BA=65,809 SF
ISF=52%
200.00' FRONTAGE

LOT 15
LA=168,698 SF
BA=45,632 SF
ISF=54%
200.00' FRONTAGE

LOT 16
LA=162,986 SF
BA=69,759 SF
ISF=55%
208.97' FRONTAGE

LOT 21
LA=96,253 SF
BA=96,253 SF
ISF=65%
1532' FRONTAGE

PROP. 3H:1V SLOPE

PROP. 2H:1V SLOPE

PROP. RETAINING WALL (MAX. HEIGHT 7'-FT)

PROP. 3H:1V SLOPE (TYP.)

LIMIT OF 100' BUFFER TO BVW (TYP.)

LIMIT OF BORDERING VEGETATED WETLAND (BVW)

PROP. DRAINAGE EASEMENT

PROP. STORMWATER RETENTION BASIN

ROAD A2
4,940 LF

PLAN
SCALE: 1" = 40'
0 20 40 80

SCOTT P. CAMERON (CIVIL) No. 47601
COMMONWEALTH OF MASSACHUSETTS
REGISTERED PROFESSIONAL ENGINEER

CONVENTIONAL ROADWAY PLAN 2

DRAWING NO.
16D OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN-CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

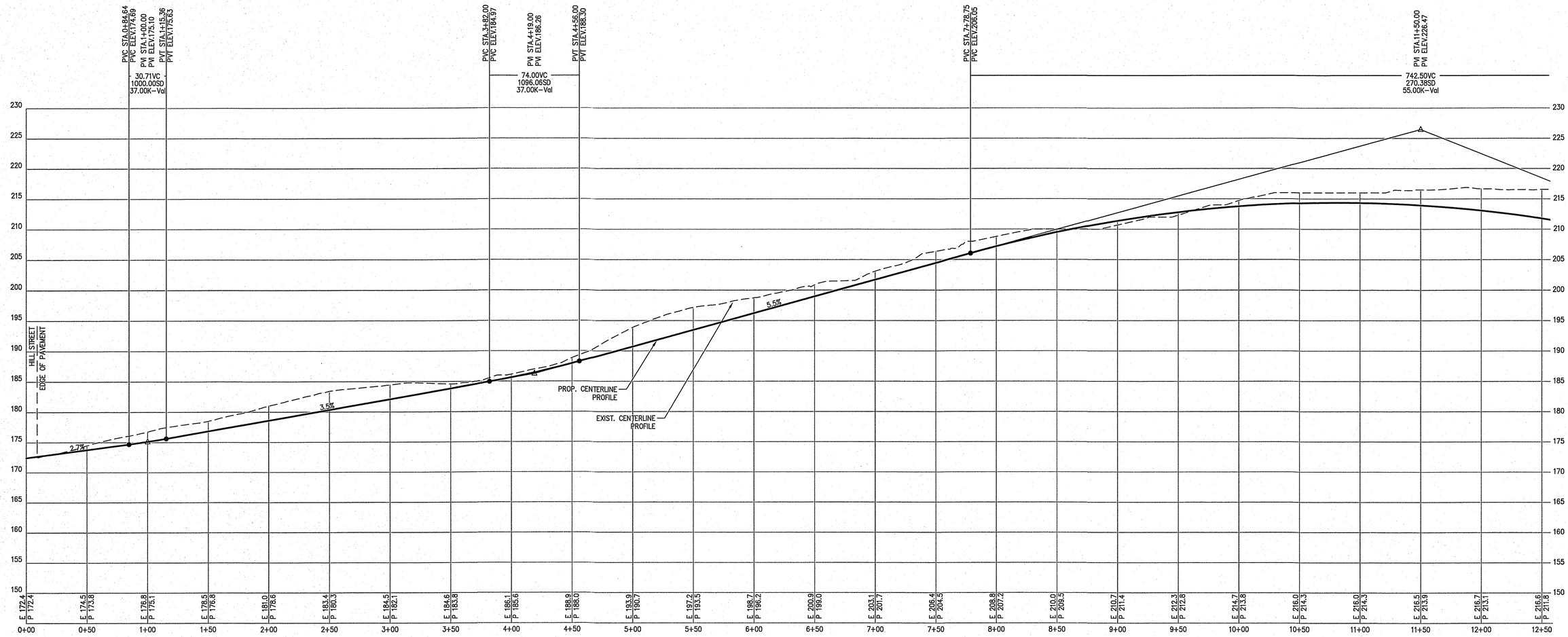
NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



PROFILE – ROAD A2

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

CONVENTIONAL ROAD PROFILE 1

DRAWING NO.

16E OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

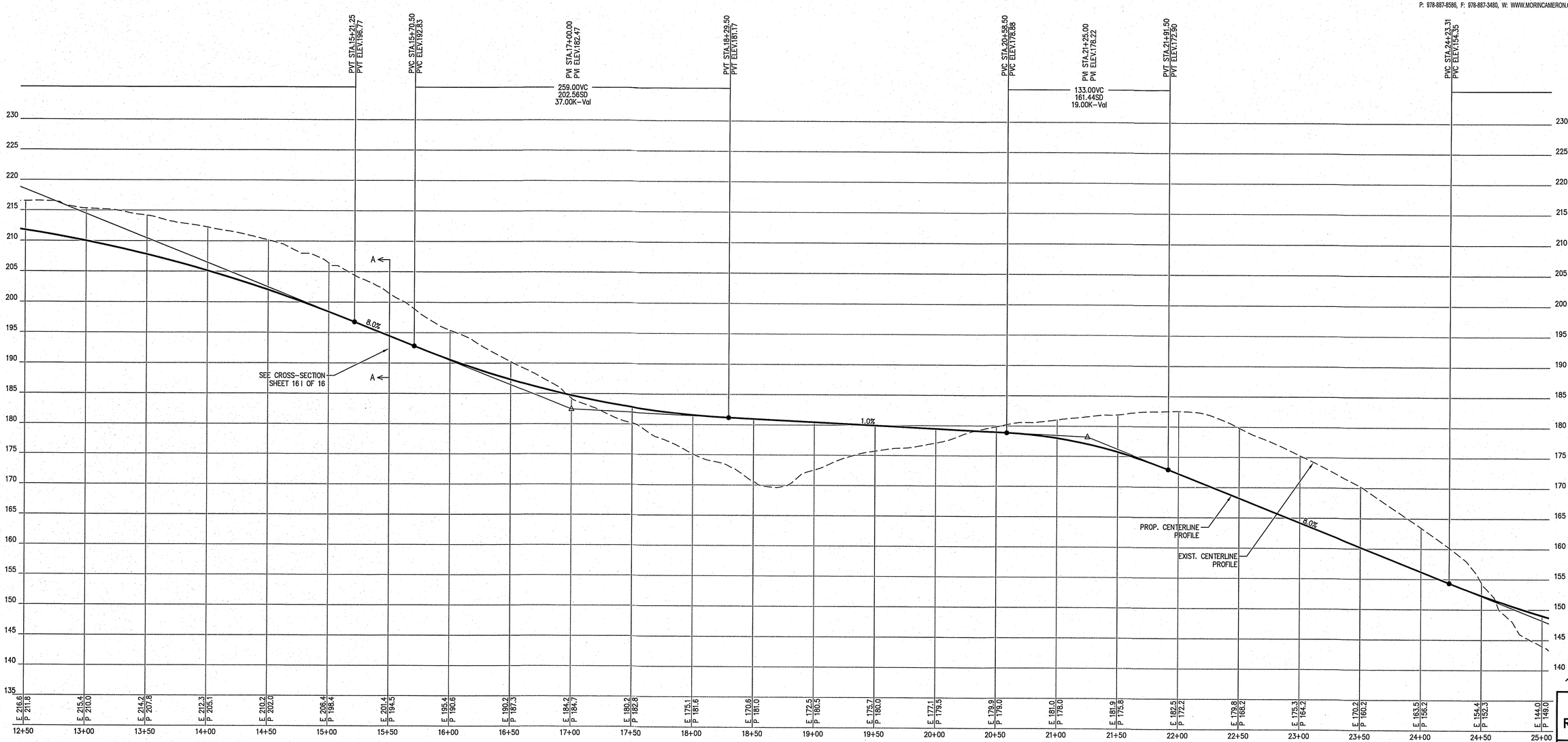
DATE: SEPTEMBER 10, 2015

REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8595, F: 978-887-3480, W: WWW.MORINCAMERON.COM



PROFILE – ROAD A2

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

SCOTT P. CAMERON CIVIL No. 47601 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

CONVENTIONAL ROAD PROFILE 2

DRAWING NO.

16F OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

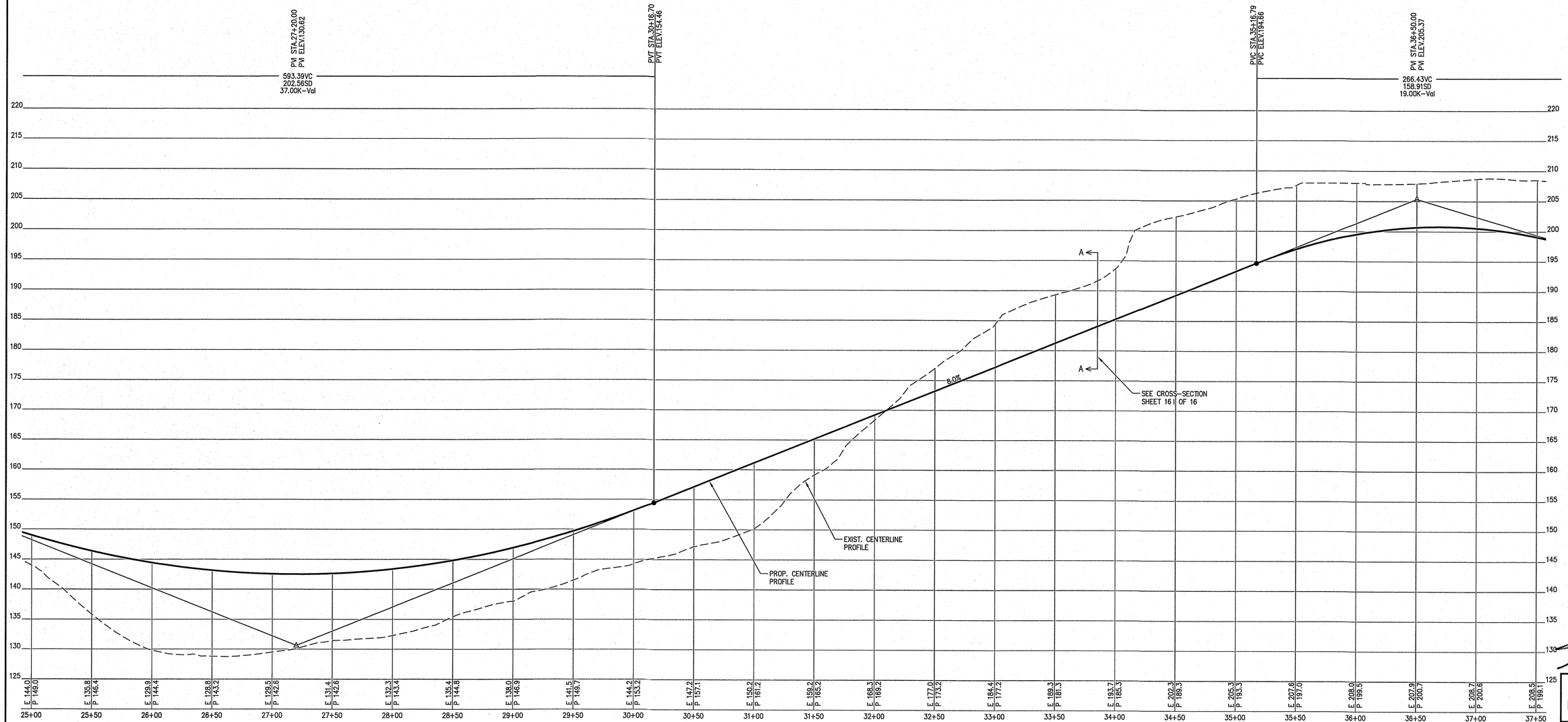
NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



PROFILE – ROAD A2

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

SCOTT P. CAMERON CIVIL No. 47601 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

CONVENTIONAL ROAD PROFILE 3

DRAWING NO.

16G OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

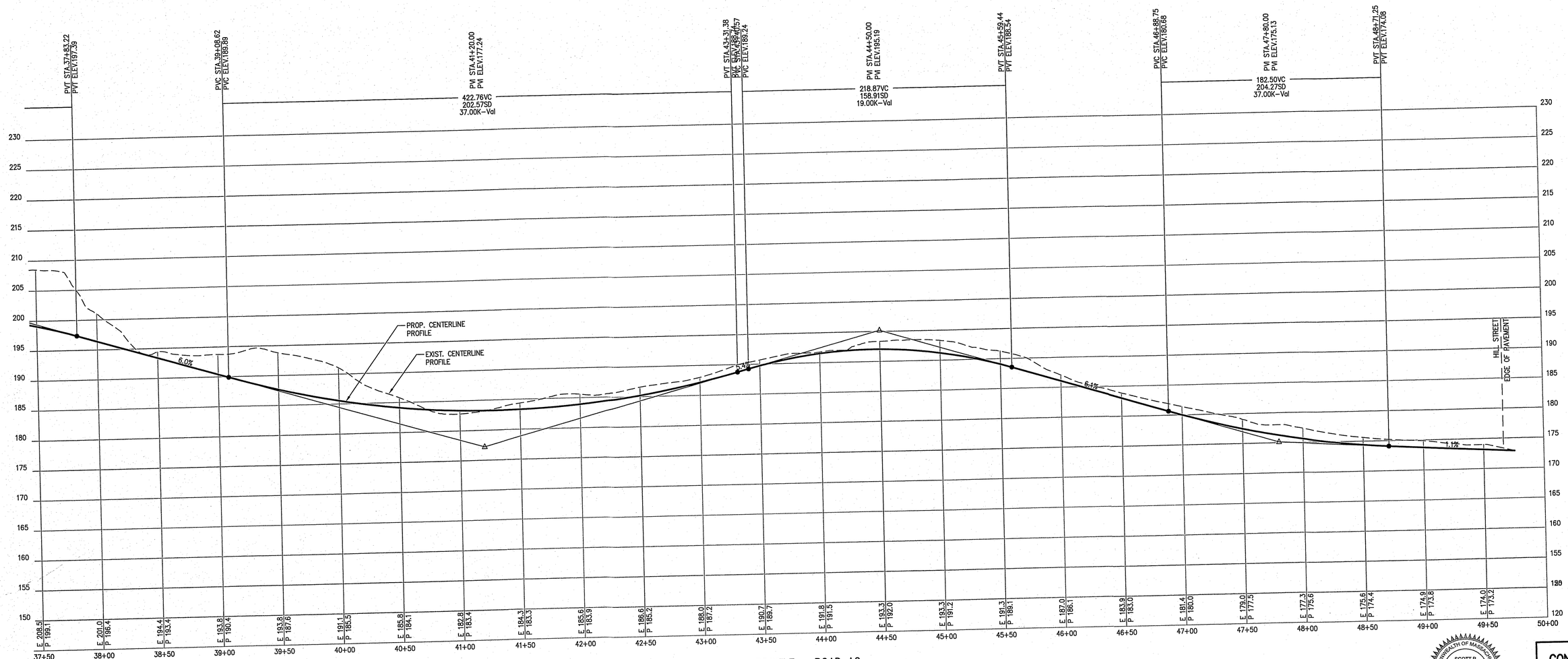
DATE: SEPTEMBER 10, 2015

REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



PROFILE – ROAD A2

SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
No. 47601
REGISTERED PROFESSIONAL ENGINEER

CONVENTIONAL ROAD PROFILE 4

DRAWING NO.
16H OF 16

PROJ. #3352
DRAWING: 3352 MAIN

© THE MORIN–CAMERON GROUP, INC. 2015

PRELIMINARY OPEN SPACE DEVELOPMENT PLAN

AT

116 & 120 HILL STREET

(ASSESSOR'S MAP 68, LOTS 47 & 48)

TOPSFIELD, MASSACHUSETTS

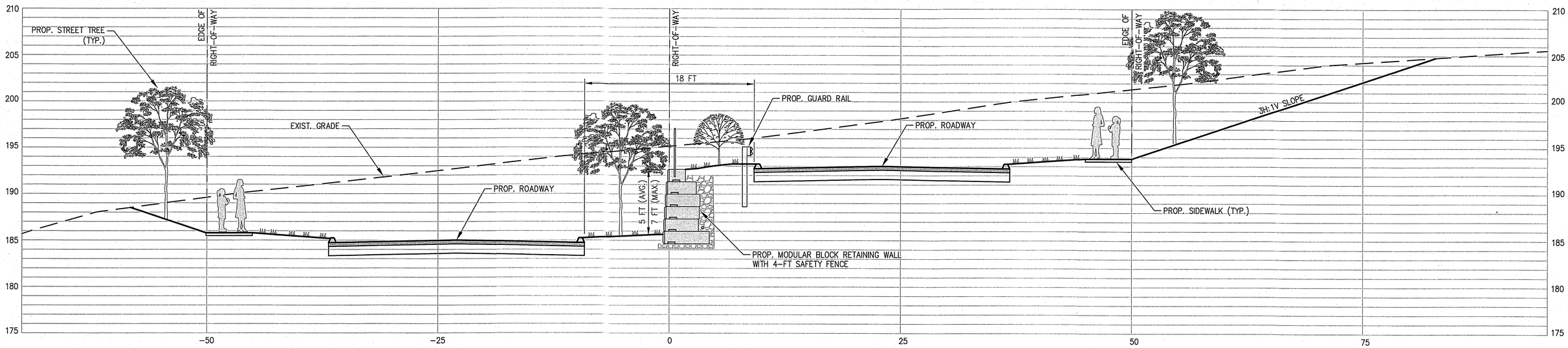
PREPARED FOR

NEW MEADOWS DEVELOPMENT, LLC

DATE: SEPTEMBER 10, 2015
REVISED: OCTOBER 30, 2015

ZONING DISTRICT: OUTLYING RESIDENTIAL AND AGRICULTURAL (ORA)

The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
447 BOSTON STREET - U.S. ROUTE 1, TOPSFIELD, MASSACHUSETTS 01983
P: 978-887-8586, F: 978-887-3480, W: WWW.MORINCAMERON.COM



ROADWAY CROSS-SECTION A-A (STA. 15+50 & 33+85)

SCALE: 1"=5'

NOTE: SEE TYPICAL ROADWAY CROSS-SECTION SHEET 14 OF 16

© THE MORIN-CAMERON GROUP, INC. 2015

COMMONWEALTH OF MASSACHUSETTS
SCOTT P. CAMERON
CIVIL
No. 47601
REGISTERED PROFESSIONAL ENGINEER

PROJ. #3352
DRAWING: 3352 MAIN

CONVENTIONAL ROADWAY CROSS-SECTION

DRAWING NO.

16 I OF 16