

# PLANNED RESIDENTIAL DEVELOPMENT

616 SPRINGS ROAD  
BEDFORD, MASSACHUSETTS

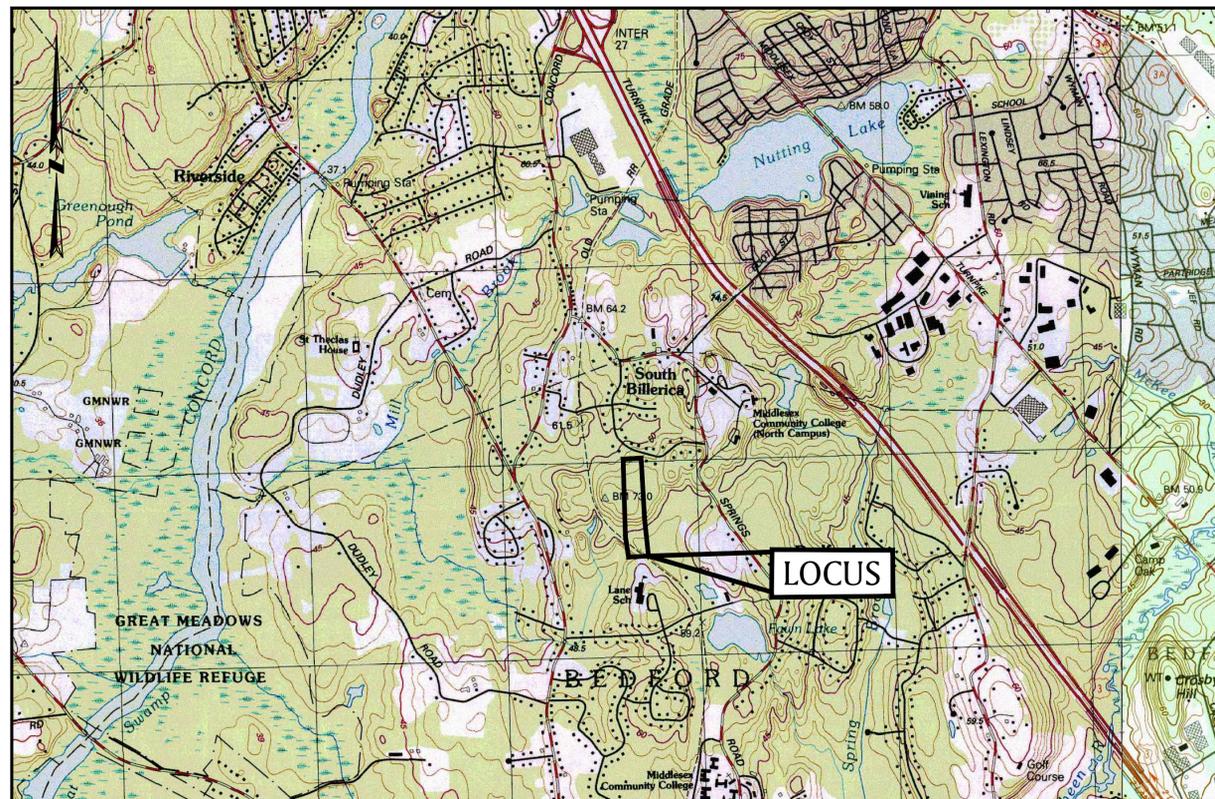
JULY 13, 2016  
REVISED: AUGUST 26, 2016

PREPARED FOR:

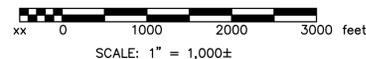
BERNSTEIN DEVELOPMENT LLC  
DAVID BERNSTEIN, MANAGER  
c/o  
MR. BRIAN DEVELLIS  
DEVELLIS CONSULTING GROUP  
41 NORTH ROAD – SUITE 100A  
BEDFORD, MA 01730

PREPARED BY:

**BSC GROUP**  
803 Summer Street  
Boston, Massachusetts  
02127  
617 896 4300



LOCUS MAP



ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION

## INDEX OF DRAWINGS

G-100	TITLE SHEET
G-101	LEGEND & GENERAL NOTES
V-100 - V-101	EXISTING CONDITIONS
C-100 - C-101	KEY PLAN
C-102 - C-103	EROSION & SEDIMENTATION CONTROL PLAN
C-104 - C-105	LAYOUT & MATERIALS PLAN
C-106 - C-107	GRADING & DRAINAGE PLAN
C-108 - C-109	UTILITY PLAN
C-110	ROADWAY PLAN & PROFILE
C-111	LOCUS PLAN
C-200 - C-202	CIVIL DETAILS
L-100 - L-101	LANDSCAPE PLANS AND DETAILS
L-102	LIGHTING PLAN

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# LEGEND

EXISTING	PROPOSED	
	CONC.	CEMENT CONCRETE
	VGC	VERTICAL GRANITE CURBING
	CGB	CAPE COD BERM
	WOOD GUARDRAIL	WOOD GUARDRAIL
	BIT CONC.	ASPHALT (BITUMINOUS CONCRETE)
	DECORATIVE CEMENT CONCRETE	DECORATIVE CEMENT CONCRETE
	SIGN	SIGN
	TEST PIT	TEST PIT
	PERCOLATION TEST	PERCOLATION TEST
	CHAIN LINK FENCE	CHAIN LINK FENCE
	STOCKADE FENCE	STOCKADE FENCE
	TREE LINE	TREE LINE
	LIGHT POLE	LIGHT POLE
	UTILITY POLE	UTILITY POLE
	CATCH BASIN	CATCH BASIN
	DRAIN MANHOLE	DRAIN MANHOLE
	ELECTRIC MANHOLE	ELECTRIC MANHOLE
	ELECTRIC HAND HOLE	ELECTRIC HAND HOLE
	VERIZON MANHOLE	VERIZON MANHOLE
	TELEPHONE MANHOLE	TELEPHONE MANHOLE
	FIRE PROTECTION MANHOLE	FIRE PROTECTION MANHOLE
	SEWER MANHOLE	SEWER MANHOLE
	PIV	POST INDICATOR VALVE
	WATER MANHOLE	WATER MANHOLE
	WATER GATE	WATER GATE
	THRUST BLOCK	THRUST BLOCK
	HYDRANT	HYDRANT
	TRANSFORMER	TRANSFORMER
	UNDERGROUND WATER LINE	UNDERGROUND WATER LINE
	UNDERGROUND DRAIN LINE	UNDERGROUND DRAIN LINE
	UNDERGROUND SEWER LINE	UNDERGROUND SEWER LINE
	UNDERGROUND GAS LINE	UNDERGROUND GAS LINE
	UNDERGROUND TELEPHONE LINE	UNDERGROUND TELEPHONE LINE
	OVERHEAD WIRE	OVERHEAD WIRE
	UNDERGROUND ELECTRIC CONDUIT	UNDERGROUND ELECTRIC CONDUIT
	UNDERGROUND CABLE CONDUIT	UNDERGROUND CABLE CONDUIT
	INV. = 146.1	INVERT
	1 = XXX	CONTOUR
	123	SPOT GRADE
	TOP (TC) & BOTTOM (BC) OF CURB	TOP (TC) & BOTTOM (BC) OF CURB
	TOP (TW) & BOTTOM (BW) OF WALL	TOP (TW) & BOTTOM (BW) OF WALL
	SILT FENCE W/ HAYBALES	SILT FENCE W/ HAYBALES

## EROSION CONTROL NOTES:

- THE SITE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SUITABLE EROSION AND SEDIMENTATION CONTROL DEVICES ON SITE DURING CONSTRUCTION AS REQUIRED TO PREVENT SILT FROM LEAVING THE SITE INCLUDING CONSTRUCTING ENTRANCES AND PERIMETER SEDIMENT CONTROLS. SILT WILL NOT BE ALLOWED BEYOND CONSTRUCTION LIMITS.
- EROSION CONTROL SHALL, AT MINIMUM, BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL ADDITIONAL EROSION CONTROLS AS NECESSARY.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR ALL GRADING AND OTHER LAND DISTURBING ACTIVITIES PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING SILT AND DEBRIS OUT OF ALL STORM DRAINAGE STRUCTURES UPON THE COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS.
- CONTRACTOR SHALL PROVIDE TEMPORARY GROUND COVER FOR ALL AREAS WITH EXPOSED SOIL WHICH WILL NOT BE DISTURBED BY GRADING OPERATIONS FOR A PERIOD OF 14 DAYS OR MORE.
- IF WORK ON THIS PROJECT IS SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL MAINTAIN THE SOIL EROSION AND SEDIMENTATION CONTROL FACILITIES IN GOOD CONDITION DURING THE SUSPENSION OF WORK.
- SPRINKLE OR APPLY DUST SUPPRESSERS TO KEEP DUST WITHIN TOLERABLE LIMITS AT THE CONSTRUCTION SITE.
- SILT SACS SHALL BE INSTALLED IN ALL CATCH BASINS, WITH PERIODIC CLEANING AND/OR REPLACING OF THE FILTER FABRIC, WHEN NECESSARY, THROUGHOUT THE DURATION OF THE CONSTRUCTION.
- CONSTRUCTION ENTRANCES SHOULD BE INSPECTED WEEKLY AND AFTER HEAVY RAINS OR HEAVY USE. THE CONSTRUCTION ENTRANCE SHOULD BE TOP DRESSED WITH NEW STONE ONCE THE ENTRANCE BECOMES COMPLETELY CLOGGED WITH MUD AND SOIL PARTICLES.
- SEDIMENT BEHIND PERIMETER SEDIMENT CONTROLS MUST BE REMOVED ONCE SEDIMENT REACHES A LEVEL OF DEPOSITION EQUAL TO HALF THE HEIGHT OF THE BARRIER.

## OPERATION AND MAINTENANCE PLAN:

THE PROJECT INCLUDES AN OPERATION AND MAINTENANCE PLAN REGARDING THE PROPOSED DEVELOPMENT TO MINIMIZE IMPACTS TO ENVIRONMENTAL RESOURCES DURING AND FOLLOWING CONSTRUCTION. THE PLAN INCORPORATES THE USE OF SILT FENCE/HAYBALES WHERE NECESSARY AND STORM DRAIN INLET PROTECTION DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR, UNDER THE SWPPP, TO INSTALL SILT FENCE/HAYBALES WHEN NECESSARY. MORE SPECIFICALLY, THE FOLLOWING ACTIVITIES SHOULD TAKE PLACE BOTH DURING AND FOLLOWING CONSTRUCTION. DURING CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE PROJECTS DRAINAGE SYSTEM.

## DURING CONSTRUCTION

- THE CONTRACTOR SHALL INSPECT THE SITE A MINIMUM OF ONCE A WEEK AND WITHIN 24 HOURS OF A 1/2 INCH OR GREATER STORM EVENT TO INSURE THAT EROSION OF SLOPES, STOCKPILES, ETC, IS NOT OCCURRING. IN INSTANCES WHERE EROSION IS OBSERVED, SILT FENCE/HAYBALES SHOULD BE INSTALLED DOWN GRADIENT OF ERODING AREAS. APPROPRIATE REPAIRS TO THE SEDIMENT CONTROLS WILL BE MADE AS NECESSARY.
- INSTALL SILT SACS UNDER ALL CATCH BASIN RIMS. SILT SACS SHOULD BE INSPECTED ONCE A WEEK AND WITHIN 24 HOURS OF A 1/2 INCH OR GREATER RAIN STORM EVENT TO INSURE THAT DAMAGE TO THE SILT SACS HAS NOT OCCURRED. APPROPRIATE REPAIRS TO THE FILTER FABRIC WILL BE MADE AS NECESSARY.
- CONSTRUCTION ENTRANCES SHOULD BE INSPECTED WEEKLY AND AFTER HEAVY RAINS OR HEAVY USE. THE CONSTRUCTION ENTRANCE SHOULD BE TOP DRESSED WITH NEW STONE ONCE THE ENTRANCE BECOMES COMPLETELY CLOGGED WITH MUD AND SOIL PARTICLES.
- SEDIMENT BEHIND PERIMETER SEDIMENT CONTROLS MUST BE REMOVED ONCE SEDIMENT REACHES A LEVEL OF DEPOSITION EQUAL TO HALF THE HEIGHT OF THE BARRIER.

## FOLLOWING CONSTRUCTION

- CATCH BASINS SHOULD BE INSPECTED FOUR TIMES A YEAR AND CLEANED TWICE PER YEAR (AT A MINIMUM). ONE CLEANING SHOULD OCCUR IN THE EARLY SPRING FOLLOWING SNOWMELT.
- CLEANING OF CATCH BASINS SHOULD BE PERFORMED BY A VACUUM TRUCK AND MATERIALS REMOVED AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
- SUBSURFACE DETENTION AND INFILTRATION SYSTEM SHOULD BE INSPECTED AFTER EVERY MAJOR STORM FOR THE FIRST THREE MONTHS FOLLOWING CONSTRUCTION. SUBSEQUENTLY, THESE SYSTEMS SHOULD BE INSPECTED ANNUALLY.

## SITE PREPARATION AND DEMOLITION:

- AREAS OUTSIDE THE LIMIT OF WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER. ALL AREAS DISTURBED DURING CONSTRUCTION NOT COVERED WITH BUILDINGS, STRUCTURES, OR PAVEMENTS SHALL RECEIVE SIX INCHES OF LOAM AND SEED, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATIONS AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH EPA'S NPDES PERMITTING FOR CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA REGULATIONS AND LOCAL & STATE REQUIREMENTS.
- ALL MATERIALS ARE TO BE DISPOSED OF PER APPLICABLE LAWS AND REGULATIONS.
- WHERE EXISTING PAVEMENT TO BE REMOVED MEETS EXISTING PAVEMENTS TO REMAIN, CONTRACTOR IS TO SAWCUT A STRAIGHT LINE UNLESS INDICATED OTHERWISE. ADDITIONALLY, EXISTING PAVEMENT IS TO BE SAWCUT, AS NECESSARY, FOR ALL PROPOSED UTILITY CONNECTIONS WITHIN THE RIGHT-OF-WAY.
- ALL EXISTING REMAINING UTILITIES SHALL BE PROTECTED, UNLESS NOTED OTHERWISE.
- UTILITY PIPES TO BE ABANDONED THAT ARE NOT LOCATED UNDER ANY BUILDINGS OR CONCRETE SLABS MAY BE LEFT IN PLACE, UNLESS NOTED OTHERWISE.

## LAYOUT AND MATERIAL NOTES:

- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO STANDARD SPECIFICATIONS DETAILS OF THE TOWN OF BEDFORD AND "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES" OF THE MASSACHUSETTS HIGHWAY DEPARTMENT, LATEST EDITION, AND THESE CONTRACT DOCUMENTS.
- ALL UNDERGROUND STRUCTURES AND UTILITIES ARE TO BE CAPABLE OF WITHSTANDING H20 WHEEL LOADS.
- UNLESS OTHERWISE INDICATED, CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO CONSTRUCT ALL PEDESTRIAN WAYS IN ACCORDANCE WITH ADA/AAB STANDARDS.
- ALL EXISTING CURBING AND PAVEMENT IN THE VICINITY OF THE PROPOSED WORK IS TO BE RESTORED, IF DAMAGED, AT NO ADDITIONAL COST TO THE OWNER.
- ALL SITE TRAFFIC SIGNAGE AND PAVEMENT MARKINGS TO COMPLY WITH MUTCD STANDARDS.
- ALL CONSTRUCTION SHALL CONFORM TO THE TOWN OF BEDFORD DEPARTMENT OF PUBLIC WORK STANDARDS.

## UTILITY NOTES:

- LOCATIONS OF UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE DONE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE COORDINATION WITH UTILITY COMPANIES AND PUBLIC AGENCIES AND FOR OBTAINING ALL REQUIRED PERMITS AND PAYING ALL REQUIRED FEES. IN ACCORDANCE WITH M.G.L., CHAPTER 82, SECTION 40, INCLUDING AMENDMENTS; CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING PRIOR TO SUCH EXCAVATION. CONTRACTOR SHALL ALSO CALL "DIG SAFE" AT 1(888)344-7233 NO LESS THAN 72 HOURS (EXCLUSIVE OF SATURDAYS, SUNDAYS AND HOLIDAYS TO SUCH EXCAVATION. DOCUMENTATION OF REQUESTS SHALL BE PROVIDED TO PROJECT REPRESENTATIVE PRIOR TO EXCAVATION WORK.
- FINAL DESIGN OF PRIVATE UTILITIES INCLUDING GAS, ELECTRIC, CABLE TV AND TELEPHONE SHALL BE PROVIDED BY THE APPROPRIATE UTILITY COMPANY. THE DRY UTILITIES SHOWN HERE ARE SHOWN FOR GENERAL COORDINATION PURPOSES ONLY.
- CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, ETC. BY THE UTILITY COMPANY.
- MEP IS RESPONSIBLE FOR ALL CONNECTIONS WITHIN 10-FT OF THE PROPOSED BUILDING.
- THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATIONS AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT.
- CONTRACTOR TO VERIFY UTILITY CONNECTIONS TO BUILDING WITH ARCHITECTURAL AND MEP DRAWINGS.
- INSTALL THRUST BLOCKS AT ALL TEES AND BENDS IN ALL WATERLINES AND SEWER FORCEMAIN.
- CONTRACTOR TO REFER TO THE LIGHTING PLANS FOR LIGHTING SCHEDULE AND LAYOUT. LIGHT FIXTURES SHOWN ON CIVIL ENGINEERING PLANS ARE FOR INFORMATION ONLY.

## GRADING NOTES:

- RIM ELEVATIONS OF PROPOSED MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE PROPOSED FINISHED GRADES.
- CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN ALL EROSION CONTROL MEASURES AND SEEDED EMBANKMENTS DURING CONSTRUCTION. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH EPA'S NPDES PERMITTING FOR CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH OSHA REGULATIONS AND LOCAL & STATE REQUIREMENTS.
- ALL FILL MATERIAL UNDER THE PROPOSED BUILDING TO BE STRUCTURAL FILL SPECIFIED BY A GEOTECHNICAL ENGINEER.
- REFER TO LANDSCAPE PLAN FOR LOAM AND SEED AREAS AND PLANTING REQUIREMENTS.
- THE CONTRACTOR SHALL GIVE TWENTY-FOUR (24) HOUR NOTICE TO PERTINENT TOWN DEPARTMENTS BEFORE COMMENCING WORK IN THE FIELD.



ENG. NAME DATE  
PROFESSIONAL ENGINEER

# PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

## LEGEND & GENERAL NOTES

AUGUST 26, 2016

### REVISIONS:

NO.	DATE	DESC.

### PREPARED FOR:

BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
BEDFORD, MA 01730



803 Summer Street  
Boston, Massachusetts  
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617 896 4300

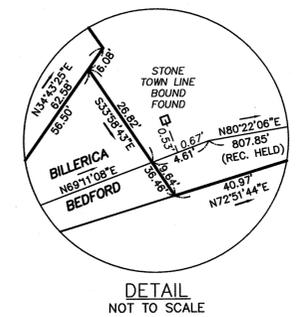
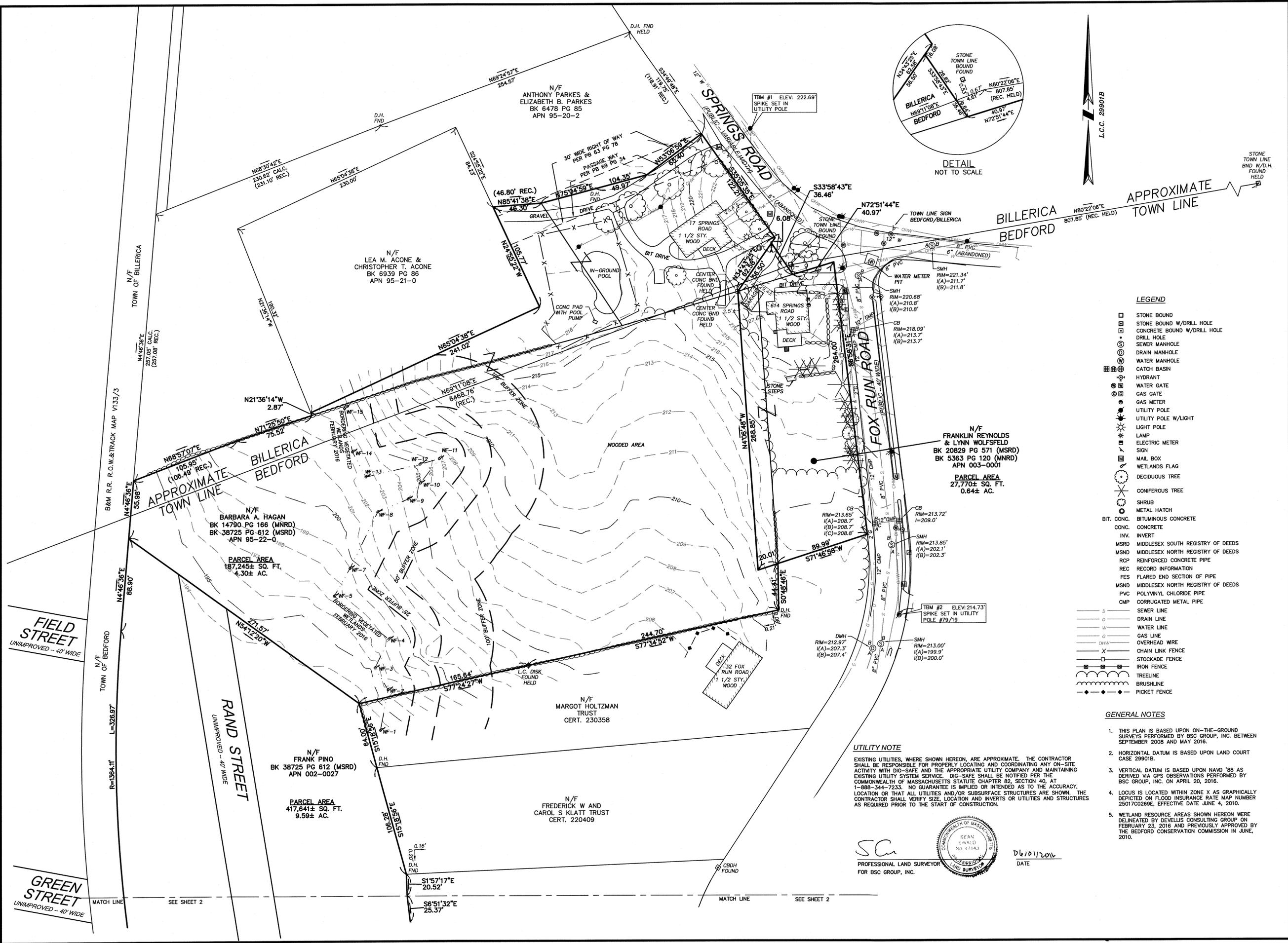
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SCALE: NONE

FILE: 2327100\Civil\Drawings

DWG. NO: SHEET G-101  
JOB. NO: 23271.00

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NOT FOR CONSTRUCTION



- LEGEND**
- STONE BOUND
  - STONE BOUND W/DRILL HOLE
  - CONCRETE BOUND W/DRILL HOLE
  - DRILL HOLE
  - SEWER MANHOLE
  - DRAIN MANHOLE
  - WATER MANHOLE
  - CATCH BASIN
  - HYDRANT
  - WATER GATE
  - GAS GATE
  - GAS METER
  - UTILITY POLE
  - UTILITY POLE W/LIGHT
  - LIGHT POLE
  - LAMP
  - ELECTRIC METER
  - SIGN
  - MAIL BOX
  - WETLANDS FLAG
  - DECIDUOUS TREE
  - CONIFEROUS TREE
  - SHRUB
  - METAL HATCH
  - BIT. CONC. BITUMINOUS CONCRETE
  - CONC. CONCRETE
  - INV. INVERT
  - MSRD MIDDLESEX SOUTH REGISTRY OF DEEDS
  - MSND MIDDLESEX NORTH REGISTRY OF DEEDS
  - RCP REINFORCED CONCRETE PIPE
  - REC RECORD INFORMATION
  - FES FLARED END SECTION OF PIPE
  - MSND MIDDLESEX NORTH REGISTRY OF DEEDS
  - PVC POLYVINYL CHLORIDE PIPE
  - CMP CORRUGATED METAL PIPE
  - S SEWER LINE
  - D DRAIN LINE
  - W WATER LINE
  - G GAS LINE
  - OHW OVERHEAD WIRE
  - X CHAIN LINK FENCE
  - □ STOCKADE FENCE
  - □ IRON FENCE
  - TREELINE
  - BRUSHLINE
  - PICKET FENCE

- GENERAL NOTES**
- THIS PLAN IS BASED UPON ON-THE-GROUND SURVEYS PERFORMED BY BSC GROUP, INC. BETWEEN SEPTEMBER 2008 AND MAY 2016.
  - HORIZONTAL DATUM IS BASED UPON LAND COURT CASE 299018.
  - VERTICAL DATUM IS BASED UPON NAVD '88 AS DERIVED VIA GPS OBSERVATIONS PERFORMED BY BSC GROUP, INC. ON APRIL 20, 2016.
  - LOCUS IS LOCATED WITHIN ZONE X AS GRAPHICALLY DEPICTED ON FLOOD INSURANCE RATE MAP NUMBER 250170226E, EFFECTIVE DATE JUNE 4, 2010.
  - WETLAND RESOURCE AREAS SHOWN HEREON WERE DELINEATED BY DEVELLIS CONSULTING GROUP ON FEBRUARY 23, 2016 AND PREVIOUSLY APPROVED BY THE BEDFORD CONSERVATION COMMISSION IN JUNE, 2010.

**UTILITY NOTE**

EXISTING UTILITIES, WHERE SHOWN HEREON, ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING AND COORDINATING ANY ON-SITE ACTIVITY WITH DIG-SAFE AND THE APPROPRIATE UTILITY COMPANY AND MAINTAINING EXISTING UTILITY SYSTEM SERVICE. DIG-SAFE SHALL BE NOTIFIED PER THE COMMONWEALTH OF MASSACHUSETTS STATUTE CHAPTER 82, SECTION 40, AT 1-888-344-7233. NO GUARANTEE IS IMPLIED OR INTENDED AS TO THE ACCURACY, LOCATION OR THAT ALL UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERTS OR UTILITIES AND STRUCTURES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

SC  
 PROFESSIONAL LAND SURVEYOR  
 FOR BSC GROUP, INC.

6/10/2016  
 DATE

**PLANNED RESIDENTIAL DEVELOPMENT (PRD)**

IN  
**BEDFORD MASSACHUSETTS**  
 (MIDDLESEX COUNTY)

**EXISTING CONDITIONS**

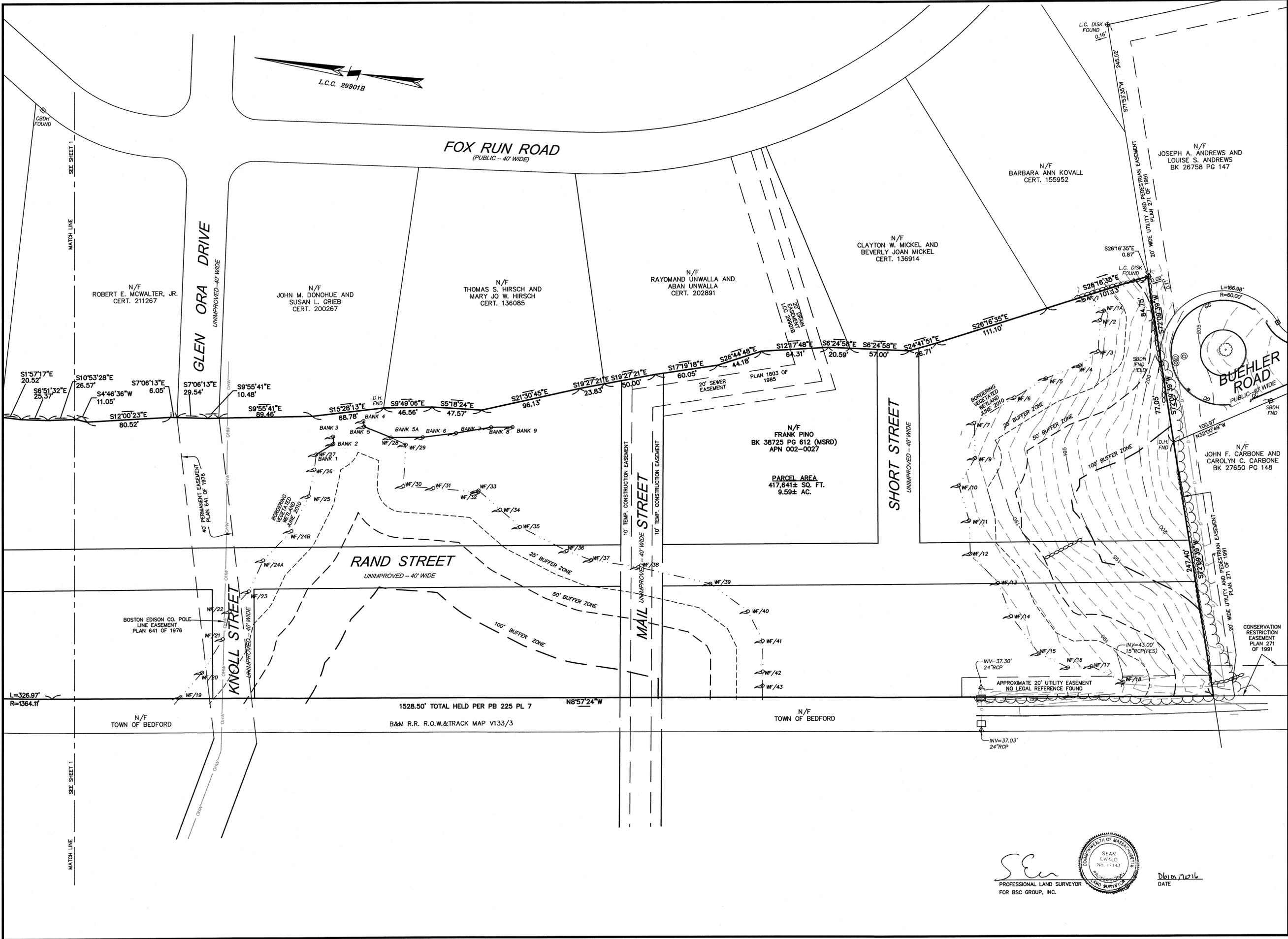
JULY 1, 2016

REVISIONS:

NO.	DATE	DESC.

PREPARED FOR:  
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 C/O DEVELLIS CONSULTING GROUP  
 41 NORTH ROAD—SUITE 203  
 BEDFORD, MA 01730

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 02127  
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**PLANNED  
RESIDENTIAL  
DEVELOPMENT (PRD)**

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

EXISTING CONDITIONS

JULY 1, 2016

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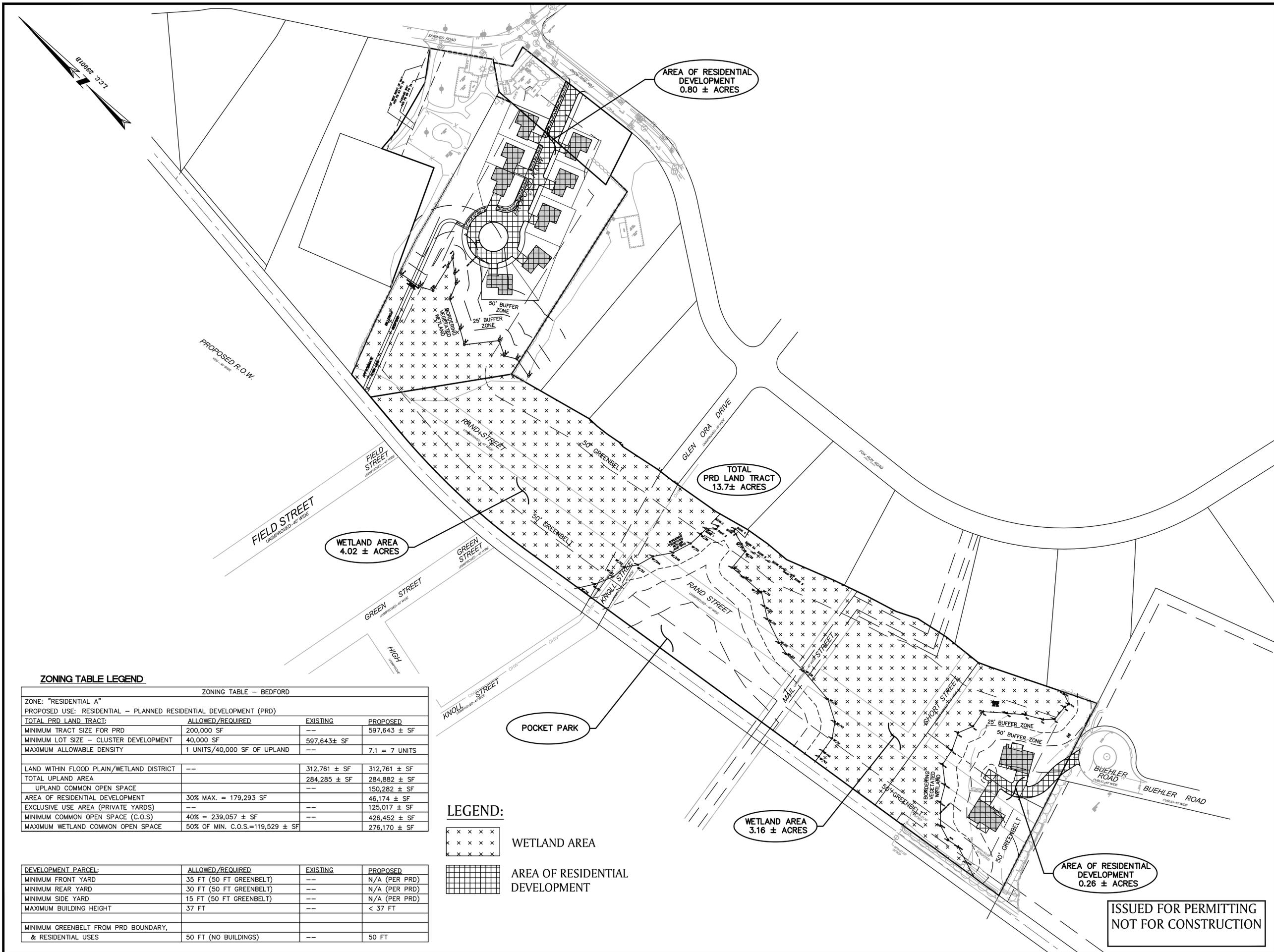
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SCALE: 1" = 40'  
0 20 40 80 FEET

FILE: 2327100\Survey\Baseplan  
DWG. NO: 2327100EC SHEET V-101  
JOB. NO: 23271.00

SEAN S. WALD  
PROFESSIONAL LAND SURVEYOR  
FOR BSC GROUP, INC.



06/10/2016  
DATE



ENG. NAME: FRANCIS D. DIPIETRO  
 PROFESSIONAL ENGINEER  
 DATE: 08-28-16

**PLANNED RESIDENTIAL DEVELOPMENT (PRD)**

IN  
 BEDFORD  
 MASSACHUSETTS  
 (MIDDLESEX COUNTY)

**KEY PLAN**

AUGUST 26, 2016

REVISIONS:

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 C/O DEVELLIS CONSULTING GROUP  
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 SCALE: 1" = 80'  
 0 40 80 160 FEET  
 FILE: 2327100\Civil\Drawings  
 DWG. NO:  
 JOB. NO: 23271.00 SHEET C-100

**ZONING TABLE LEGEND**

ZONING TABLE - BEDFORD

ZONE: "RESIDENTIAL A"  
 PROPOSED USE: RESIDENTIAL - PLANNED RESIDENTIAL DEVELOPMENT (PRD)

TOTAL PRD LAND TRACT:	ALLOWED/REQUIRED	EXISTING	PROPOSED
MINIMUM TRACT SIZE FOR PRD	200,000 SF	--	597,643 ± SF
MINIMUM LOT SIZE - CLUSTER DEVELOPMENT	40,000 SF	597,643± SF	--
MAXIMUM ALLOWABLE DENSITY	1 UNITS/40,000 SF OF UPLAND	--	7.1 = 7 UNITS
LAND WITHIN FLOOD PLAIN/WETLAND DISTRICT	--	312,761 ± SF	312,761 ± SF
TOTAL UPLAND AREA		284,285 ± SF	284,882 ± SF
UPLAND COMMON OPEN SPACE		--	150,282 ± SF
AREA OF RESIDENTIAL DEVELOPMENT	30% MAX. = 179,293 SF	--	46,174 ± SF
EXCLUSIVE USE AREA (PRIVATE YARDS)	--	--	125,017 ± SF
MINIMUM COMMON OPEN SPACE (C.O.S)	40% = 239,057 ± SF	--	426,452 ± SF
MAXIMUM WETLAND COMMON OPEN SPACE	50% OF MIN. C.O.S.=119,529 ± SF	--	276,170 ± SF

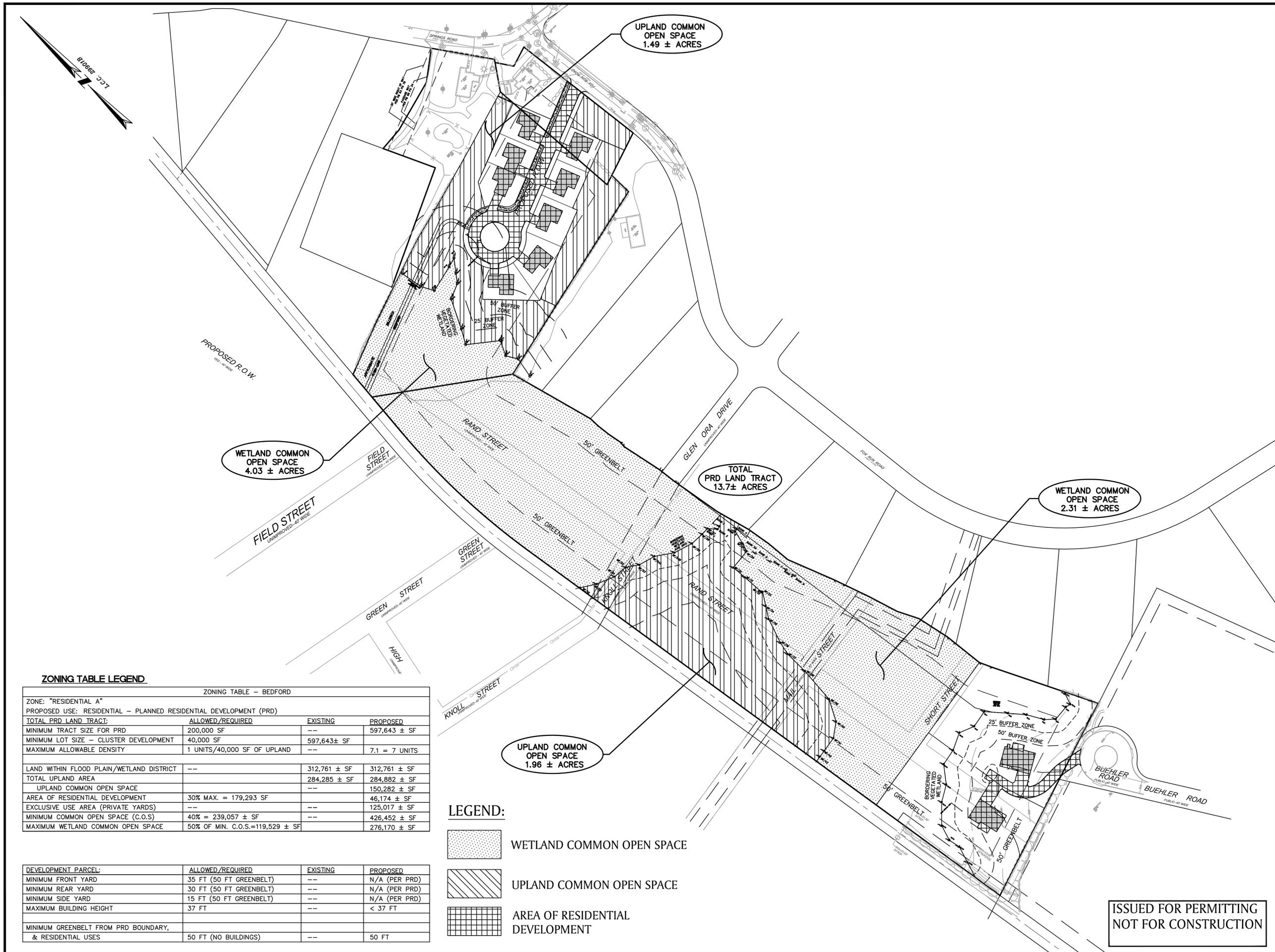
DEVELOPMENT PARCEL:	ALLOWED/REQUIRED	EXISTING	PROPOSED
MINIMUM FRONT YARD	35 FT (50 FT GREENBELT)	--	N/A (PER PRD)
MINIMUM REAR YARD	30 FT (50 FT GREENBELT)	--	N/A (PER PRD)
MINIMUM SIDE YARD	15 FT (50 FT GREENBELT)	--	N/A (PER PRD)
MAXIMUM BUILDING HEIGHT	37 FT	--	< 37 FT
MINIMUM GREENBELT FROM PRD BOUNDARY, & RESIDENTIAL USES	50 FT (NO BUILDINGS)	--	50 FT

**LEGEND:**

WETLAND AREA

AREA OF RESIDENTIAL DEVELOPMENT

**ISSUED FOR PERMITTING  
 NOT FOR CONSTRUCTION**



ENG. NAME: FRANCIS D. DIPIETRO  
PROFESSIONAL ENGINEER  
DATE: 08-28-16

**PLANNED RESIDENTIAL DEVELOPMENT (PRD)**

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MASSACHUSETTS  
(MIDDLESEX COUNTY)

**KEY PLAN**

AUGUST 26, 2016

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SCALE: 1" = 80'  
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DWG. NO:  
JOB. NO: 23271.00 SHEET C-101

**ZONING TABLE LEGEND**

ZONING TABLE -- BEDFORD

ZONE: "RESIDENTIAL A"  
PROPOSED USE: RESIDENTIAL -- PLANNED RESIDENTIAL DEVELOPMENT (PRD)

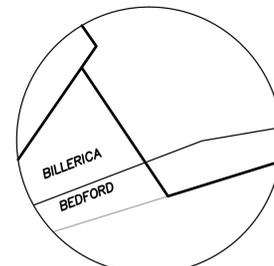
TOTAL PRD LAND TRACT:	ALLOWED/REQUIRED	EXISTING	PROPOSED
MINIMUM TRACT SIZE FOR PRD	200,000 SF	--	597,643 ± SF
MINIMUM LOT SIZE -- CLUSTER DEVELOPMENT	40,000 SF	597,643± SF	
MAXIMUM ALLOWABLE DENSITY	1 UNITS/40,000 SF OF UPLAND	--	7.1 = 7 UNITS
LAND WITHIN FLOOD PLAIN/WETLAND DISTRICT	--	312,761 ± SF	312,761 ± SF
TOTAL UPLAND AREA		284,285 ± SF	284,882 ± SF
UPLAND COMMON OPEN SPACE		--	150,282 ± SF
AREA OF RESIDENTIAL DEVELOPMENT	30% MAX. = 179,293 SF	--	46,174 ± SF
EXCLUSIVE USE AREA (PRIVATE YARDS)	--	--	125,017 ± SF
MINIMUM COMMON OPEN SPACE (C.O.S)	40% = 239,057 ± SF	--	426,452 ± SF
MAXIMUM WETLAND COMMON OPEN SPACE	50% OF MIN. C.O.S.=119,529 ± SF	--	276,170 ± SF

DEVELOPMENT PARCEL:	ALLOWED/REQUIRED	EXISTING	PROPOSED
MINIMUM FRONT YARD	35 FT (50 FT GREENBELT)	--	N/A (PER PRD)
MINIMUM REAR YARD	30 FT (50 FT GREENBELT)	--	N/A (PER PRD)
MINIMUM SIDE YARD	15 FT (50 FT GREENBELT)	--	N/A (PER PRD)
MAXIMUM BUILDING HEIGHT	37 FT	--	< 37 FT
MINIMUM GREENBELT FROM PRD BOUNDARY, & RESIDENTIAL USES	50 FT (NO BUILDINGS)	--	50 FT

**LEGEND:**

- WETLAND COMMON OPEN SPACE
- UPLAND COMMON OPEN SPACE
- AREA OF RESIDENTIAL DEVELOPMENT

**ISSUED FOR PERMITTING  
NOT FOR CONSTRUCTION**



DETAIL  
NOT TO SCALE

APPROXIMATE  
TOWN LINE

BILLERICA  
BEDFORD



ENG. NAME DATE  
PROFESSIONAL ENGINEER

**PLANNED  
RESIDENTIAL  
DEVELOPMENT (PRD)**

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

**EROSION &  
SEDIMENTATION CONTROL  
PLAN**  
AUGUST 26, 2016

REVISIONS:

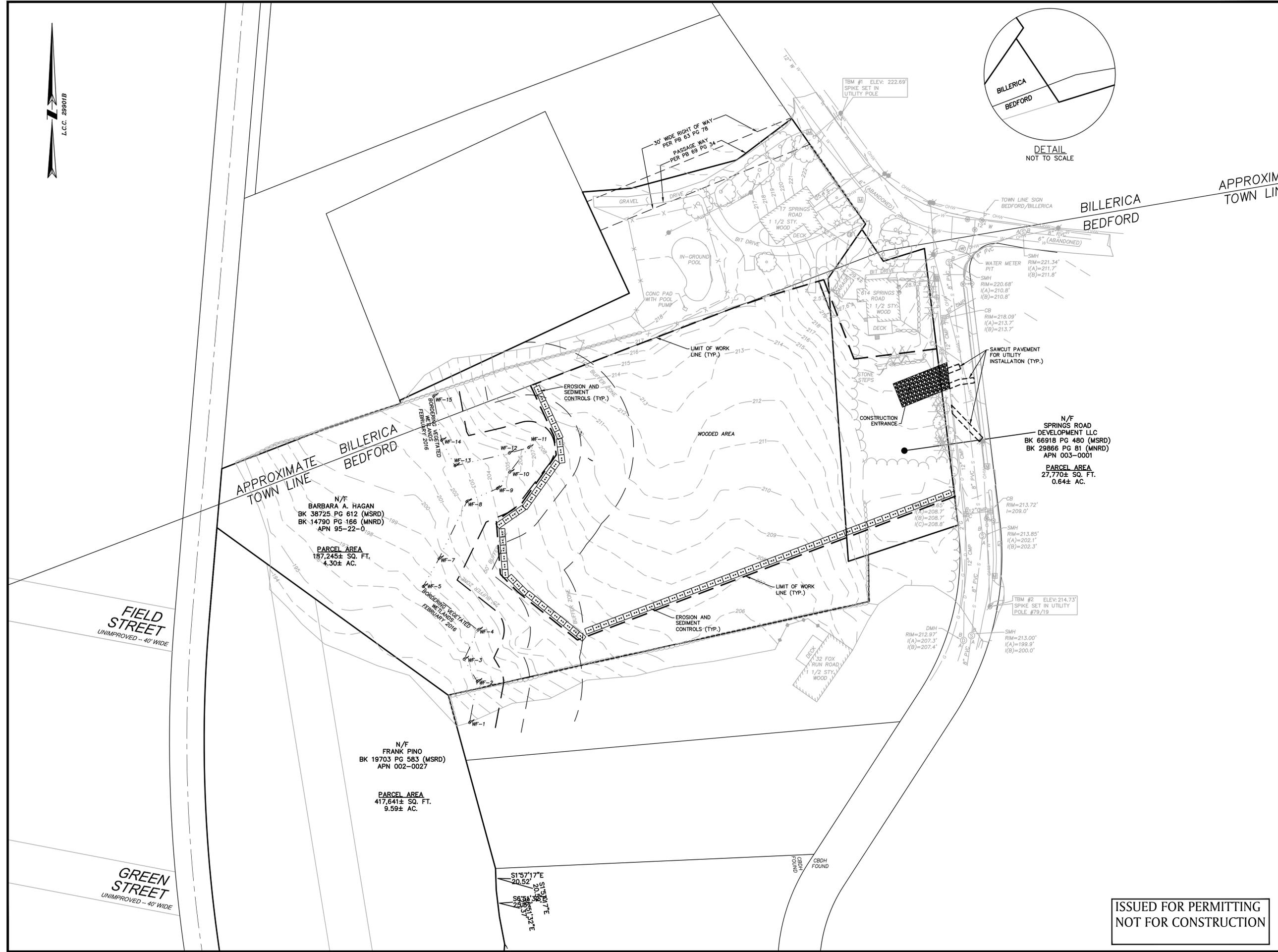
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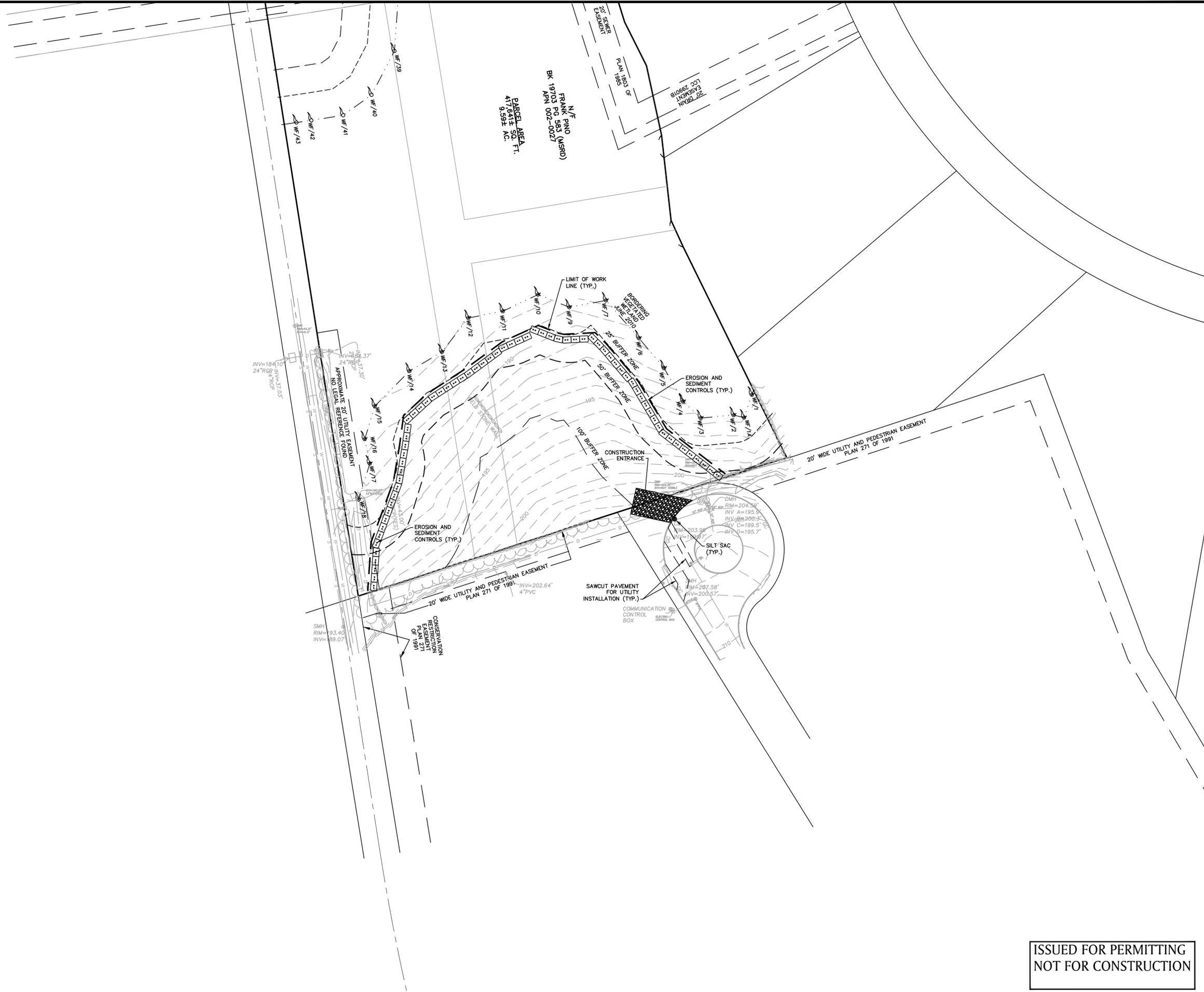
PREPARED FOR:  
BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
BEDFORD, MA 01730

**BSC GROUP**  
803 Summer Street  
Boston, Massachusetts  
02127  
617 896 4300

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SCALE: 1" = 40'  
0 20 40 80 FEET  
FILE: 2327100\Civil\Drawings  
DWG. NO: SHEET C-102  
JOB. NO: 23271.00

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ENG. NAME DATE  
PROFESSIONAL ENGINEER

### PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN BEDFORD MASSACHUSETTS (MIDDLESEX COUNTY)

### EROSION & SEDIMENTATION CONTROL PLAN AUGUST 26, 2016

REVISIONS:

NO.	DATE	DESC.

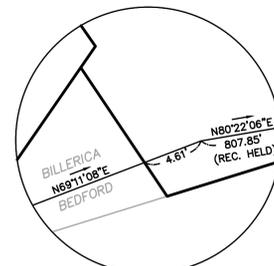
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JOB. NO: 23271.00 SHEET C-103



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ENG. NAME DATE  
PROFESSIONAL ENGINEER

### PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

### LAYOUT & MATERIALS PLAN

AUGUST 26, 2016

REVISIONS:

NO.	DATE	DESC.

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41 NORTH ROAD-SUITE 203  
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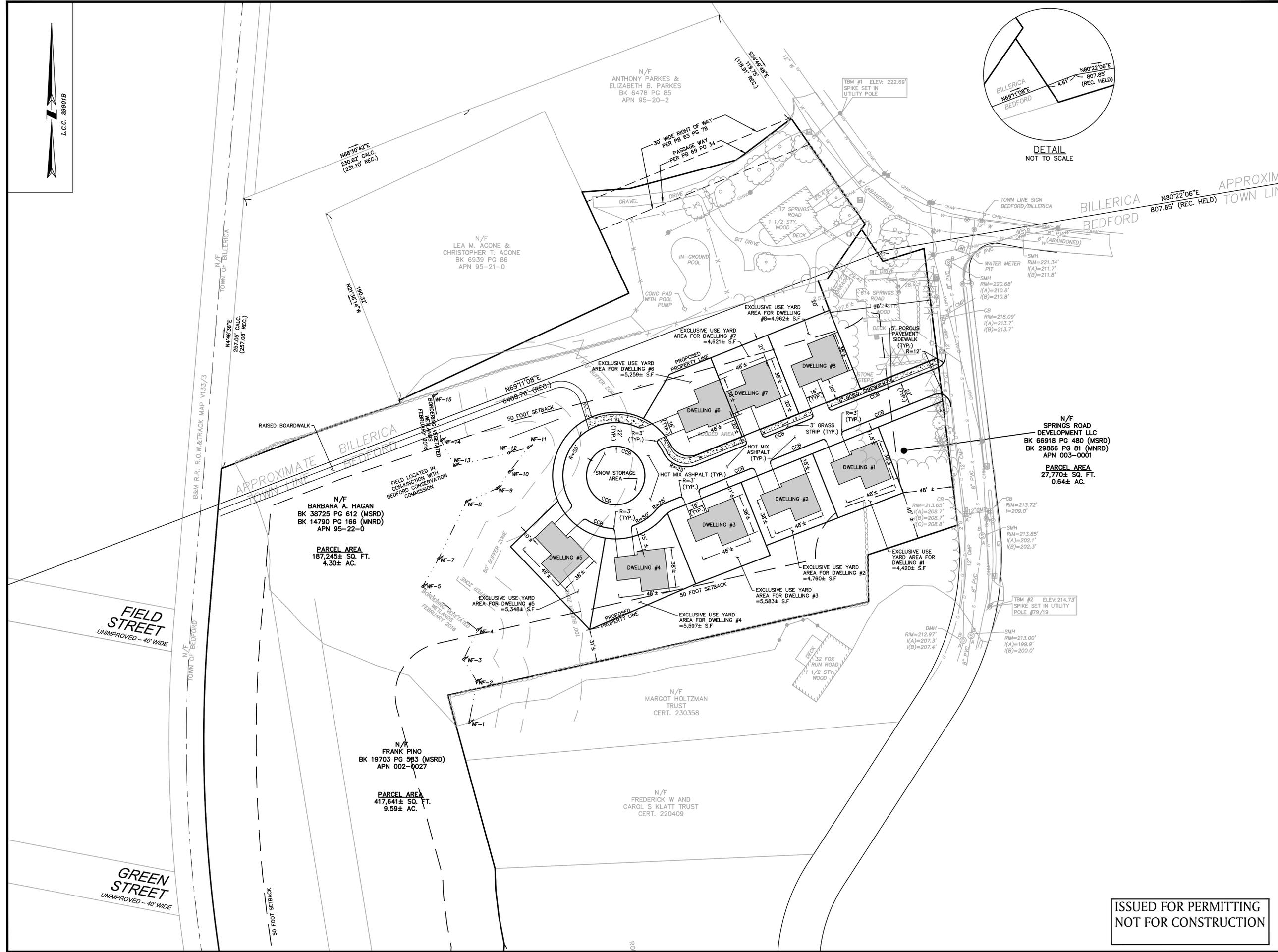
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JOB. NO: 23271.00

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ENG. NAME DATE  
PROFESSIONAL ENGINEER

### PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN BEDFORD MASSACHUSETTS (MIDDLESEX COUNTY)

### LAYOUT & MATERIALS PLAN

AUGUST 26, 2016

REVISIONS:

NO.	DATE	DESC.

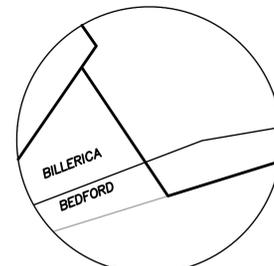
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JOB. NO: 23271.00 SHEET **C-105**



DETAIL  
NOT TO SCALE

APPROXIMATE  
TOWN LINE

BILLERICA  
BEDFORD



ENG. NAME  
PROFESSIONAL ENGINEER

DATE

### PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

### GRADING & DRAINAGE PLAN

AUGUST 26, 2016

REVISIONS:

NO.	DATE	DESC.

PREPARED FOR:

BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
BEDFORD, MA 01730

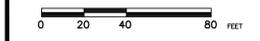


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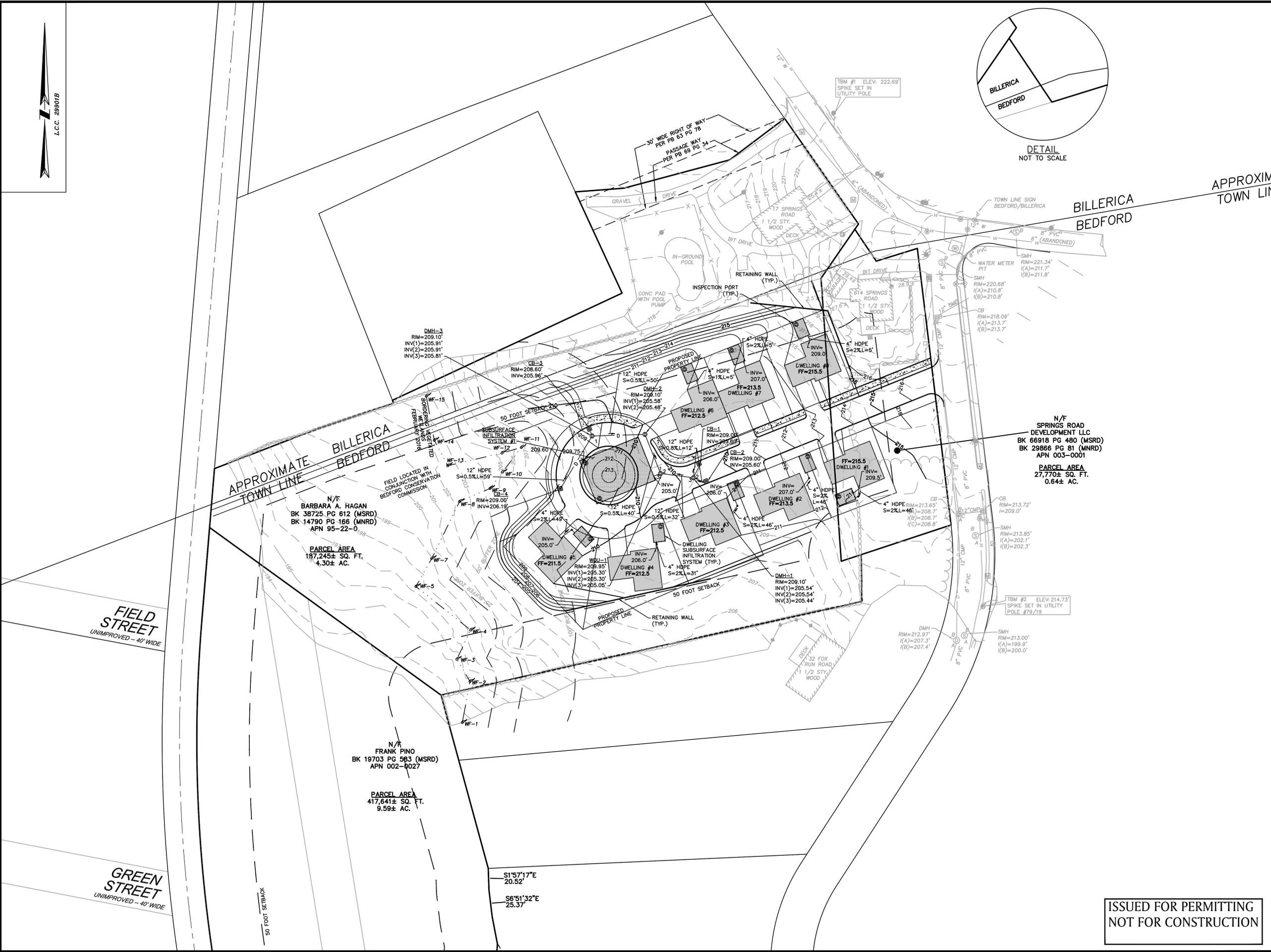
FILE: 2327100\Civil\Drawings

DWG. NO:

JOB. NO: 23271.00

SHEET C-106

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NOT FOR CONSTRUCTION



N/F  
BARBARA A. HAGAN  
BK 38725 PG 612 (MSRD)  
BK 14790 PG 166 (MNRD)  
APN 95-22-0.

PARCEL AREA  
187,245± SQ. FT.  
4.30± AC.

N/F  
FRANK PINO  
BK 19703 PG 563 (MSRD)  
APN 002-0027

PARCEL AREA  
417,641± SQ. FT.  
9.59± AC.

S1°57'17"E  
20.52'

S6°51'32"E  
25.37'

N/F  
SPRINGS ROAD  
DEVELOPMENT LLC  
BK 66918 PG 480 (MSRD)  
BK 29866 PG 81 (MNRD)  
APN 003-0001

PARCEL AREA  
27,770± SQ. FT.  
0.64± AC.



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NOT FOR CONSTRUCTION



ENG. NAME: FRANCIS D. DIPIETRO  
PROFESSIONAL ENGINEER  
DATE:

**PLANNED  
RESIDENTIAL  
DEVELOPMENT (PRD)**

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

**GRADING &  
DRAINAGE PLAN**

AUGUST 26, 2016

REVISIONS:

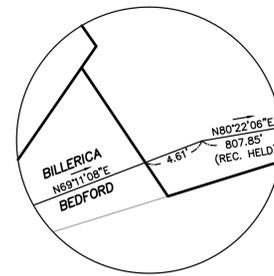
NO.	DATE	DESC.

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C/O DEVELLIS CONSULTING GROUP  
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JOB. NO: 23271.00 SHEET **C-107**



DETAIL  
NOT TO SCALE



ENG. NAME DATE  
PROFESSIONAL ENGINEER

### PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

### UTILITY PLAN

AUGUST 26, 2016

REVISIONS:

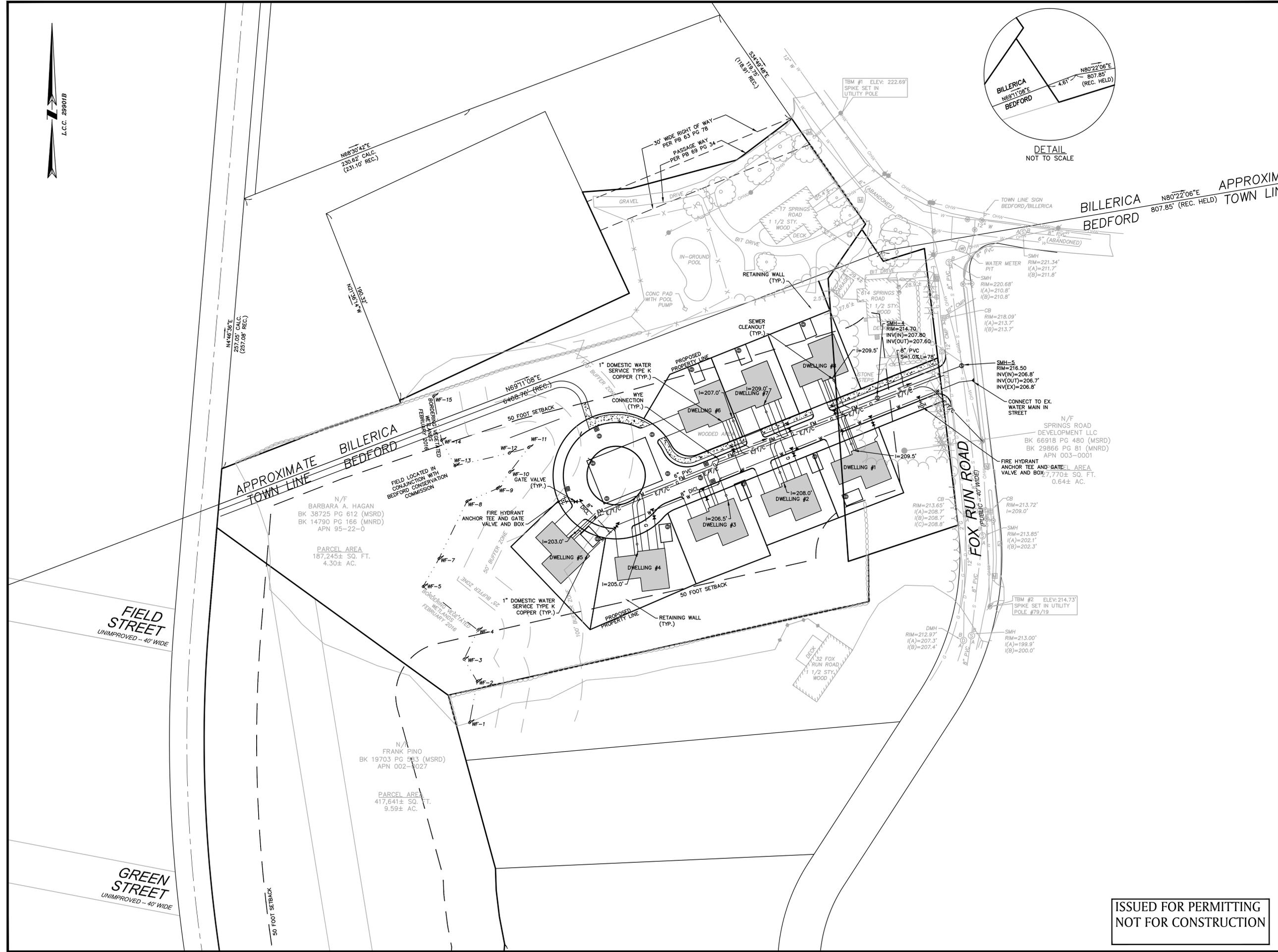
NO.	DATE	DESC.

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C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
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DWG. NO: SHEET C-108  
JOB. NO: 23271.00

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ENG. NAME: FRANCIS D. DIPIETRO  
 PROFESSIONAL ENGINEER  
 DATE: 08-28-16

**PLANNED  
 RESIDENTIAL  
 DEVELOPMENT (PRD)**

IN  
 BEDFORD  
 MASSACHUSETTS  
 (MIDDLESEX COUNTY)

**UTILITY PLAN**

AUGUST 26, 2016

REVISIONS:

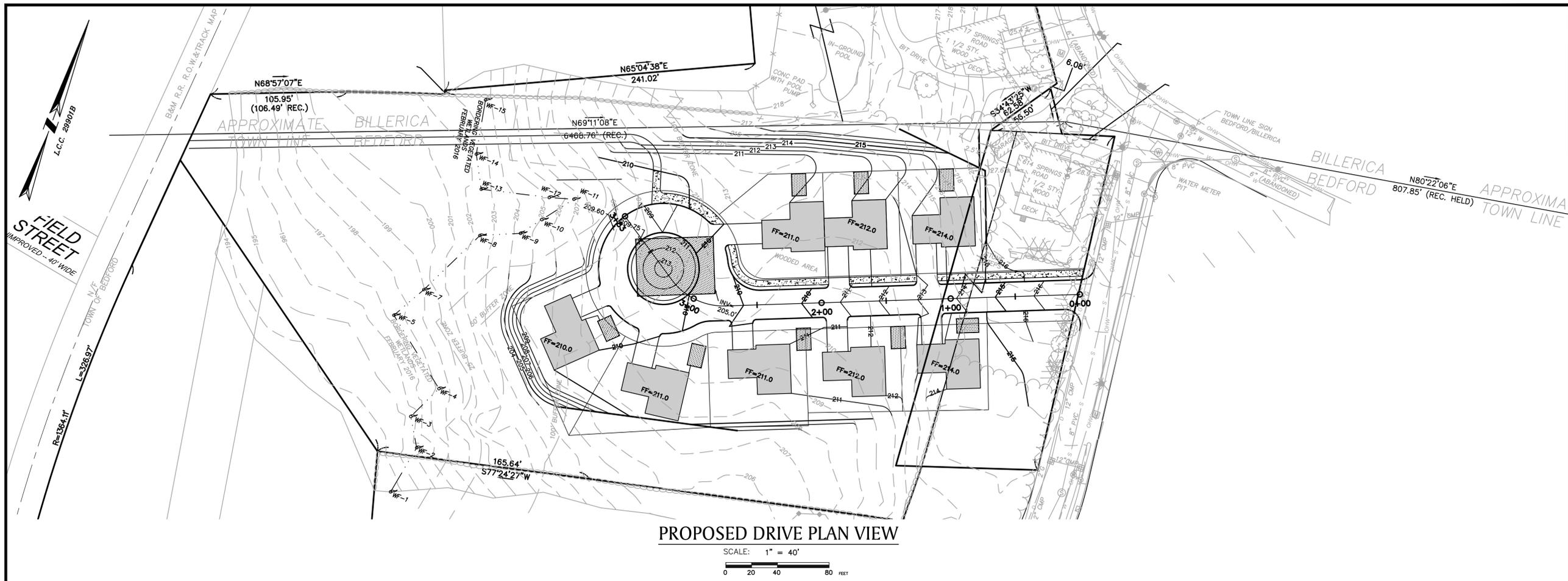
NO.	DATE	DESC.

PREPARED FOR:  
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 C/O DEVELLIS CONSULTING GROUP  
 41 NORTH ROAD-SUITE 203  
 BEDFORD, MA 01730

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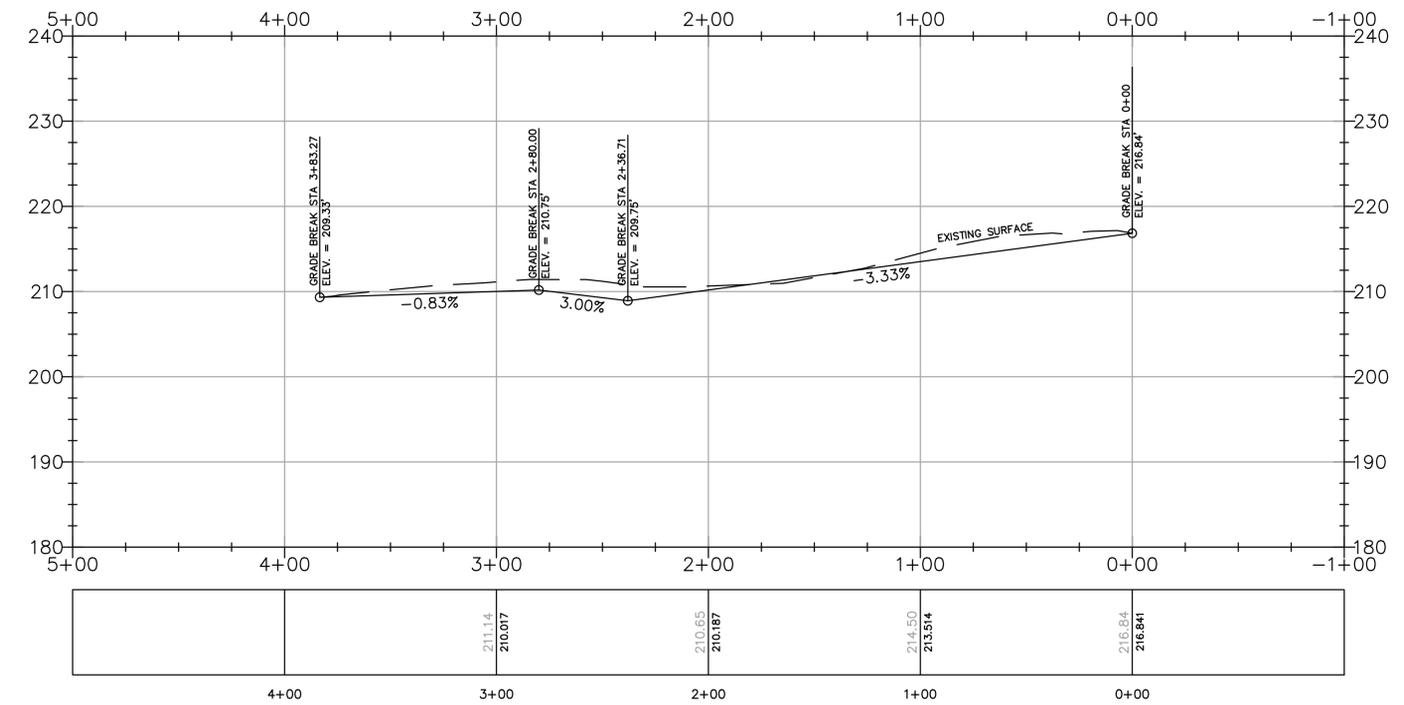
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 SCALE: 1" = 40'

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**PROPOSED DRIVE PLAN VIEW**

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



**PROPOSED DRIVE PROFILE VIEW**

SCALE: 1" = 40' HORIZONTAL  
1" = 4' VERTICAL  
0 20 40 80 FEET  
0 2 4 8 FEET

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NOT FOR CONSTRUCTION**



ENG. NAME: FRANCIS D. DIPIETRO  
PROFESSIONAL ENGINEER  
DATE:

**PLANNED  
RESIDENTIAL  
DEVELOPMENT (PRD)**

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

**ROADWAY PLAN  
& PROFILE**

AUGUST 26, 2016

REVISIONS:

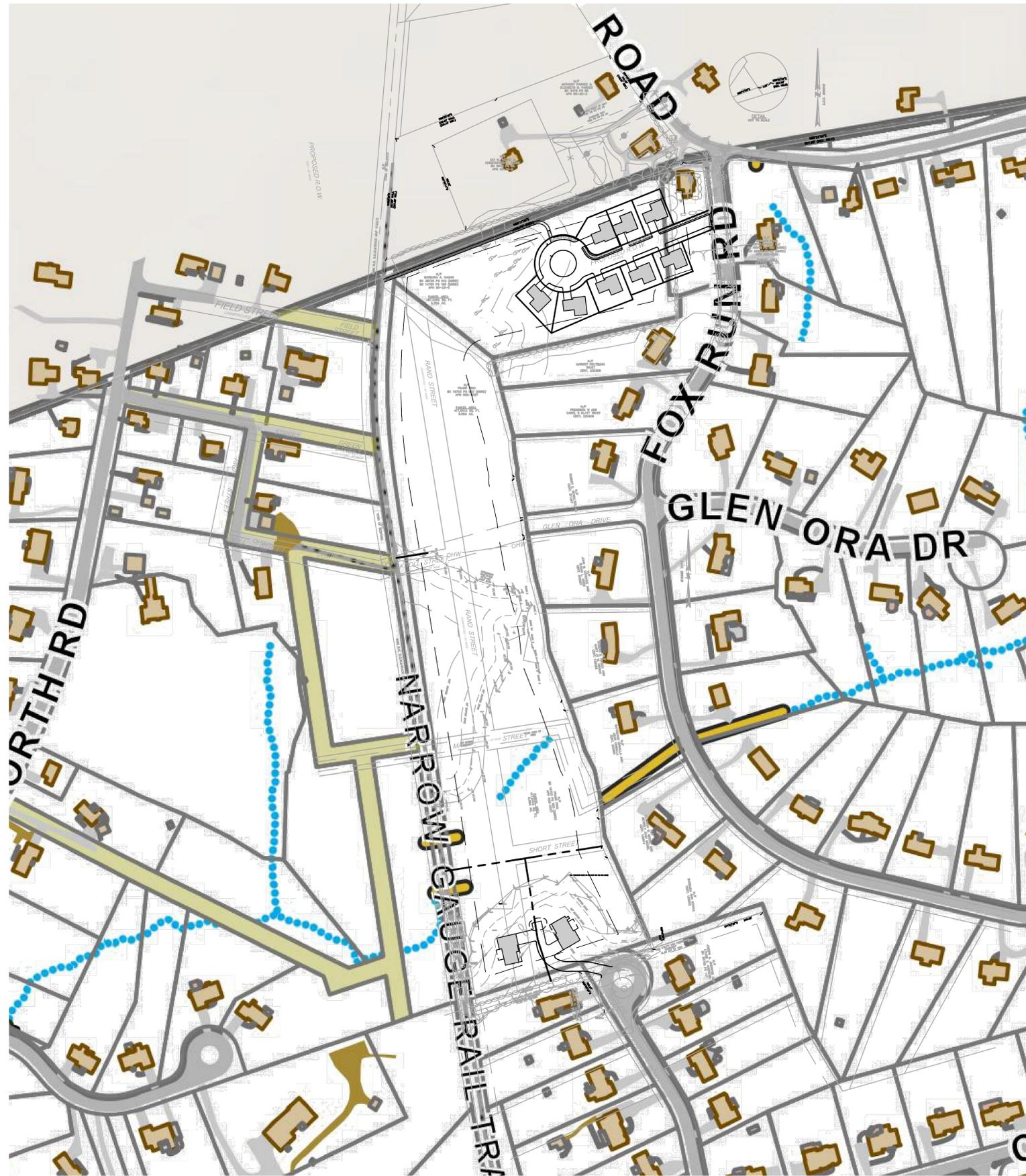
NO.	DATE	DESC.

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DWG. NO:  
JOB. NO: 23271.00  
SHEET **C-110**



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ENG. NAME: FRANCIS D. DIPIETRO  
PROFESSIONAL ENGINEER DATE: 08-28-16

### PLANNED RESIDENTIAL DEVELOPMENT (PRD)

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

LOCUS PLAN

AUGUST 26, 2016

REVISIONS:

NO.	DATE	DESC.

PREPARED FOR:  
BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
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DWG. NO:  
JOB. NO: 23271.00 SHEET C-111







ENG. NAME: FRANCIS D. DIPIETRO  
PROFESSIONAL ENGINEER  
DATE: 08-28-16

**PLANNED  
RESIDENTIAL  
DEVELOPMENT (PRD)**

IN  
BEDFORD  
MASSACHUSETTS  
(MIDDLESEX COUNTY)

**CIVIL DETAILS III**

AUGUST 26, 2016

**REVISIONS:**

NO.	DATE	DESC.

**PREPARED FOR:**

BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
BEDFORD, MA 01730

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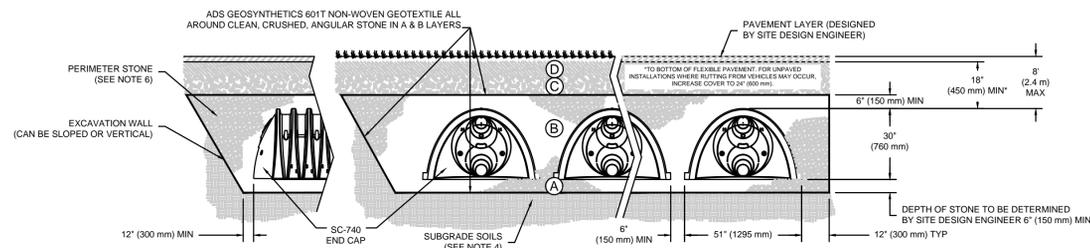
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DWG. NO:  
JOB. NO: 23271.00  
SHEET **C-202**

**ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D <b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C <b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B <b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A <b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SURGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>1, 2</sup>

- PLEASE NOTE:  
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".  
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



**NOTES:**

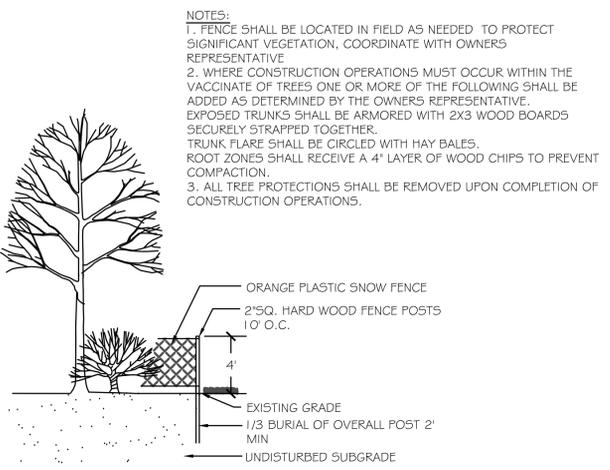
- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

**STORMTECH SC-740 SUBSURFACE  
INFILTRATION CHAMBER DETAIL**

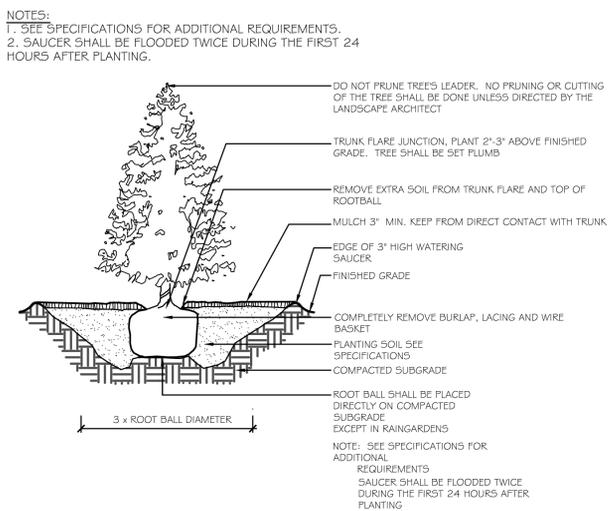
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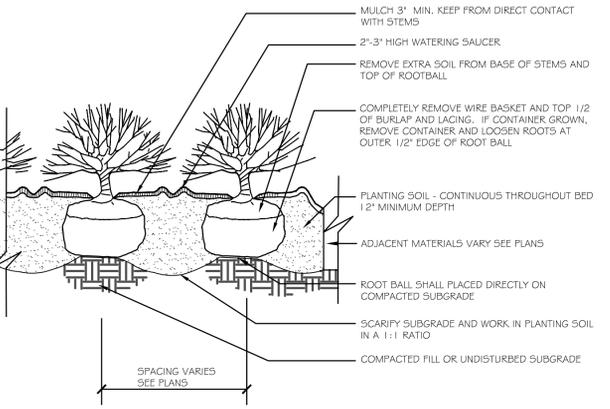




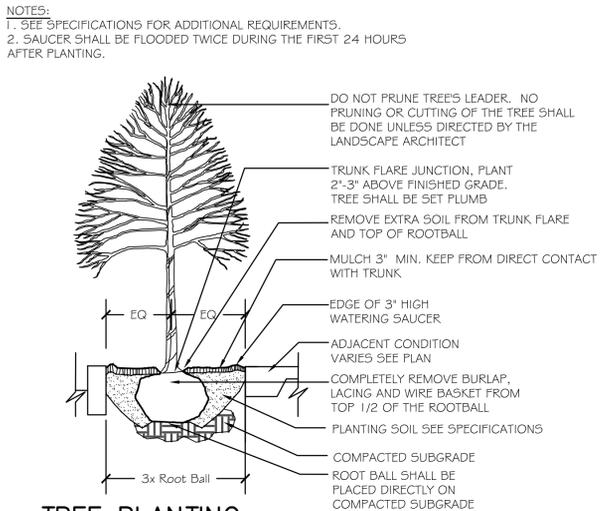
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SCALE: NONE



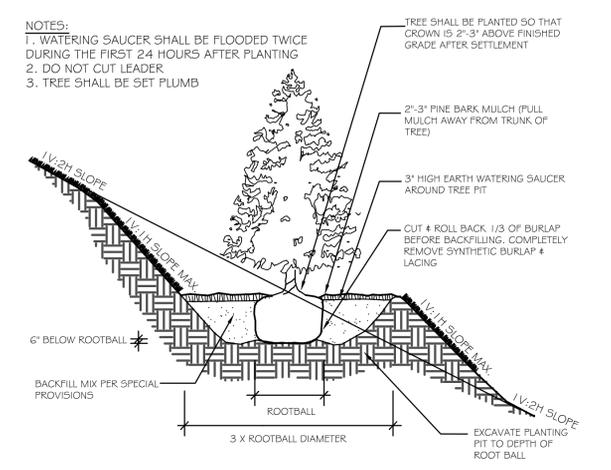
**EVERGREEN TREE PLANTING**  
N.T.S.



**SHRUB PLANTING**  
N.T.S.



**TREE PLANTING**  
SCALE: NONE



**TREE PLANTING (SLOPE)**  
N.T.S.



LESLIE D. FANGER, RLA DATE  
LANDSCAPE ARCHITECT

**PLANNED RESIDENTIAL DEVELOPMENT (PRD)**

IN  
**BEDFORD MASSACHUSETTS (MIDDLESEX COUNTY)**

**BUEHLER ROAD LANDSCAPE PLAN, DETAILS AND LIGHTING NOTES**  
AUGUST 26, 2016

REVISIONS:

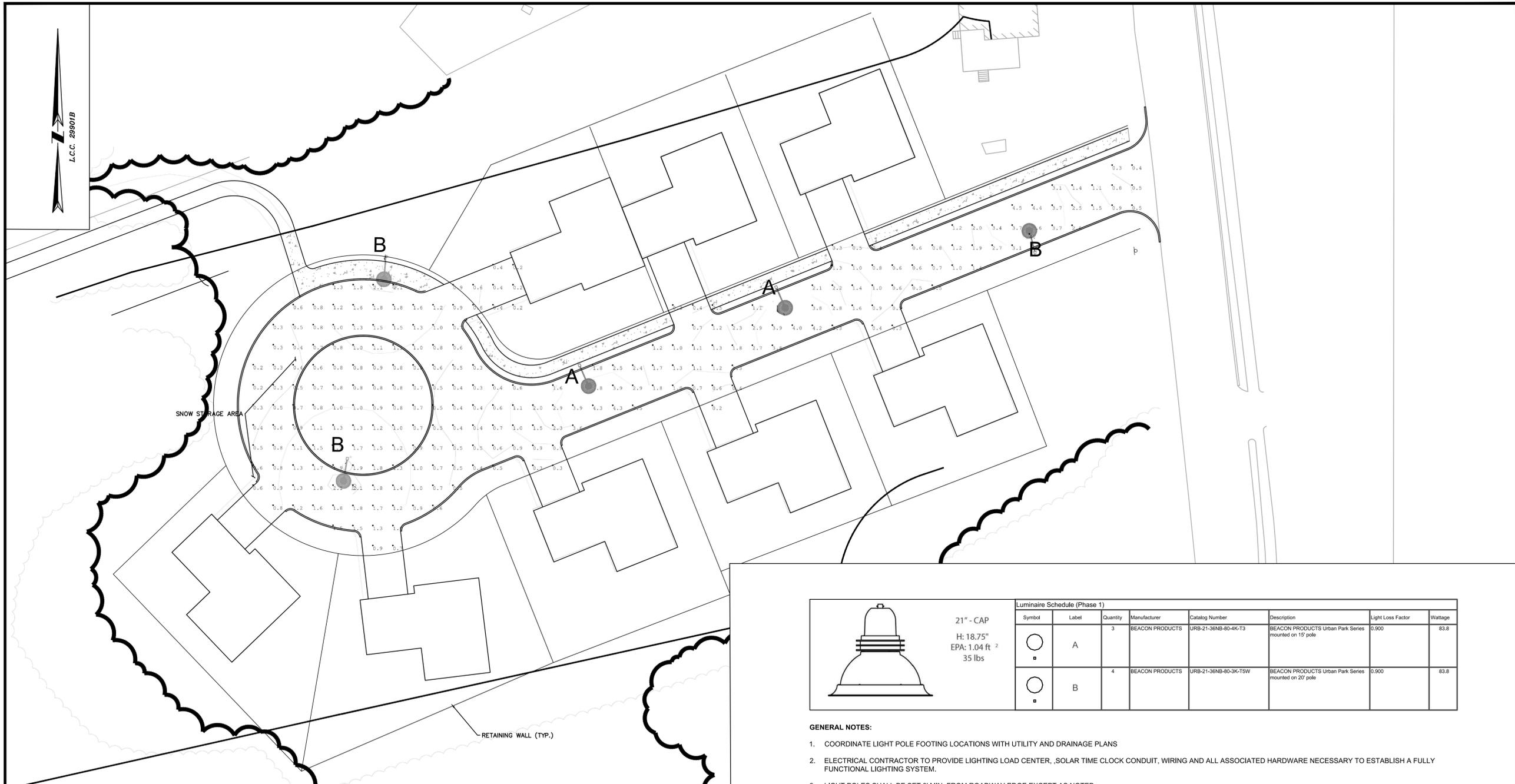
NO.	DATE	DESC.

PREPARED FOR:  
BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
BEDFORD, MA 01730

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FILE: 2327100\Civil\Drawings  
DWG. NO:  
JOB. NO: 23271.00 SHEET **L-101**



21" - CAP H: 18.75" EPA: 1.04 ft <sup>2</sup> 35 lbs		Luminaire Schedule (Phase 1)						
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Light Loss Factor	Wattage	
	A	3	BEACON PRODUCTS	URB-21-36NB-80-4K-T3	BEACON PRODUCTS Urban Park Series mounted on 15' pole	0.900	83.8	
	B	4	BEACON PRODUCTS	URB-21-36NB-80-3K-T5W	BEACON PRODUCTS Urban Park Series mounted on 20' pole	0.900	83.8	

**GENERAL NOTES:**

- COORDINATE LIGHT POLE FOOTING LOCATIONS WITH UTILITY AND DRAINAGE PLANS
- ELECTRICAL CONTRACTOR TO PROVIDE LIGHTING LOAD CENTER, SOLAR TIME CLOCK CONDUIT, WIRING AND ALL ASSOCIATED HARDWARE NECESSARY TO ESTABLISH A FULLY FUNCTIONAL LIGHTING SYSTEM.
- LIGHT POLES SHALL BE SET 3' MIN. FROM ROADWAY EDGE EXCEPT AS NOTED

**LIGHT FIXTURE – URBAN PARK SERIES**

**LIGHT POLE AND LUMINAIRE DESCRIPTION:**

MANUFACTURER SHALL BE BEACON PRODUCTS.

POST SHALL BE ALUMINUM CONSTRUCTION, WITH A ONE PIECE SHAFT AND FULL LONGITUDINAL WELD, AND A SINGLE RAILROAD ARM BRACKET

URBAN PARK SERIES BASE SHALL BE FULL CUT OFF MAX DARK SKIES COMPLIANT, LED LIGHT SOURCE, COLOR TEMPERATURE 4000K, AND MINIMUM 70 CRI, IP 66 LIGHT ENGINE, MINIMUM L70 OF 100,000 HOURS AT 25°C, MINIMUM 10KV/5KA SURGE PROTECTION, EPA 1.04, TOOL LESS ENTRY/ QUICK DISCONNECT DRIVER STAINLESS STEEL HARDWARE, ADJUSTABLE HOUSING.

**WIRING ACCESS:**  
THE POST SHALL INCLUDE A 2.5" BY 4.5" RECTANGULAR CURVED HAND HOLE AND COVER AND A 1/2-13UNC BOLT AND NUT PROVIDED FOR GROUNDING.

**FINISH:**  
THE POST SHALL HAVE A PRIME COAT OF URETHANE POLYESTER POWDER AND A TOP COAT OF ALIPHATIC ACRYLIC POLYURETHANE. COLORS BLACK

**INSTALLATION:**  
FOUNDATION MANUFACTURER TO PROVIDE CALCULATIONS, STAMPED BY A MAINE PROFESSIONAL ENGINEER, VERIFYING THAT THE FIXTURES (INCLUDING LUMINARIES, BANNERS, BRACKETS, POLE AND FOOTING) MEET OR EXCEED ACCEPTED WIND LOADS REQUIRED BY THE STATE BUILDING CODE OR AASHTO STANDARDS, WHICHEVER IS MORE STRINGENT. AT A MINIMUM, THE POLE SHALL INCLUDE FOUR 3/4" DIAMETER BY 17" LONG L-TYPE ANCHOR BOLTS TO BE INSTALLED ON A 9.0" DIAMETER BOLT CIRCLE. POLES SHALL BE GROUNDED.

**OPTIONS:**  
PROVIDE PREWIRED LEADS SUFFICIENT FOR ACCESS TO SPLICE AT POLE HAND HOLE CORRESPONDING TO THE SPECIFIED POLE HEIGHTS.

**CONTACT:**  
ILLUMINATE LOCAL REPRESENTATIVE STEVE PRUDHOMME (941)345-4928 OR VISIT WWW.ILLUMINATE.COM FOR ADDITIONAL INFORMATION



LESLIE D. FANGER, RLA  
LANDSCAPE ARCHITECT DATE

**PLANNED RESIDENTIAL DEVELOPMENT (PRD)**

IN  
BEDFORD MASSACHUSETTS (MIDDLESEX COUNTY)

**LIGHTING PLAN**

AUGUST 26, 2016

REVISIONS:

NO.	DATE	DESC.

PREPARED FOR:  
BERNSTEIN DEVELOPMENT LLC  
C/O DEVELLIS CONSULTING GROUP  
41 NORTH ROAD-SUITE 203  
BEDFORD, MA 01730

**BSC GROUP**  
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Boston, Massachusetts  
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617 896 4300

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SCALE: 1" = 20'  
0 10 20 40 FEET

FILE: 2327100\Civil\Drawings  
DWG. NO:  
JOB. NO: 23271.00 SHEET L-102