

PRELIMINARY SUBDIVISION "FIFTEEN GREAT ROAD"

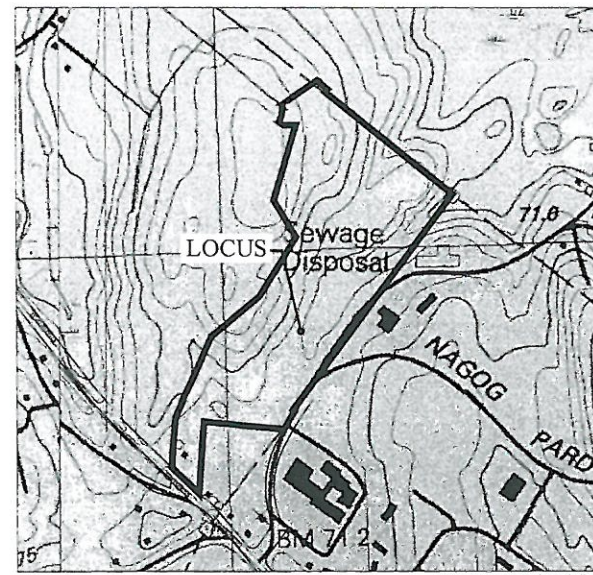
at 15 Great Road, 70 Grist Mill Road and Off Great Road
Littleton, Massachusetts

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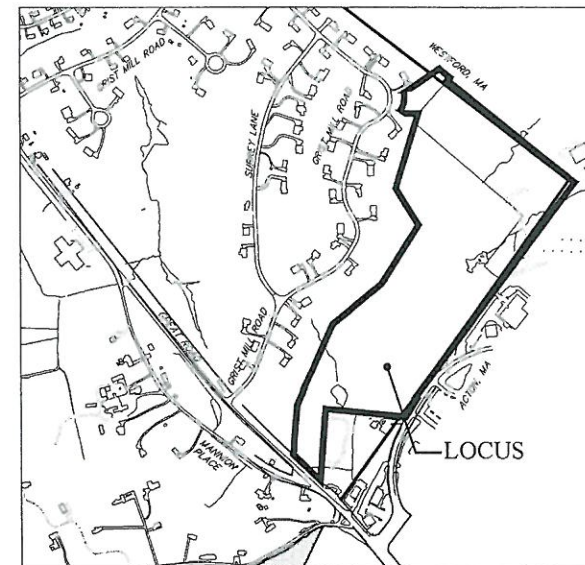
MAY 13 2011

LITTLETON
PLANNING BOARD

NOTE: ALL SUPPLEMENTAL DATA SUBMITTED IN CONNECTION WITH THIS PRELIMINARY SUBDIVISION AS REQUIRED BY THE SUBDIVISION REGULATIONS IS HEREBY INCORPORATED AS PART OF THE PLAN SET. THIS PLAN, ITS SUPPORTING DOCUMENTATION AND FORM WORK ARE SUBMITTED PURSUANT TO THE PROVISIONS OF THE TOWN OF LITTLETON'S SUBDIVISION REGULATIONS AND MASSACHUSETTS GENERAL LAW, CHAPTER 81 AND PURPOSEFULLY OBTAINS THE PROTECTIONS PROVIDED THEREIN.



LOCUS
SCALE: 1" = 600'



LOCUS
SCALE: 1" = 600'

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PERMIT SET
NOT FOR CONSTRUCTION

APPLICANT:
Fifteen Great Road LLC
200 Baker Avenue-Suite 303
Concord, MA 01742

OWNERS:
15 Great Road
Mayel Development Inc
One Intercontinental Way, 3rd Floor
Peabody, MA 01960

Off Great Road
Leslie French, Trustee
JFM Realty Trust
P.O. Box 1472
Littleton, MA 01460

70 Grist Mill Road
Mayel Development Inc
One Intercontinental Way, 3rd Floor
Peabody, MA 01960

PLANNER, LANDSCAPE ARCHITECT,
CIVIL ENGINEER & SURVEYOR:
Places Associates, Inc.
510 King Street, Suite 9
Littleton, MA 01460



COVER SHEET

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:
FIFTEEN GREAT ROAD LLC
SCALE: AS SHOWN DATE: MAY 2011
Places Associates, Inc. Planning, Landscape Architecture, Civil Engineering, Surveying 510 KING STREET, SUITE 9 LITTLETON, MA 01460 978-468-0847 FAX 978-468-0847 EMAIL places@placeson.net
PROJECT No.: 11-6303 PLAN No. PS-1

LITTLETON ASSESSOR DATA:
MAP & PARCEL: U01-2-0,
U01-1-56 AND U01-6-0

REFERENCES:
MIDDLESEX SOUTH-
REGISTRY OF DEEDS
DEED BOOK 49092 PAGE 359
DEED BOOK 44725 PAGE 484

ZONING
R-RESIDENTIAL

GENERAL NOTES:

- PRIOR TO THE PREPARATION OF BIDS AND/OR THE INITIATION OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN AND CAREFULLY EXAMINE THIS PLAN SET, RELATED CONSTRUCTION PLAN SETS FROM OTHER PROFESSIONAL DISCIPLINES, CONSTRUCTION SPECIFICATIONS, MANUFACTURERS INFORMATION AND ANY APPLICABLE PERMIT REQUIREMENTS/CONDITIONS OF APPROVAL FOR THE PROJECT.
- THE EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. DIG SAFE AND THE APPROPRIATE UTILITY COMPANIES SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE INITIATION OF CONSTRUCTION.
- NOT ALL UTILITIES WERE ABLE TO BE LOCATED BY RECORD INFORMATION, SITE SURVEYS OR UTILITY LOCATOR SERVICES. THE DESIGN ENGINEER AND BASE PLAN SURVEYOR DO NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OR SUBSURFACE STRUCTURES WHICH ARE OMITTED OR INACCURATELY SHOWN. PRIOR TO THE INITIATION OF WORK, THE CONTRACTOR SHALL VERIFY THE LOCATION/ELEVATION OF EXISTING UTILITIES SHOWN ON THE PLAN.
- THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON THE DISCOVERY OF ANY DISCREPANCY BETWEEN THE LOCATION/ELEVATION OF ANY EXISTING UTILITIES SHOWN ON THE PLANS AND THAT WHICH IS FOUND IN THE FIELD.
- THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL LAND SURVEYOR TO PROVIDE LAYOUT & CONTROL FOR THE DEVELOPMENT OF THE SITE.
- ALL CONSTRUCTION UNDER AREAS SUBJECT TO VEHICULAR TRAFFIC SHALL BE CONSTRUCTED TO WITHSTAND A DIRECT H2O DESIGN LOAD. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL UTILITY/SITE IMPROVEMENT AREAS UNDER LANDSCAPED/NON-TRAFFIC BEARING AREAS FROM TEMPORARY CONSTRUCTION LOADS DURING CONSTRUCTION.
- THE CONSTRUCTION SHOWN ON THESE PLANS REQUIRES AN ORDER OF CONDITIONS BE ISSUED BY THE LITTLETON CONSERVATION COMMISSION. THE CONTRACTOR SHALL OBTAIN A COPY OF SUCH ORDERS OF CONDITIONS PRIOR TO ANY SITE-RELATED DISTURBANCES AND SHALL COMPLY WITH APPROPRIATE CONDITIONS FOR CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ADJACENT PROPERTY FROM DAMAGE. ALL DAMAGES BY THE CONTRACTOR OR SUBCONTRACTORS SHALL BE REPAIRED AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING SURVEY MONUMENTS (BOUNDS, PINS, PIPES, DRILL HOLES, ETC.) THROUGHOUT ALL PHASES OF CONSTRUCTION. ANY DISTURBED MONUMENTS SHALL BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
- THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON THE DISCOVERY OF ANY CONTRADICTION, INCOMPLETE OR MISLABELED INFORMATION SHOWN ON THE PLANS OR PLANS PREPARED BY OTHERS. THE CONTRACTOR SHALL ALLOW FOR ADEQUATE TIME FOR THE ENGINEER TO RESPOND/PROVIDE DIRECTION FOR THE PLAN DISCREPANCY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SHOP DRAWINGS OF PRODUCTS/MATERIALS TO THE ENGINEER AND/OR THE LOCAL APPROVING AUTHORITY AS REQUIRED IN THE CONSTRUCTION DOCUMENTS OR IF REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION OVER THE PROJECT. ADEQUATE TIME SHALL BE ALLOWED FOR THE SHOP DRAWINGS TO BE REVIEWED AND RETURNED TO THE CONTRACTOR PRIOR TO ORDERING THE SPECIFIED PRODUCTS/MATERIALS.
- ALL SUPPLEMENTAL DATA SUBMITTED IN CONJUNCTION WITH THIS PRELIMINARY SUBDIVISION AS REQUIRED BY THE SUBDIVISION REGULATIONS IS HEREBY INCORPORATED AS PART OF THE PLAN SET.
- ALL PERMANENT BOUNDARY AND SURVEY MONUMENTS SHALL BE INSTALLED AFTER THE COMPLETION OF ALL HEAVY SITE WORK.
- NO DEBRIS, JUNK, RUBBISH OR OTHER WASTE MATERIALS SHALL BE BURIED, BURNED OR OTHERWISE DISPOSED OF WITHIN THE LIMITS OF THE PROJECT. ALL WASTE, TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS.
- UNLESS OTHERWISE SPECIFIED OR SHOWN, ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE STANDARDS DESCRIBED IN THE TOWN OF LITTLETON'S SUBDIVISION CONTROL REGULATIONS. IF NOT SPECIFIED THEREIN, SUCH CONSTRUCTION SHALL THEN CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MDOT, FORMERLY MASSHIGHWAY) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST VERSION.
- THE CONTRACTOR SHALL APPLY FOR AND OBTAIN A PERMIT FROM MASS HIGHWAY TO CONSTRUCT WITHIN A PUBLIC WAY FOR WORK WITHIN GREAT ROAD, STATE ROUTE 2A. CONTROLLED DENSITY FILL SHALL BE USED AS PAVEMENT BASE COURSE WITHIN THE STATE HIGHWAY LAYOUT.
- WETLANDS DELINEATION PERFORMED BY OXBOW ASSOCIATES, INC. OF ACTON, MA IN APRIL 2011. LOCATIONS OF FLAGS WERE FIELD-SURVEY LOCATED BY PLACES ASSOCIATES, INC. THE FINAL WETLANDS LIMITS ARE SUBJECT TO REVIEW AND APPROVAL BY THE LITTLETON CONSERVATION COMMISSION.
- TOWN LINES DEPICTED HEREIN ARE DERIVED FROM PLAN RECORD INFORMATION AND WILL BE FIELD SURVEY DETERMINED PRIOR TO SUBMITTAL OF A DEFINITIVE PLAN.

SITE WORK NOTES:

- THE LIMITS OF WORK SHALL BE FIELD ESTABLISHED PRIOR TO INITIATION OF ANY CONSTRUCTION, SITE EXPLORATIONS OR EARTHEN DISTURBANCE.
- EROSION CONTROLS SHALL BE IMPLEMENTED PRIOR TO SITE CLEARING OR DISTURBANCE. SEE EROSION AND SEDIMENTATION CONTROL PLAN.
- EXCEPT FOR THE SETUP FOR ENTRY TO THE SITE, NO CONSTRUCTION OR CONTRACTOR'S VEHICLES SHALL BE PARKED ON GRIST MILL ROAD OR GREAT ROAD. UNLESS COORDINATED WITH ADJACENT PROPERTY OWNERS, ALL CONSTRUCTION STAGING, STOCKPILE AND PARKING AREAS SHALL BE ONSITE.
- LOAM SHALL BE STOCKPILED FOR RE-USE ON THE SITE TO THE EXTENT PRACTICAL. SEE EROSION AND SEDIMENTATION CONTROL PLAN.
- NO DEBRIS, JUNK, RUBBISH OR OTHER WASTE MATERIALS SHALL BE BURIED, BURNED OR OTHERWISE DISPOSED OF WITHIN THE LIMITS OF THE PROJECT. ALL WASTE, TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS. THE SITE SHALL BE KEPT IN A NEAT AND ORDERLY FASHION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TRENCH OPERATIONS PERMIT PURSUANT TO THE REQUIREMENTS OF THE TOWN OF LITTLETON AND 520 CMR 14.00 (AKA "JACKIE'S LAW").

MATERIAL DEFINITIONS:

BITUMINOUS CONCRETE PAVEMENT

ALL SITE PAVING SHALL BE CLASS 1 BITUMINOUS CONCRETE. MIXTURES SHALL BE COMPOSED OF MINERAL AGGREGATE, MINERAL FILLER (IF REQUIRED) AND BITUMINOUS MATERIAL. THE MIXTURE MAY INCLUDE RECLAIMED ASPHALT PAVEMENT AT THE OPTION OF THE CONTRACTOR.

CAST IN PLACE CONCRETE

THE MIXTURE COMPOSITION AND TOLERANCES SHALL MEET THE SPECIFICATIONS FOR BINDER COURSE AND TOP COURSE MIXTURES AS SPECIFIED IN TABLE A OF SSMB M3.11.03. IF RECLAIMED ASPHALT PAVEMENT (RAP) IS USED IN THE MIXTURE, THE PROPORTION OF RAP TO VIRGIN AGGREGATE SHALL BE LIMITED TO A MAXIMUM OF 40% FOR DRUM MIX PLANTS AND 20% FOR MODIFIED BATCH PLANTS.

CONTROLLED DENSITY FILL (CDF)

CONTROL DENSITY FILL SHALL BE A FLOWABLE, SELF-CONSOLIDATING, RIGID SETTING, LOW DENSITY MATERIAL THAT CAN SUBSTITUTE FOR COMPACTED GRAVELS FOR BACKFILLS, FILLS AND STRUCTURAL FILLS. CDF SHALL BE EXCAVATABLE BY HAND TOOLS AND/OR SMALL EQUIPMENT WHEN PLACED AND CURING. CDF SHALL MEET THE REQUIREMENTS OF SSMB M4.0.08, TYPE 2E, AND SHALL MEET THE FOLLOWING REQUIREMENTS:

A.

CDF IS TO BE BATCHED AT A READY MIX PLANT AND IS TO BE USED AT A HIGH OF "VERY HIGH SLUMP FROM 10" TO 12". IT SHALL BE FLOWABLE AND REQUIRE NO VIBRATION AFTER IT HAS BEEN PLACED.

B.

CDF SHALL BE A MIXTURE OF PORTLAND CEMENT, FLYASH, SAND AND WATER DESIGNED TO MEET THE CDF REQUIREMENTS. HIGH AIR ENTRAINMENT MAY BE SUBSTITUTED FOR FLYASH WITH AN ADJUSTMENTS (20%) ADJUSTMENT IN SAND CONTENT.

C.

CDF MUST MEET THE FOLLOWING STRENGTH REQUIREMENTS:

-28 DAY COMPRESSIVE STRENGTH: 30-90 PSI

-90 DAY COMPRESSIVE STRENGTH: 100 PSI MAX

CRUSHED STONE

CRUSHED STONE SHALL BE THE SIZE AS INDICATED ON THE PLANS. THE STONE SHALL BE FROM A STONE QUARRY THAT PRODUCES HARD, ANGULAR, DURABLE WASHED STONE FREE FROM DEBRIS AND ORGANIC MATERIALS. THE STONE SHALL MEET THE REQUIREMENTS OF SSMB M2.01.0.

DENSE GRADED CRUSHED STONE

DENSE GRADED CRUSHED STONE SHALL CONSIST OF THE COMBINATION OF CRUSHER-RUN COARSE AGGREGATES (MEETING SSMB M2.01.0) AND FINE AGGREGATES OF NATURAL SAND OR STONE SCREENING UNIFORMLY PREVIEWED WITH A PREDETERMINED QUANTITY OF WATER. COARSE AGGREGATE SHALL CONSIST OF HARD, DURABLE PARTICLES OF FRAGMENTS OF STONE MATERIALS THAT BREAK UP WHEN ALTERNATELY FROZEN AND THAWED OR WETTED AND DRIED SHALL NOT BE USED. FINE AGGREGATE SHALL CONSIST OF NATURAL OR CRUSHED SAND. THE CRUSHER-RUN MATERIAL SHALL COMPLY WITH THE SPECIFICATIONS OF SSMB M2.01.7.

GLACIAL FILL

A. GLACIAL FILL: NATURAL INORGANIC SOIL APPROVED BY THE ENGINEER AND MEETING THE FOLLOWING REQUIREMENTS:

A.

IT SHALL BE FREE OF ORGANIC OR OTHER WEAK OR COMPRESSIBLE MATERIALS, FROZEN MATERIALS AND STONES GREATER THAN TWO INCHES IN MAXIMUM DIMENSION.

B.

IT SHALL BE A SILT LOAM AS DEFINED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL TEXTURAL CLASSIFICATION.

C.

THE SOIL SHALL CONSIST OF GREATER THAN 50% SILT, 10% TO 21% CLAY, OR 50% TO 80% SILT AND LESS THAN 12% CLAY.

GRAVEL BORROW

GRAVEL BORROW SHALL CONSIST OF INERT MATERIAL THAT IS HARD, DURABLE STONE AND COARSE SAND, FREE FROM CLAY, SURFACE COATINGS, ORGANIC AND DELETERIOUS MATERIAL. ALL GRAVEL BORROW SHALL MEET THE REQUIREMENTS OF SSMB M1.03.0. MAXIMUM STONE SIZE SHALL BE AS FOLLOWS:

TYPE A: 6" LARGEST DIMENSION

TYPE B: 3" LARGEST DIMENSION

TYPE C: 2" LARGEST DIMENSION

LOAM (BORROW)

LOAM SHALL CONSIST OF NATURAL TOPSOIL, FREE FROM SUB-SOIL, OBTAINED FROM AN AREA WHICH HAS NEVER BEEN STRIPPED. LOAM SHALL BE OF UNIFORM QUALITY, FREE FROM HARD CLODS, STIFF CLAY, HARDPAN, SOO, PARTIALLY QUANTIFIED STONE, LIME, COKE, ASHES, SLAG, CONCRETE, TAR RESIDUE, TAILED PAPER, BOARDS, CHIPS OR ANY OTHER UNDESIRABLE MATERIAL.

LOAM SHALL CONTAIN BETWEEN 5.5 AND 7.5 PERCENT ORGANIC MATTER AS DETERMINED BY LOSS ON IGNITION OF A MOISTURE-FREE SAMPLE DRIED IN ACCORDANCE WITH THE CURRENT METHOD OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS.

THE ACIDITY RANGE OF THE LOAM SHALL BE PH 6.5 TO PH 7.5 INCLUSIVE.

THE MECHANICAL ANALYSIS OF THE SOIL SHALL BE AS FOLLOWS:

U.S. SIEVE SIZE & NUMBER	MINIMUM	MAXIMUM
1" (25.4mm)	100%	100%
3/4" (19.0mm)	97%	100%
No. 100 (0.075mm)	49%	60%
No. 100 (SILT & CLAY)	40%	60%

ORDINARY BORROW

ORDINARY BORROW SHALL CONSIST OF MATERIAL NOT SPECIFIED AS ANY OTHER EARTHEN MATERIAL. ORDINARY BORROW SHALL BE WELL GRADED, NATURAL, INORGANIC MATERIAL ACCEPTABLE TO THE ENGINEER FOR THE GENERAL FILLING TO THE SPECIFIED SUB-GRADE. THE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

A.

IT SHALL BE FREE OF ORGANIC OR OTHER WEAK OR COMPRESSIBLE MATERIAL, OF FROZEN MATERIALS AND OF STONES LARGER THAN 6 INCHES IN MAXIMUM DIMENSION.

B.

IT SHALL BE OF SUCH NATURE & CHARACTER THAT IT CAN BE COMPACTED TO THE SPECIFIED DENSITIES IN A REASONABLE AMOUNT OF TIME.

C.

IT SHALL BE FREE OF HIGHLY PLASTIC CLAYS, OF ALL MATERIALS SUBJECT TO DECAY, DECOMPOSITION, AND OF ONDERS OR OTHER MATERIALS WHICH WILL CORRODE PIPING OR OTHER BURIED MATERIALS.

D.

IT SHALL HAVE A MAXIMUM DRY DENSITY OF NOT LESS THAN 100 POUNDS PER CUBIC FOOT AND LESS THAN 40% OF THE MATERIAL SHALL PASS THE NUMBER 200 SIEVE.

E.

EXCAVATED ROCK & BOULDERS SMALLER THAN ONE CUBIC YARD IN SIZE MAY BE USED IN FILL AREAS UNDER LAWS ONLY. PROVED THEY ARE A MINIMUM OF 24 INCHES BELOW THE SUBGRADE, PLACED AND COMPACTED IN LAYERS WITH NO VOIDS AND ALL INTERSTICES FILLED.

RIP RAP

RIP-RAP STONE SHALL BE SOUND, DURABLE ROCK, ANGULAR IN SHAPE, RIP RAP SHALL BE FREE FROM DEBRIS, ORGANIC OR DELETERIOUS MATERIAL. ROUGH STONES, BOULDERS, SANDSTONE OR SIMILAR SOFT STONE OR RELATIVELY THIN SLABS WILL NOT BE PERMITTED UNLESS SPECIFICALLY PERMITTED BY THE DESIGN ENGINEER. ALL RIP RAP MATERIALS SHALL MEET THE REQUIREMENTS OF SSMB M2.02.0.

SAND BORROW

SAND BORROW SHALL CONSIST OF CLEAN, INERT, HARD, DURABLE GRAINS OF QUARTZ OR OTHER HARD DURABLE ROCK, FREE FROM LOAM OR CLAY, SURFACE COATINGS AND DELETERIOUS MATERIALS. THE ALLOWABLE AMOUNT OF MATERIAL PASSING A #200 SIEVE AS DETERMINED BY ASTM D 153 SHALL NOT EXCEED 10% MASS. ALL SAND BORROW SHALL MEET THE REQUIREMENTS OF SSMB M1.04.0. MAXIMUM STONE SIZE SHALL BE AS DEPICTED IN THE PLANS.

COMPACTION TESTING

ALL EARTHEN MATERIALS SHALL BE COMPACTED TO THE DRY DENSITY INDICATED IN THE CONSTRUCTION DOCUMENTS AND/OR AS IS REQUIRED BY CODE OR REGULATION. MAXIMUM DRY DENSITY SHALL BE DETERMINED FROM A SAMPLE OF THE MATERIAL TO BE USED AND TESTED IN ACCORDANCE WITH THE MODIFIED PROCTOR DRY DENSITY TEST AS DEFINED IN ASTM D1557, METHOD C.

AREAS THAT WERE TESTED AND FOUND TO BE INSUFFICIENTLY COMPACTED SHALL BE RE-TESTED AFTER THE ADDITIONAL COMPACTION HAS BEEN COMPLETED.

ABBREVIATIONS

ABBREVIATION	DEFINITION
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ABR	ACCESSIBLE RAMP - TYPE 1
AR-1	ACCESSIBLE RAMP - TYPE 2
AR-2	ACCESSIBLE RAMP - TYPE 3
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
B&B	BALL & BURLAP
BC	BOTTOM CURB ELEVATION
BT CONC	BITUMINOUS CONCRETE
BUILD	BUILDING
REIN	REINFORCING
BR	BOTTOM RAMP ELEVATION
CA	CALIPER
CB	CONCRETE BOUND
CF	CUBIC FOOT
CP	CAST IRON PIPE
COR	CORRODED METAL PIPE
CONC	CONCRETE
CIB	CATCH BASIN
CU	CUBIC YARD
DH	DRILL HOLE
DI	DUCTILE IRON PIPE
DIAM	DIAMETER
DMH	DRAIN MANHOLE
ELEV	ELEVATION
EMH	ELECTRIC MANHOLE
EX	EXISTING
EXT	EXTERIOR
FLD	FLARED END SECTION
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FO	FOUND
FSB	FIELD STONE BOUND
FT	FEET - LINEAR MEASURE
GPM	GALLONS PER MINUTE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
H	HEIGHT
I PIN	IRON PIN
I PIPE	IRON PIPE
ID	INSIDE DIAMETER
INV	PIPE INVERT ELEVATION
LP	LOW POINT
MAX	MAXIMUM
MHB	MASS HIGHWAY BOUND
MIN	MINIMUM
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
OC	ON CENTER
OD	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P&P	PLUG & PUMP
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R & S	REMOVE & STOCKPILE ITEM REQUIRED
SE	SEWER
SMH	SEWER MANHOLE
SPR	SPREAD
S&S	STAKE & STONE
SSMB	STANDARD SPECIFICATIONS OF HIGHWAYS & BRIDGES, THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS
STV	SLOPED TO VERTICAL CURB TRANSITION SEGMENT
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB ELEVATION
TMH	TELEPHONE MANHOLE
TOC	TOP OF CONCRETE FOUNDATION ELEVATION
TOP	TOP OF RAMP ELEVATION
TYP	TYPICAL FOR ALL ITEMS SHOWN
UP	UTILITY POLE
VGCT	VERTICAL GRANITE CURB TRANSITION SEGMENT

LEGEND

EXISTING	PROPOSED
INDEX CONTOUR	INDEX CONTOUR
INTERMEDIATE CONTOUR	INTERMEDIATE CONTOUR
SPOT GRADE	SPOT GRADE
STONE WALL	STONE WALL
EDGE OF WOODS	EDGE OF WOODS
EDGE OF WATER BODY	EDGE OF WATER BODY
100' YEAR FLOOD LINE	100' YEAR FLOOD LINE
EDGE OF WETLAND	EDGE OF WETLAND
25' BUFFER	25' BUFFER
50' BUFFER	50' BUFFER
75' BUFFER	75' BUFFER
100' BUFFER	100' BUFFER
WETLAND	WETLAND
WETLAND FLAG	WETLAND FLAG
RIEVEFRONT	RIEVEFRONT
100' RIVER BUFFER	100' RIVER BUFFER
250' RIVER BUFFER	250' RIVER BUFFER
SILTATION BARRIER	SILTATION BARRIER
BUILDING SETBACK LINE	BUILDING SETBACK LINE
WELL	WELL
TREE	TREE
FLAGPOLE	FLAGPOLE
BOUND	BOUND
DRILL HOLE	DRILL HOLE
IRON PIN	IRON PIN
BENCHMARK	BENCHMARK
PERC TEST	PERC TEST
TEST PIT	TEST PIT
SOIL BORING	SOIL BORING
EDGE OF GRAVEL	EDGE OF GRAVEL
EDGE OF WALK	EDGE OF WALK
EXPANSION JOINT	EXPANSION JOINT
CONSTRUCTION JOINT	CONSTRUCTION JOINT
EDGE OF PAVEMENT	EDGE OF PAVEMENT
CAPE COO BURN	CAPE COO BURN
BT CONC (TYPE 3)	BT CONC (TYPE 3)
CONCRETE CURB	CONCRETE CURB
VERT. GRANITE CURB	VERT. GRANITE CURB
SLOPED GRANITE CURB	SLOPED GRANITE CURB
STOCKPILE FENCE	STOCKPILE FENCE
CHAIN LINK FENCE	CHAIN LINK FENCE
FENCE - OTHER	FENCE - OTHER
FENCE GATE	FENCE GATE
WOOD GUIDE RAIL	WOOD GUIDE RAIL
ROOT BARRIER	ROOT BARRIER
SIGN POST	SIGN POST
FOUNDATION DRAIN	FOUNDATION DRAIN
ROOF DRAIN	ROOF DRAIN
DRAIN LINE	DRAIN LINE
DRAIN MANHOLE	DRAIN MANHOLE
CATCHBASIN	CATCHBASIN
FLARED END IN/OUT	FLARED END IN/OUT
CLEANOUT	CLEANOUT
IMPLICATION LINE	IMPLICATION LINE
FIRE PROTECTION LINE	FIRE PROTECTION LINE
WATER LINE	WATER LINE
WATER VALVE	WATER VALVE
FIRE HYDRANT	FIRE HYDRANT
WATER SHUTOFF	WATER SHUTOFF
OVERHEAD WIRES	OVERHEAD WIRES
UNDERGROUND WIRES	UNDERGROUND WIRES
GUY POLE	GUY POLE
UTILITY POLE	UTILITY POLE
GUY ANCHOR	GUY ANCHOR
UTILITY BOX	UTILITY BOX
STREETLIGHT	STREETLIGHT
LAMP POST	LAMP POST
ELECTRIC MANHOLE	ELECTRIC MANHOLE
TELEPHONE MANHOLE	TELEPHONE MANHOLE
SEWER LINE	SEWER LINE
SEWER FORCE MAIN	SEWER FORCE MAIN
LOW PRESSURE SEWER	LOW PRESSURE SEWER
SEWER MANHOLE	SEWER MANHOLE
GAS LINE	GAS LINE
GAS VALVE	GAS VALVE

NOTES AND LEGEND

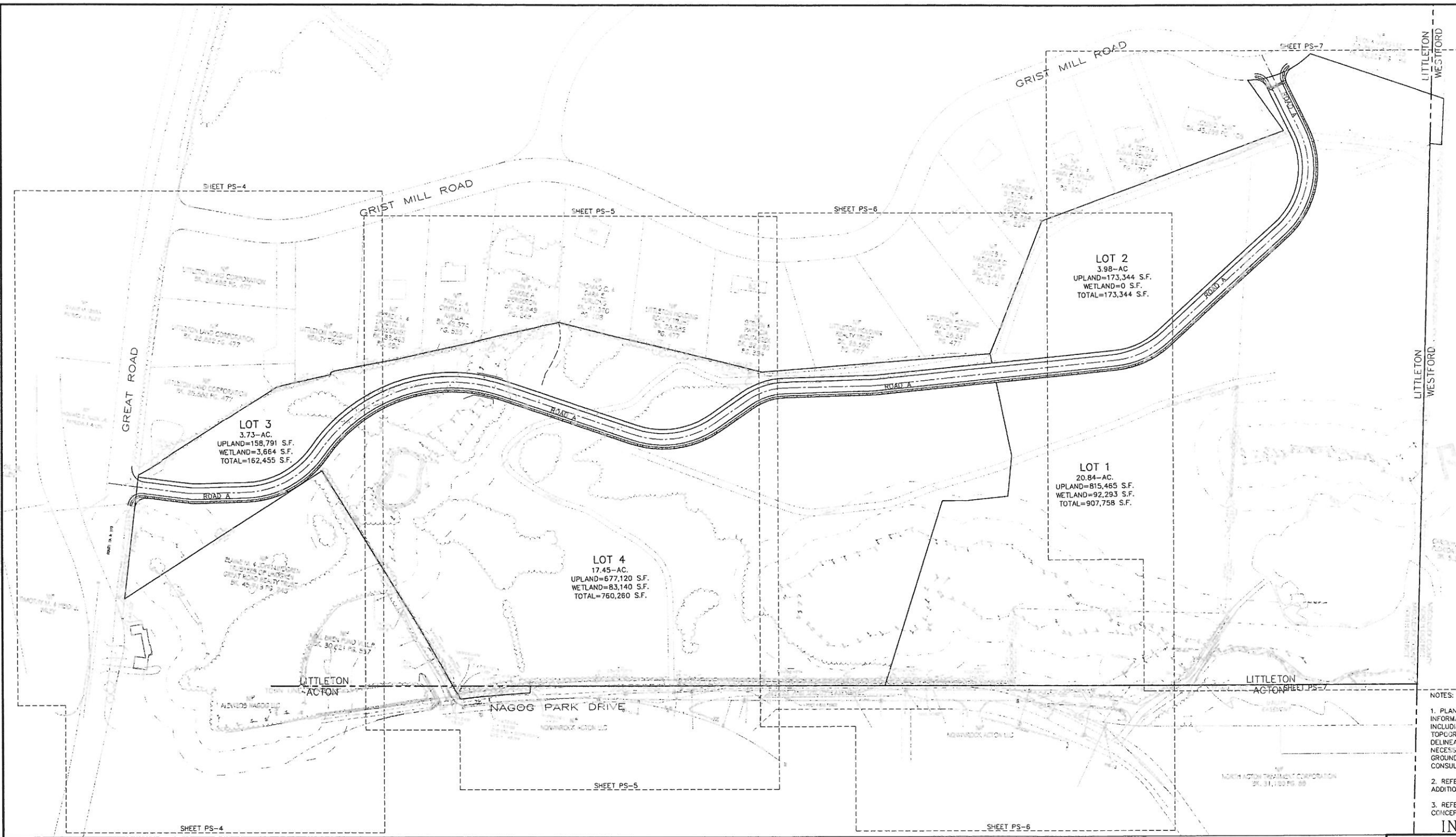
LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR: FIFTEEN
GREAT ROAD II
LLC
SCALE: AS NOTED DATE: MAY 2011

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PROJECT No.: 11-6303 PLAN No. PS-2

NOTE: ALL SUPPLEMENTAL DATA SUBMITTED IN CONJUNCTION WITH THIS PRELIMINARY SUBDIVISION AS REQUIRED BY THE SUBDIVISION REGULATIONS IS HEREBY INCORPORATED AS PART OF THE PLAN SET. THIS PLAN, ITS SUPPORTING DOCUMENTATION AND FORM-WORK ARE SUBMITTED PURSUANT TO THE PROVISIONS OF THE TOWN OF LITTLETON'S SUBDIVISION REGULATIONS AND MASSACHUSETTS GENERAL LAW, CHAPTER 91B AND PURPOSEFULLY OBTAINS THE PROTECTIONS PROVIDED THEREIN.



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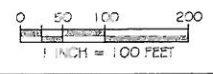


NOTES:

1. PLAN IS THE COMPILATION OF INFORMATION FROM VARIOUS SOURCES INCLUDING RECORD DEEDS, AERIAL TOPOGRAPHY AND WETLANDS DELINEATIONS BY OTHERS AND IS NOT NECESSARILY THE RESULT OF AN ON THE GROUND SURVEY BY PLACES SITE CONSULTANTS, INC.
2. REFER TO SHEET PS-2 FOR ADDITIONAL NOTES.
3. REFER TO SITE PLANS FOR CONCEPTUAL DRAINAGE LAYOUT.

INDEX PLAN

PERMIT SET
NOT FOR CONSTRUCTION



LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:
FIFTEEN GREAT ROAD LLC

SCALE: 1"=100' DATE: MAY 2011

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PROJECT No.: 11-6303 PLAN No. PS-3



Parcel Table		
Line #/Curve #	Length	Direction/Delta
L1	26.731	S7° 41' 07.60"W
L2	22.100	S3° 30' 12.79"W
L3	6.920	S4° 21' 03.79"W
L4	7.500	S6° 35' 00.21"E
L5	13.810	S5° 12' 48.79"W
L6	6.680	S3° 12' 52.21"E
L7	72.460	S3° 59' 25.79"W
L8	4.290	S3° 41' 39.79"W
L9	21.070	S2° 13' 11.79"W
L10	17.850	S8° 47' 38.79"W
L11	21.980	S1° 12' 55.79"W
L12	71.330	S4° 00' 42.79"W
L13	23.270	S3° 40' 22.79"W
L14	15.730	S18° 27' 14.79"W
L15	3.900	S62° 15' 45.21"E
L16	7.500	S10° 28' 43.79"W
L19	15.000	S51° 55' 45.79"W
L20	7.170	S47° 48' 18.79"W
L22	4.261	S47° 23' 26.00"E

- NOTES:
1. PLAN IS THE COMPILATION OF INFORMATION FROM VARIOUS SOURCES INCLUDING RECORD DEEDS, AERIAL TOPOGRAPHY AND WETLANDS DELINEATIONS BY OTHERS AND IS NOT NECESSARILY THE RESULT OF AN ON THE GROUND SURVEY BY PLACES SITE CONSULTANTS, INC.
 2. SOIL TESTING TO DEMONSTRATE FEASIBILITY OF ON-SITE SUBSURFACE SEWAGE DISPOSAL SYSTEMS IS INCLUDED WITH THE PRELIMINARY SUBDIVISION APPLICATION PACKAGE.
 3. REFER TO SHEET PS-2 FOR ADDITIONAL NOTES.

SITE PLAN 1 OF 4

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

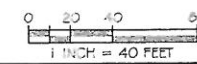
FIFTEEN GREAT ROAD LLC

SCALE: 1"=40' DATE: MAY 2011

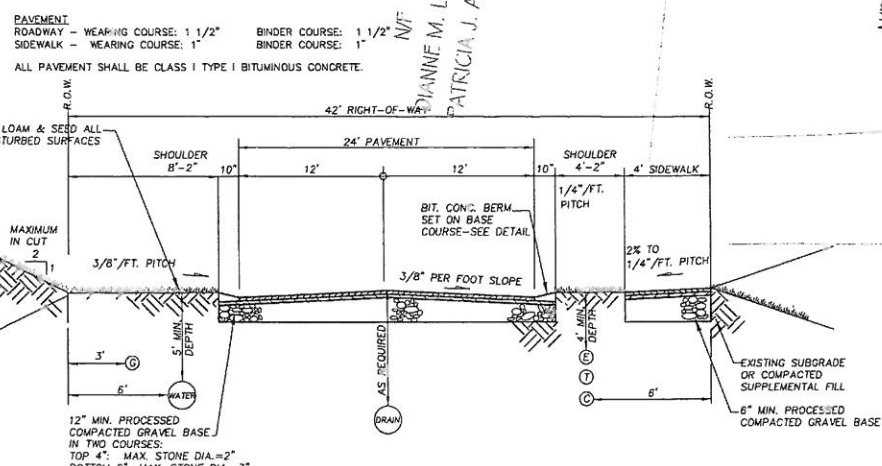
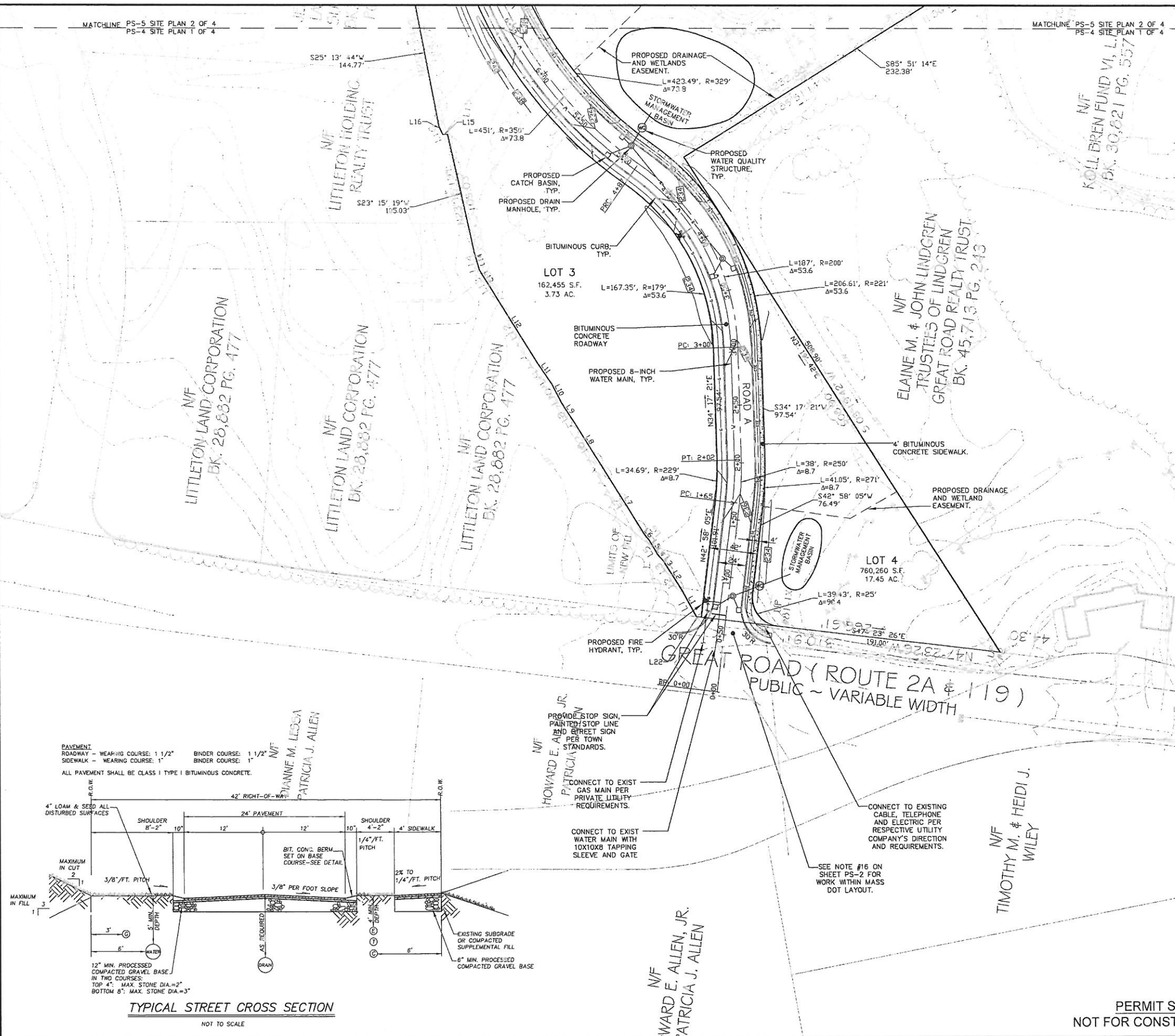
Places Associates, Inc.

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Civil Engineering, Surveying
510 KING STREET, SUITE 9
LITTLETON, MA 01460
978.486.0334 Fax
978.486.0447
EMAIL: places@verizon.net

PROJECT No.: 11-6303 PLAN No. PS-4



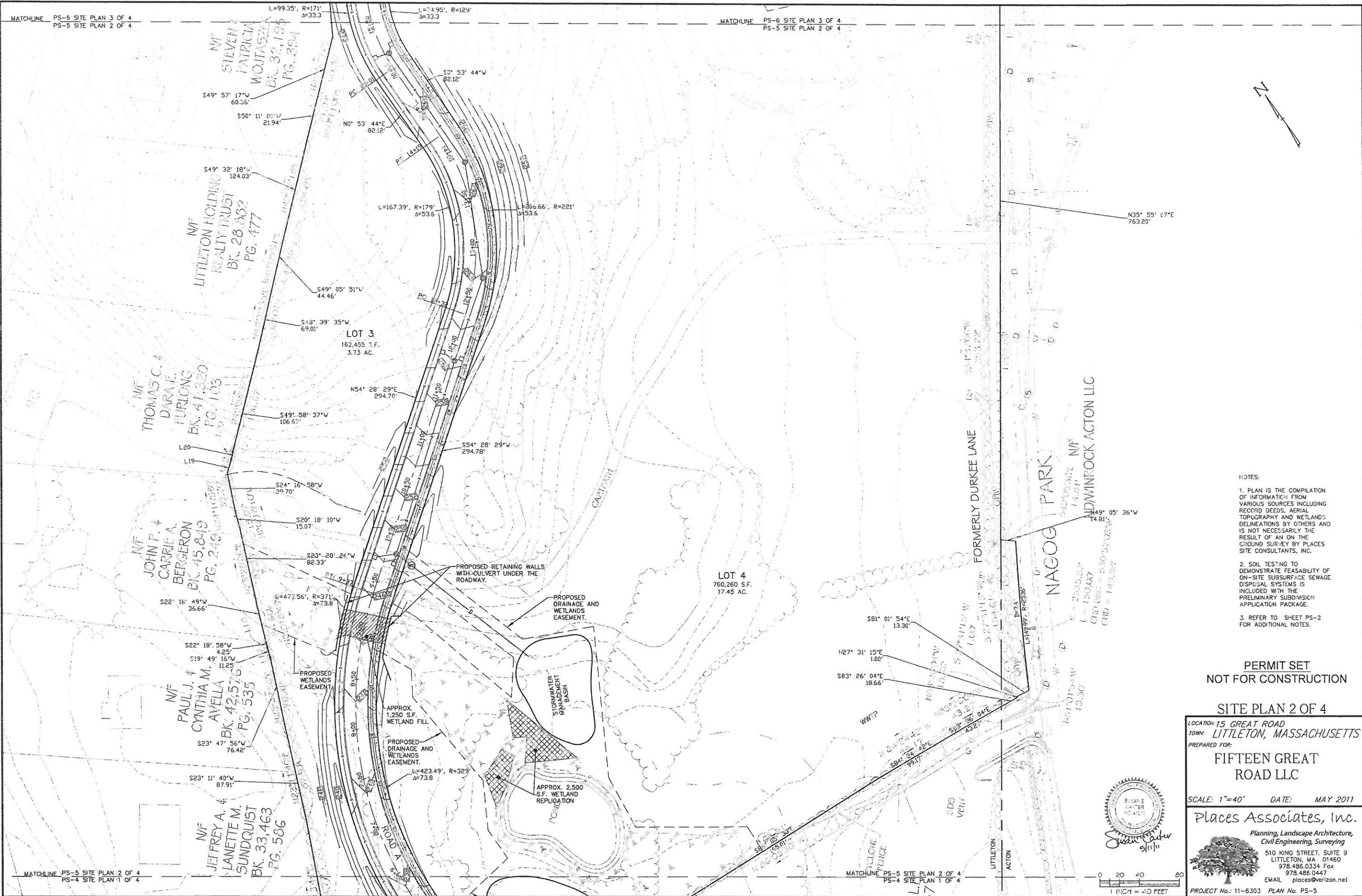
PERMIT SET
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TYPICAL STREET CROSS SECTION
NOT TO SCALE

MATCHLINE PS-6 SITE PLAN 3 OF 4
PS-5 SITE PLAN 2 OF 4

MATCHLINE PS-6 SITE PLAN 3 OF 4
PS-5 SITE PLAN 2 OF 4



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 3. REFER TO SHEET PS-2 FOR ADDITIONAL NOTES.

PERMIT SET
NOT FOR CONSTRUCTION

SITE PLAN 2 OF 4

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

FIFTEEN GREAT
ROAD LLC

SCALE: 1"=40' DATE: MAY 2011

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PROJECT No.: 11-6303 PLAN No. PS-5



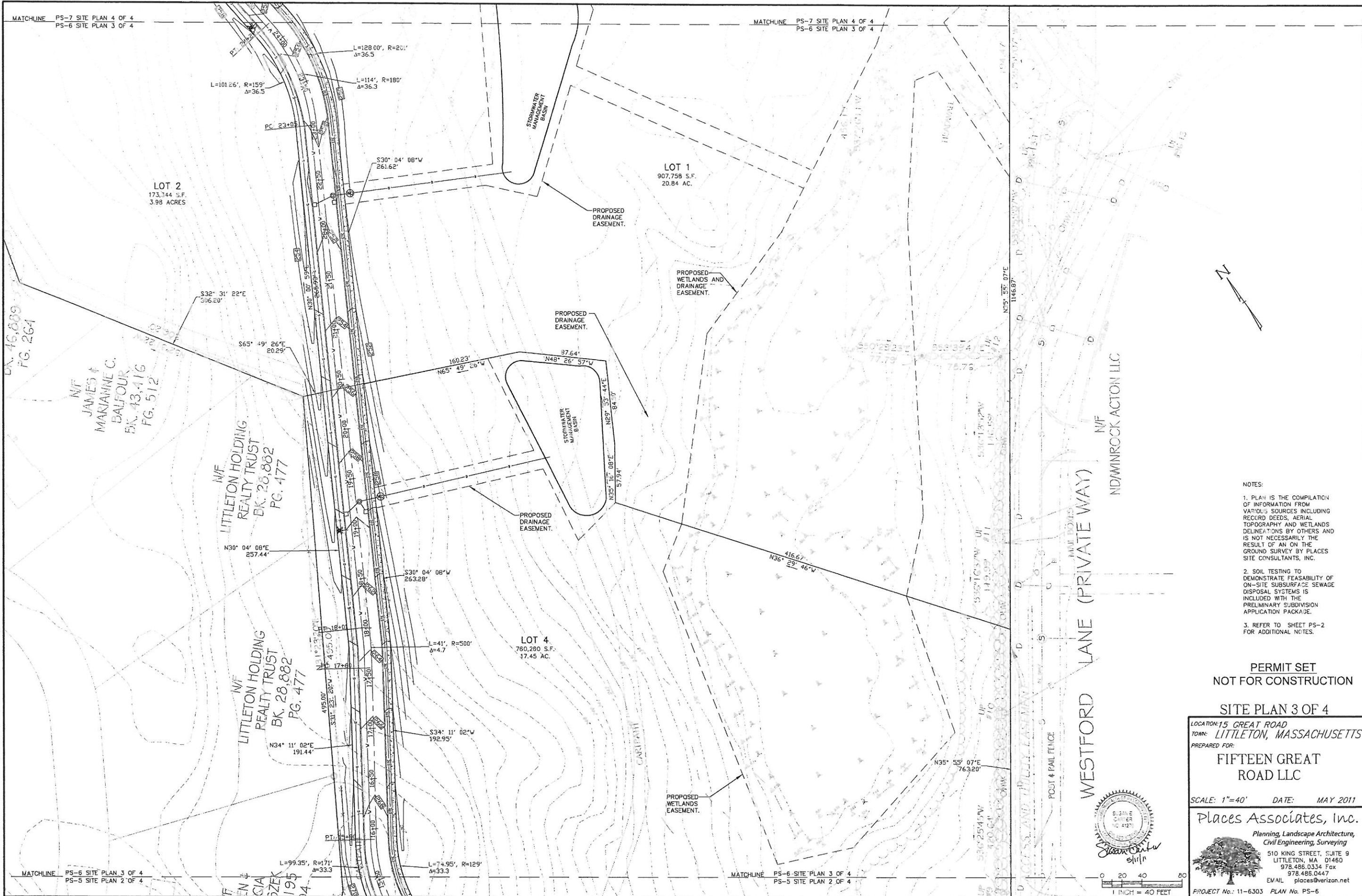
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1 INCH = 40 FEET

MATCHLINE PS-5 SITE PLAN 2 OF 4
PS-4 SITE PLAN 1 OF 4

MATCHLINE PS-5 SITE PLAN 2 OF 4
PS-4 SITE PLAN 1 OF 4

MATCHLINE PS-7 SITE PLAN 4 OF 4
PS-6 SITE PLAN 3 OF 4

MATCHLINE PS-7 SITE PLAN 4 OF 4
PS-6 SITE PLAN 3 OF 4



- NOTES:
1. PLAN IS THE COMPILATION OF INFORMATION FROM VARIOUS SOURCES INCLUDING RECORD DEEDS, AERIAL TOPOGRAPHY AND WETLANDS DELINEATIONS BY OTHERS AND IS NOT NECESSARILY THE RESULT OF AN ON THE GROUND SURVEY BY PLACES SITE CONSULTANTS, INC.
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PERMIT SET
NOT FOR CONSTRUCTION

SITE PLAN 3 OF 4

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

FIFTEEN GREAT
ROAD LLC

SCALE: 1"=40' DATE: MAY 2011

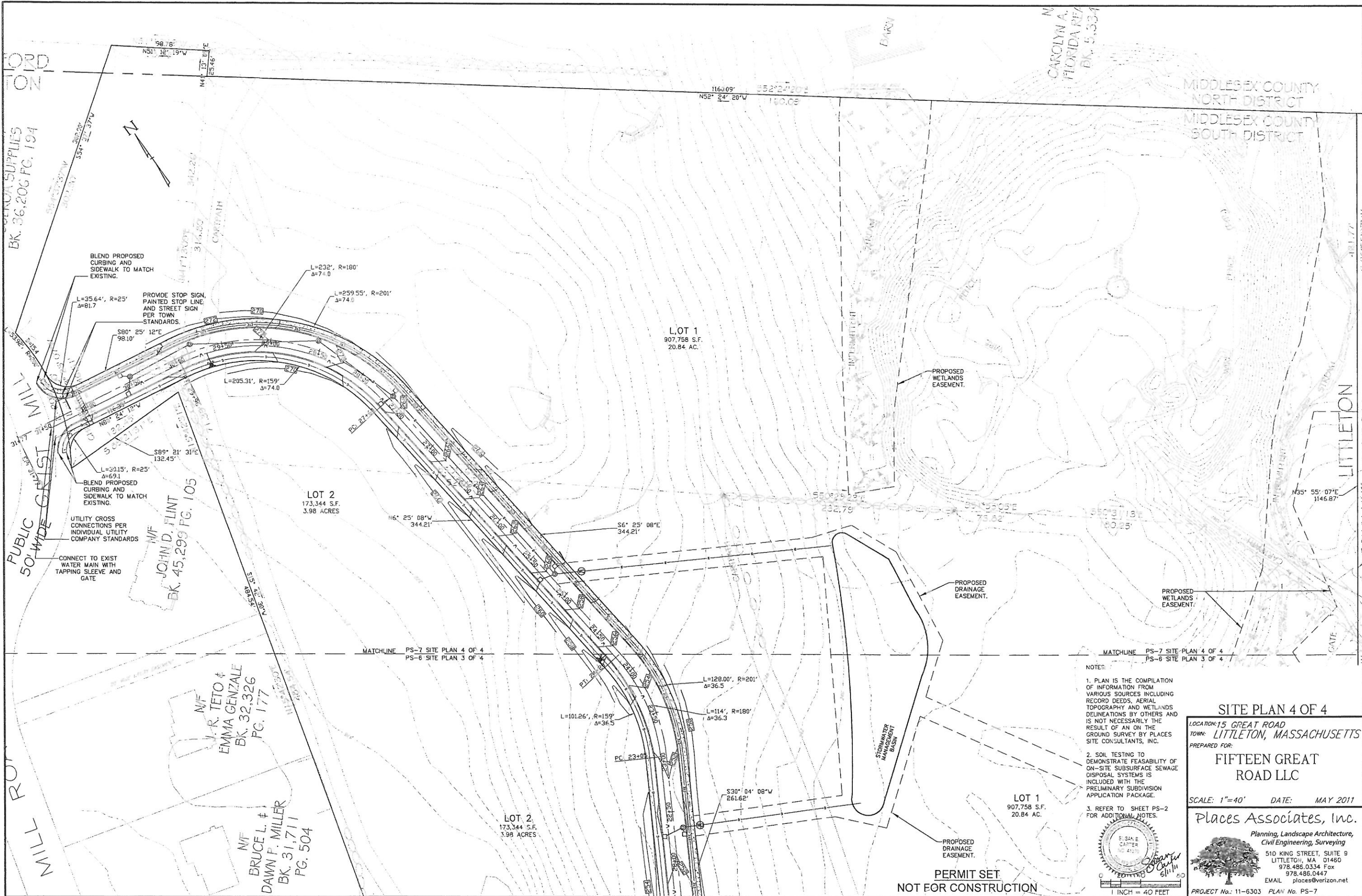
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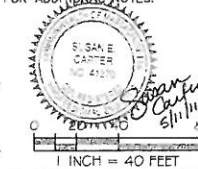
PROJECT No.: 11-6303 PLAN No. PS-6



0 20 40 80
1 INCH = 40 FEET



- NOTES:
1. PLAN IS THE COMPILATION OF INFORMATION FROM VARIOUS SOURCES INCLUDING RECORD DEEDS, AERIAL TOPOGRAPHY AND WETLANDS DELINEATIONS BY OTHERS AND IS NOT NECESSARILY THE RESULT OF AN ON THE GROUND SURVEY BY PLACES SITE CONSULTANTS, INC.
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SITE PLAN 4 OF 4

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

FIFTEEN GREAT ROAD LLC

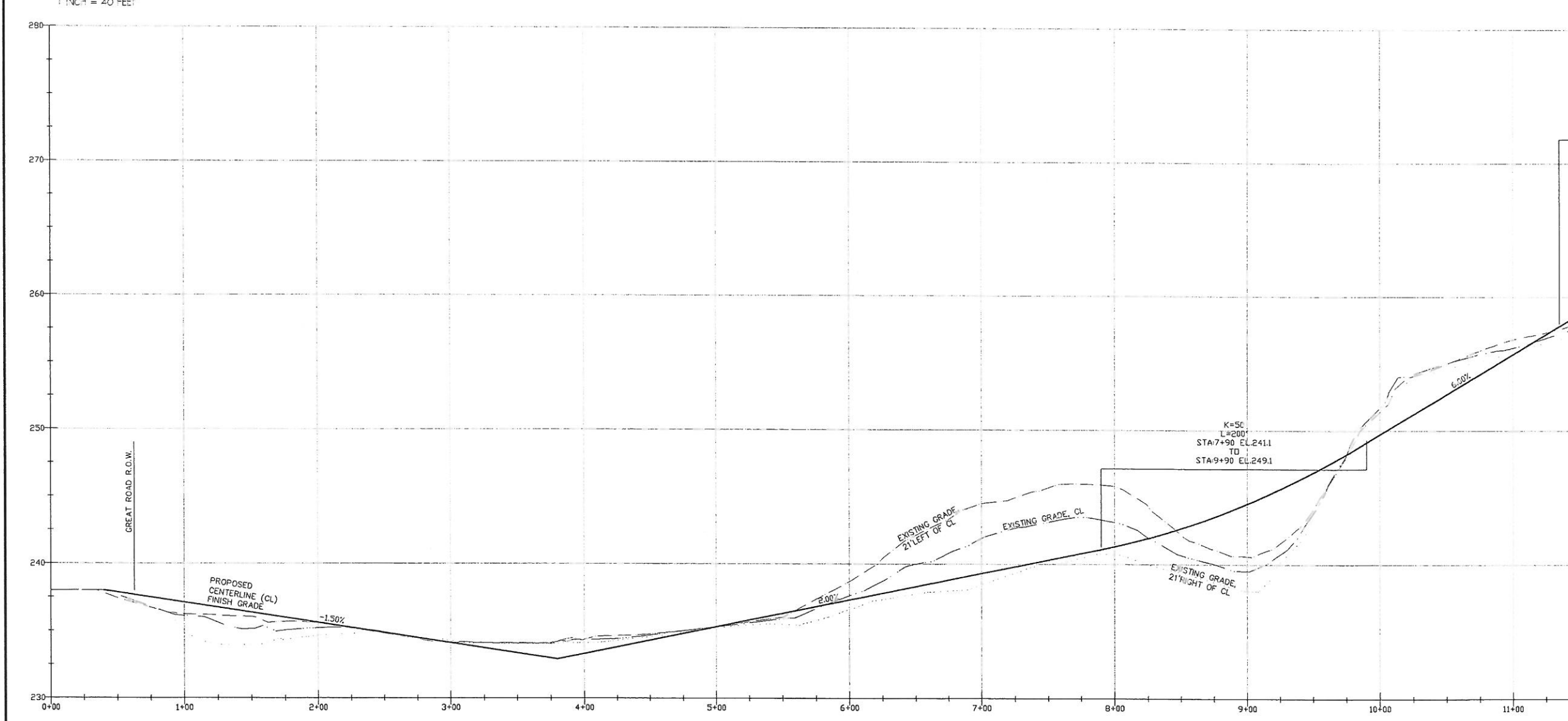
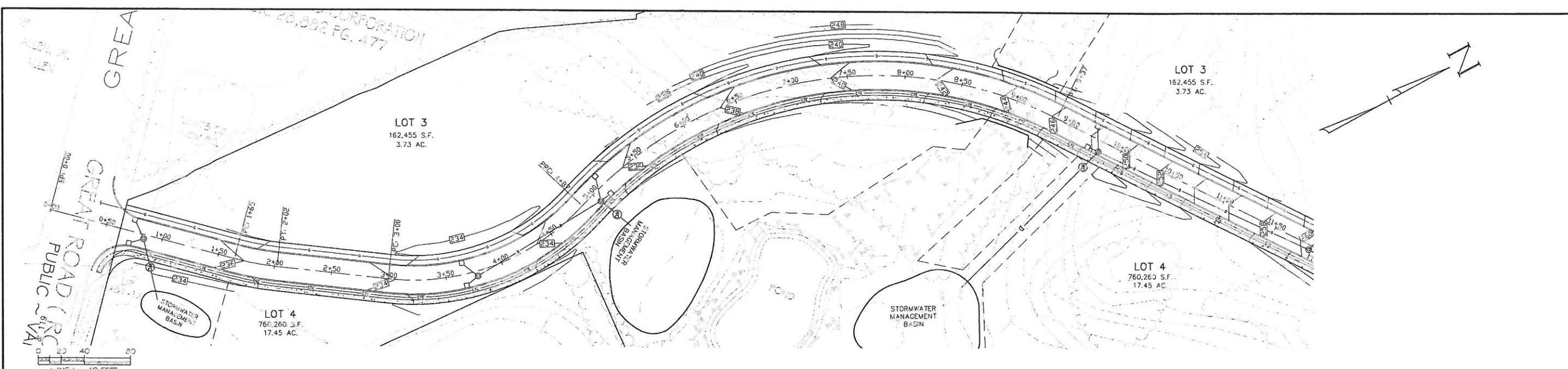
SCALE: 1"=40' DATE: MAY 2011

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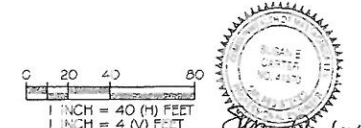
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PROJECT No.: 11-6303 PLAN No. PS-7



- NOTES:
1. PLAN IS THE COMPILATION OF INFORMATION FROM VARIOUS SOURCES INCLUDING RECORD DEEDS, AERIAL TOPOGRAPHY AND WETLANDS DELINEATIONS BY OTHERS AND IS NOT NECESSARILY THE RESULT OF AN ON THE GROUND SURVEY BY PLACES SITE CONSULTANTS, INC.
 2. REFER TO SHEET PS-2 FOR ADDITIONAL NOTES.
 3. REFER TO SITE PLANS FOR CONCEPTUAL DRAINAGE LAYOUT.

PERMIT SET
NOT FOR CONSTRUCTION



ROADWAY PROFILE 1 OF 3

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

FIFTEEN GREAT ROAD LLC

SCALE: AS SHOWN DATE: MAY 2011

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PROJECT No.: 11-6303 PLAN No. PS-B



NOTES:

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2. REFER TO SHEET PS-2 FOR ADDITIONAL NOTES.
3. REFER TO SITE PLANS FOR CONCEPTUAL DRAINAGE LAYOUT.

ROADWAY PROFILE 2 OF 3

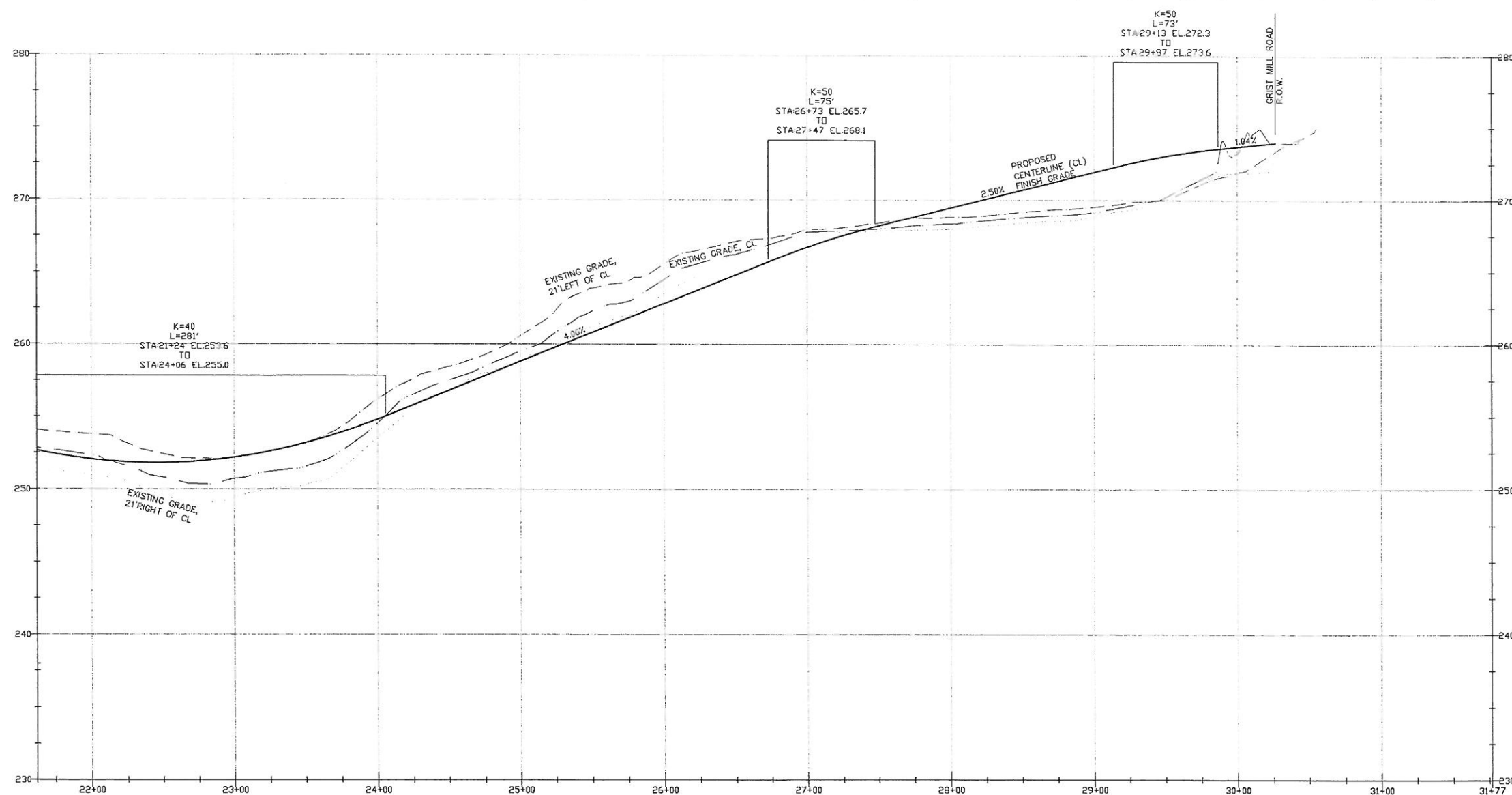
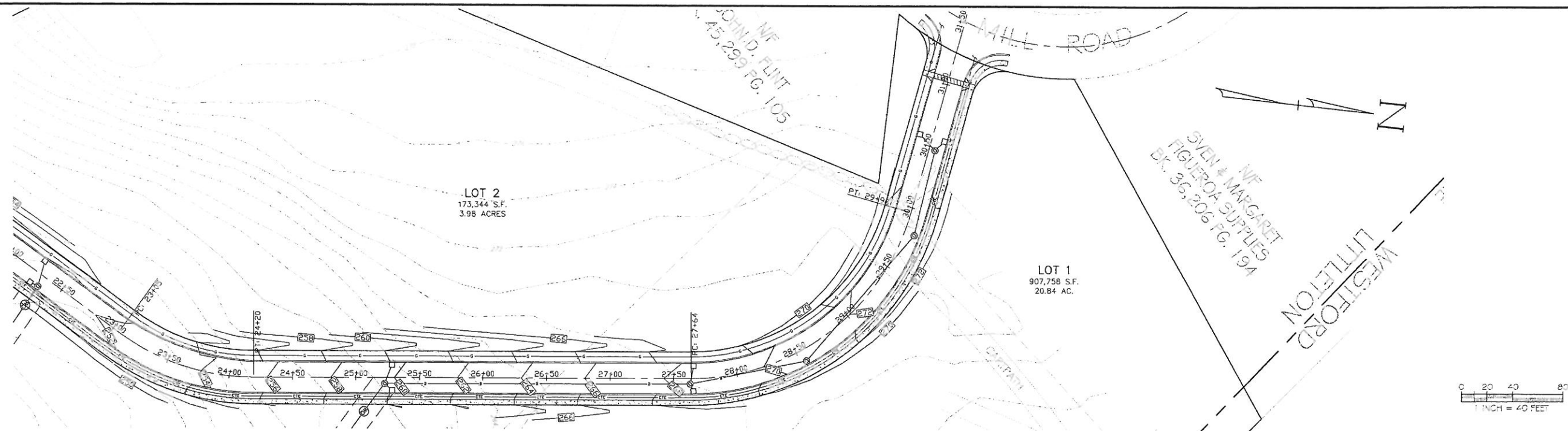
LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

FIFTEEN GREAT ROAD LLC

SCALE: AS SHOWN DATE: MAY 2011

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PROJECT No.: 11-6303 PLAN No.: PS-9



NOTES:

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3. REFER TO SITE PLANS FOR CONCEPTUAL DRAINAGE LAYOUT.

PERMIT SET
NOT FOR CONSTRUCTION

ROADWAY PROFILE 3 OF 3

LOCATION: 15 GREAT ROAD
TOWN: LITTLETON, MASSACHUSETTS
PREPARED FOR:

FIFTEEN GREAT
ROAD LLC

SCALE: AS SHOWN DATE: MAY 2011

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PROJECT No.: 11-6303 PLAN No. PS-10

