

GRAFTON SUPERPARK

A Community Playground and Recreation Project

Grafton SuperPark

Located at
4 & 6 Upton Street
 Grafton, MA
 Prepared for
Town of Grafton
 30 Providence Road
 Grafton, MA 01519

September 16, 2015

LEGEND

○	IRON PIN FOUND
●	DRILL HOLE FOUND
□	BOUND FOUND
⊙	DRAIN MANHOLE
⊚	SEWER MANHOLE
⊕	UTILITY POLE
⊗	HYDRANT
⊘	GATE VALVE
⊙	CURB STOP
— 500 —	EXISTING CONTOUR
— 500.0x —	PROPOSED CONTOUR
⊙	PROPOSED SPOT GRADE
⊙	LIGHT FIXTURE - POLE MOUNT
⊙	LIGHT FIXTURE - WALL MOUNT
— w —	WATER LINE
— g —	GAS
— s —	SEWER SERVICE

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	LAYOUT, GRADING, AND UTILITY PLAN
3	SEDIMENTATION AND EROSION CONTROL PLAN
4	CONSTRUCTION DETAILS PLAN
5	SURVEY PLAN

Site Data:

Assessor's ID: Map 74 Parcels 89 & 90

Property Owner:
 Town of Grafton
 30 Providence Road
 Grafton, MA 01519

Deed Reference: Book 47599 Page 297

Site elevations are based upon NAVD88 datum

Zoning Summary

	Neighborhood Business	Residential R-40	Provided
	Required	Required	
Frontage:	100 ft	140 ft	171.90 ft
Area:	20,000 ft ²	40,000 ft ²	554,516 ft ²
Front Yard:	40 ft	30 ft	217.9 ft
Side Yard:	15 ft	15 ft	18.9 ft
Rear Yard:	15 ft	15 ft	222.5 ft



Locus Plan
 1" = 1000'

DATE:
 NORMAN G. HILL, P.E. #31887

DATE:
 NORMAN G. HILL, P.L.S. #41786

REVISIONS			
No.	Date	Design	Checked
1	12/1/15	MHG	NGH
2	12/28/15	MHG	NGH
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6			

Field By:	BH/JB	9/12
Designed By:	MHG	9/15
Drawn By:	MHG	9/15
Checked By:	NGH	9/15



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 167 Hartford Ave.
 Bellingham, MA 02019
 508-966-4130

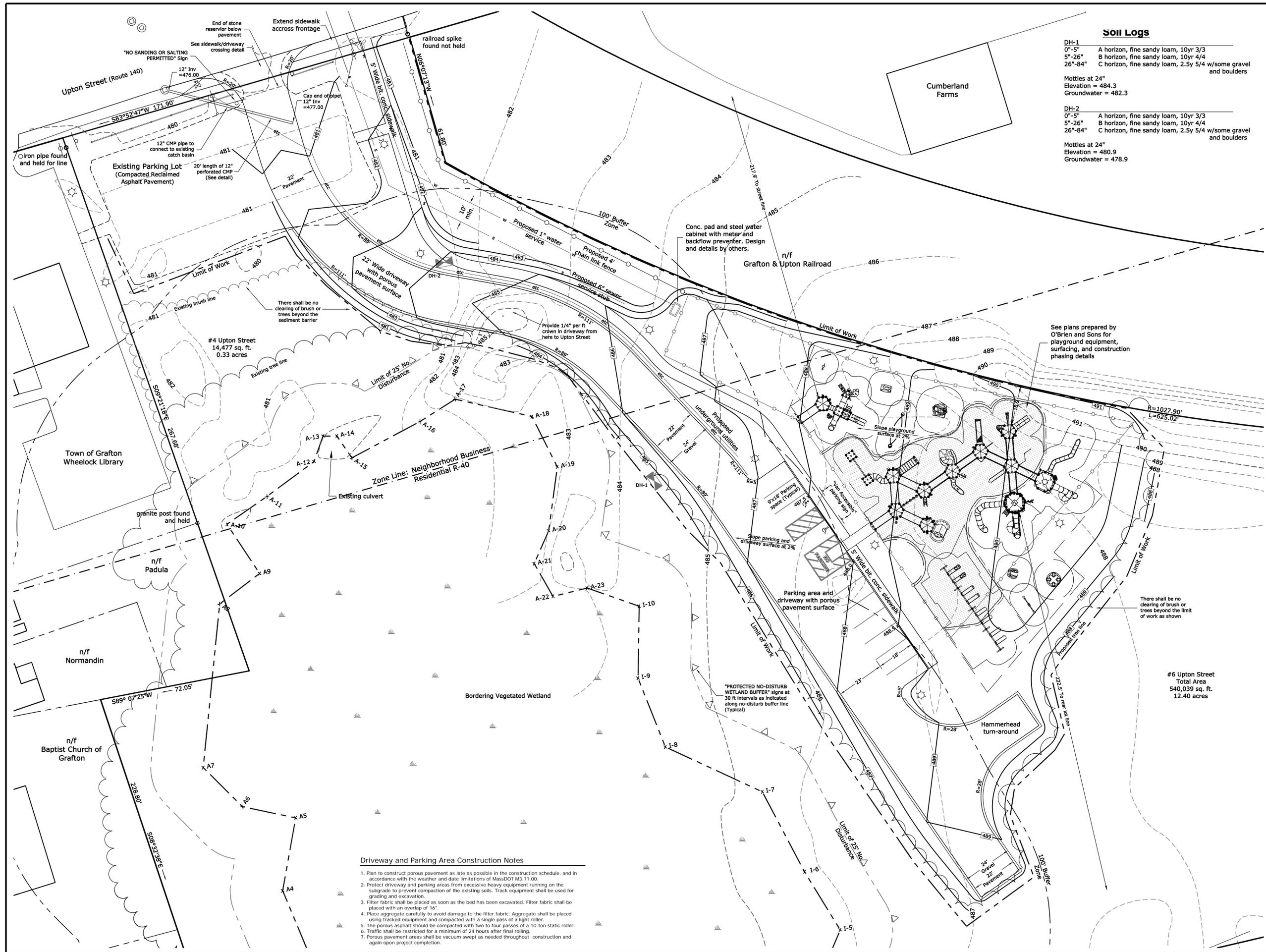
North Grafton
 214 Worcester St.
 N. Grafton, MA 01536
 508-839-9526

Hanson
 1115 Main Street
 Hanson, MA 02341
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Date	Sept. 16, 2015	Sheet No.	1
Job No.	G7857		

Located on
 Upton Street
 Grafton, MA



Soil Logs

DH-1
 0'-5" A horizon, fine sandy loam, 10yr 3/3
 5'-26" B horizon, fine sandy loam, 10yr 4/4
 26"-84" C horizon, fine sandy loam, 2.5y 5/4 w/some gravel and boulders

Mottles at 24"
 Elevation = 484.3
 Groundwater = 482.3

DH-2
 0'-5" A horizon, fine sandy loam, 10yr 3/3
 5'-26" B horizon, fine sandy loam, 10yr 4/4
 26"-84" C horizon, fine sandy loam, 2.5y 5/4 w/some gravel and boulders

Mottles at 24"
 Elevation = 480.9
 Groundwater = 478.9

Grafton SuperPark
Layout, Grading, & Utility Plan
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September 16, 2015
 scale: 1"=20'

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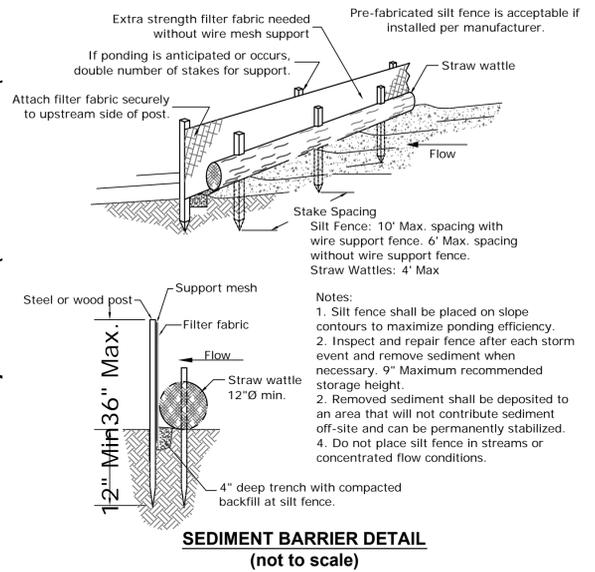
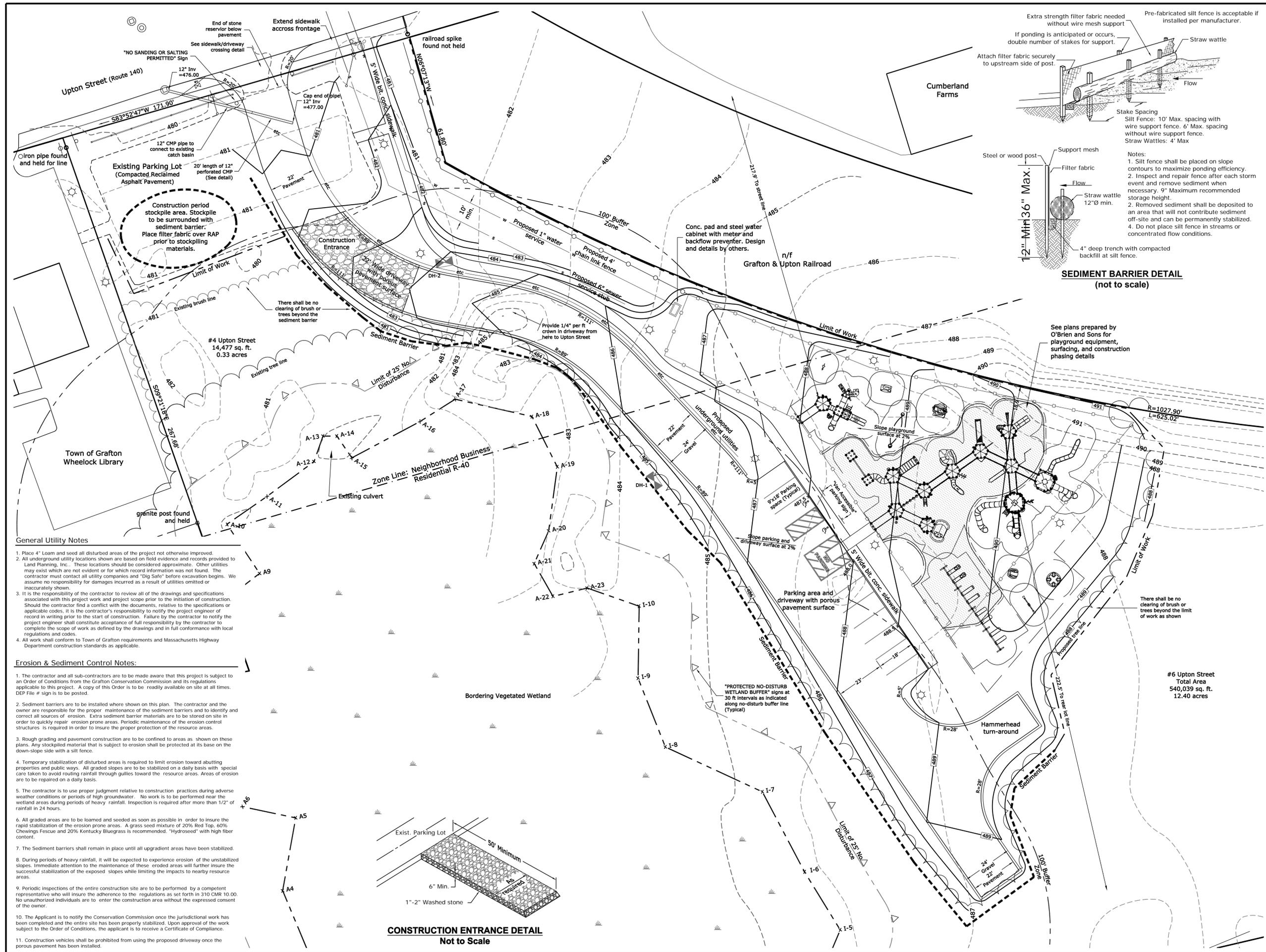
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- Driveway and Parking Area Construction Notes**
1. Plan to construct porous pavement as late as possible in the construction schedule, and in accordance with the weather and date limitations of MassDOT M3.11.00.
 2. Protect driveway and parking areas from excessive heavy equipment running on the subgrade to prevent compaction of the existing soils. Track equipment shall be used for grading and excavation.
 3. Filter fabric shall be placed as soon as the bed has been excavated. Filter fabric shall be placed with an overlap of 16".
 4. Place aggregate carefully to avoid damage to the filter fabric. Aggregate shall be placed using tracked equipment and compacted with a single pass of a light roller.
 5. The porous asphalt should be compacted with two to four passes of a 10-ton static roller.
 6. Traffic shall be restricted for a minimum of 24 hours after final rolling.
 7. Porous pavement areas shall be vacuum swept as needed throughout construction and again upon project completion.



Grafton SuperPark
Sedimentation & Erosion Control Plan
 Located at
4 & 6 Upton Street
 Grafton, MA
 Prepared for
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 30 Providence Road
 Grafton, MA 01519

September 16, 2015
 scale: 1"=20'

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- General Utility Notes**
- Place 4" Loam and seed all disturbed areas of the project not otherwise improved.
 - All underground utility locations shown are based on field evidence and records provided to Land Planning, Inc. These locations should be considered approximate. Other utilities may exist which are not evident or for which record information was not found. The contractor must contact all utility companies and "Dig Safe" before excavation begins. We assume no responsibility for damages incurred as a result of utilities omitted or inaccurately shown.
 - It is the responsibility of the contractor to review all of the drawings and specifications associated with this project work and project scope prior to the initiation of construction. Should the contractor find a conflict with the documents, relative to the specifications or applicable codes, it is the contractor's responsibility to notify the project engineer of record in writing prior to the start of construction. Failure by the contractor to notify the project engineer shall constitute acceptance of full responsibility by the contractor to complete the scope of work as defined by the drawings and in full conformance with local regulations and codes.
 - All work shall conform to Town of Grafton requirements and Massachusetts Highway Department construction standards as applicable.

- Erosion & Sediment Control Notes:**
- The contractor and all sub-contractors are to be made aware that this project is subject to an Order of Conditions from the Grafton Conservation Commission and its regulations applicable to this project. A copy of this Order is to be readily available on site at all times. DEP File # sign is to be posted.
 - Sediment barriers are to be installed where shown on this plan. The contractor and the owner are responsible for the proper maintenance of the sediment barriers and to identify and correct all sources of erosion. Extra sediment barrier materials are to be stored on site in order to quickly repair erosion prone areas. Periodic maintenance of the erosion control structures is required in order to insure the proper protection of the resource areas.
 - Rough grading and pavement construction are to be confined to areas as shown on these plans. Any stockpiled material that is subject to erosion shall be protected at its base on the down-slope side with a silt fence.
 - Temporary stabilization of disturbed areas is required to limit erosion toward abutting properties and public ways. All graded slopes are to be stabilized on a daily basis with special care taken to avoid routing rainfall through gullies toward the resource areas. Areas of erosion are to be repaired on a daily basis.
 - The contractor is to use proper judgment relative to construction practices during adverse weather conditions or periods of high groundwater. No work is to be performed near the wetland areas during periods of heavy rainfall. Inspection is required after more than 1/2" of rainfall in 24 hours.
 - All graded areas are to be loamed and seeded as soon as possible in order to insure the rapid stabilization of the erosion prone areas. A grass seed mixture of 20% Red Top, 40% Chewings Fescue and 20% Kentucky Bluegrass is recommended. "Hydroseed" with high fiber content.
 - The Sediment barriers shall remain in place until all upgradient areas have been stabilized.
 - During periods of heavy rainfall, it will be expected to experience erosion of the unstabilized slopes. Immediate attention to the maintenance of these eroded areas will further insure the successful stabilization of the exposed slopes while limiting the impacts to nearby resource areas.
 - Periodic inspections of the entire construction site are to be performed by a competent representative who will insure the adherence to the regulations as set forth in 310 CMR 10.00. No unauthorized individuals are to enter the construction area without the expressed consent of the owner.
 - The Applicant is to notify the Conservation Commission once the jurisdictional work has been completed and the entire site has been properly stabilized. Upon approval of the work subject to the Order of Conditions, the applicant is to receive a Certificate of Compliance.
 - Construction vehicles shall be prohibited from using the proposed driveway once the porous pavement has been installed.



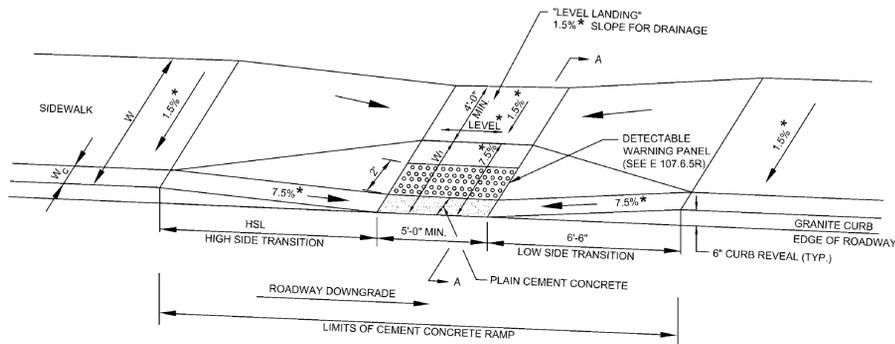
CONSTRUCTION ENTRANCE DETAIL
 Not to Scale

Grafton SuperPark

Construction Details Plan

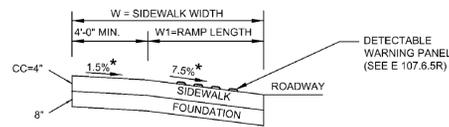
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September 16, 2015
 scale: As Noted



LEGEND

HSL = HIGH SIDE TRANSITION LENGTH (SEE E 107.9.0R)
 W = SIDEWALK WIDTH
 W_c = CURB WIDTH
 W_r = PERPENDICULAR RAMP LENGTH
 CC = CEMENT CONCRETE
 * = TOLERANCE FOR CONSTRUCTION ±0.5%
 USABLE SIDEWALK WIDTH PER AAB = W-W_c
 RAMP LENGTH, W_r = W-4'-0" Min

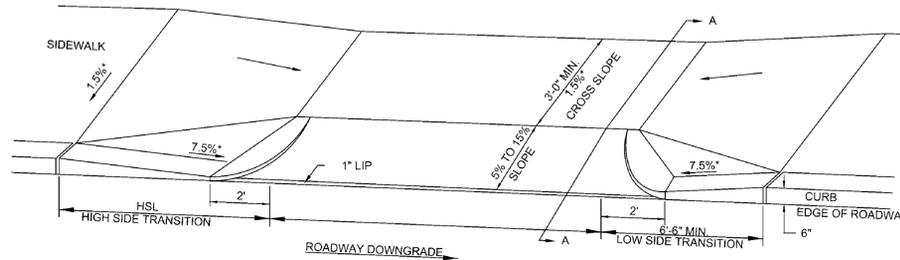


SECTION A-A

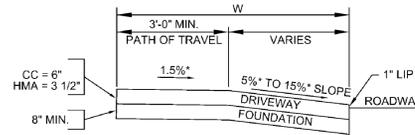


**WHEELCHAIR RAMPS
 LESS THAN 12'-4" SIDEWALK**

DATE OF ISSUE
 MARCH 2012
 DRAWING NUMBER
E 107.2.0R



SIDEWALK THICKNESS AS DRIVEWAYS



SECTION A-A

LEGEND

HSL = HIGH SIDE TRANSITION LENGTH
 W = SIDEWALK WIDTH
 * = TOLERANCE FOR CONSTRUCTION ±0.5%
 CC = CEMENT CONCRETE
 HMA = HOT MIX ASPHALT



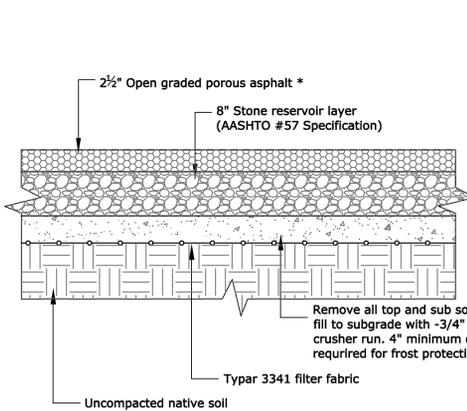
**SIDEWALK THROUGH DRIVEWAYS
 WITH CURB RETURNS
 2' CURB CORNERS**

DATE OF ISSUE
 MARCH 2012
 DRAWING NUMBER
E 107.8.0

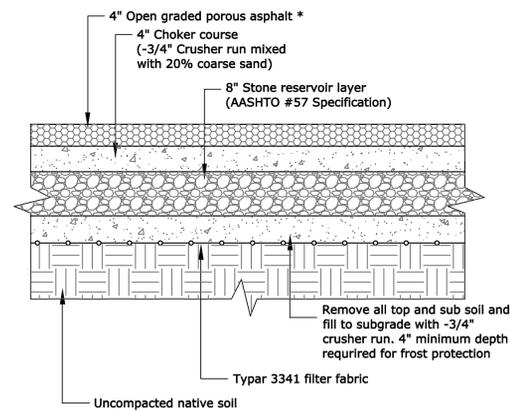


Sign to be mounted on posts at the head of both accessible parking spaces

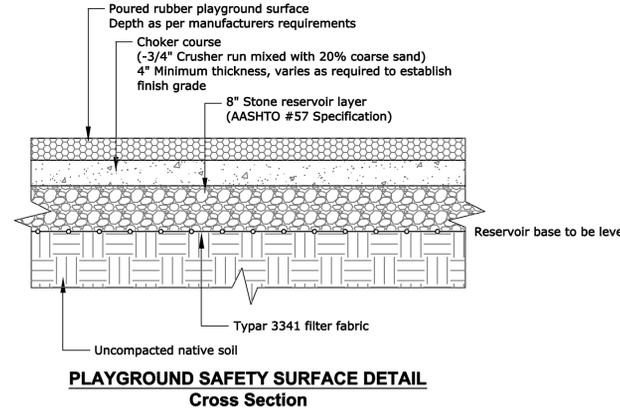
Mount sign 5' min. to 8' max. to top of sign
SIGN DETAILS
 (not to scale)



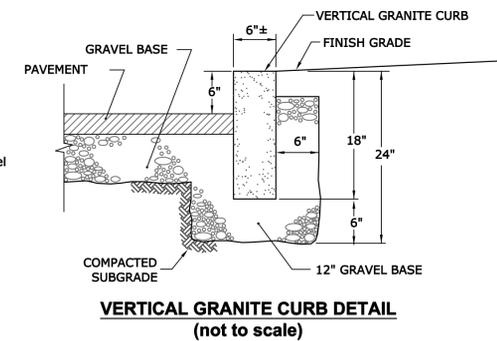
POROUS ASPHALT SIDEWALK DETAIL
 Cross Section
 (not to scale)



POROUS ASPHALT PAVING DETAIL
 Cross Section
 (not to scale)

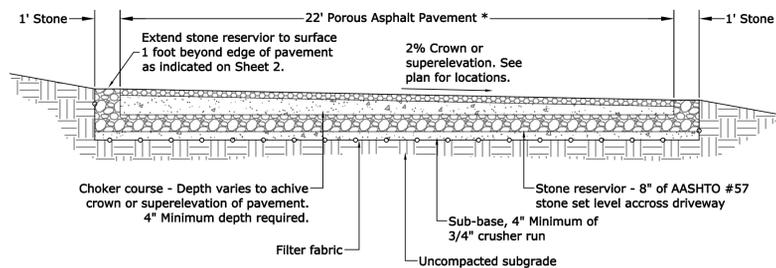


PLAYGROUND SAFETY SURFACE DETAIL
 Cross Section
 (not to scale)

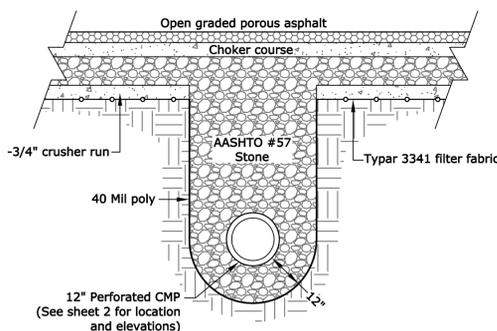


VERTICAL GRANITE CURB DETAIL
 (not to scale)

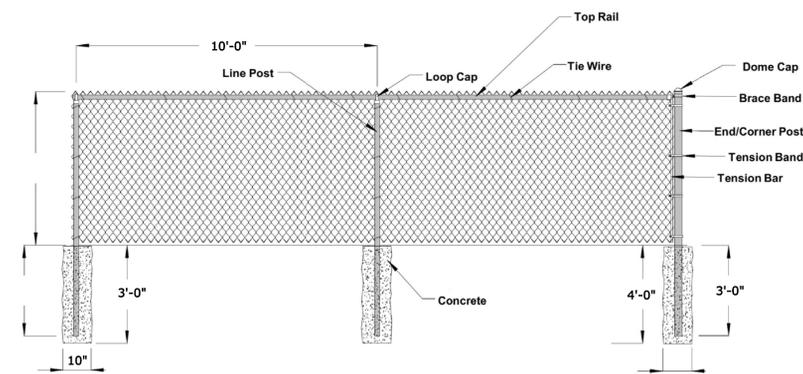
* Note: All open graded porous asphalt materials and methods of placement shall meet MassDOT M3.11.00 specifications for open-graded friction course (OGFC)



TYPICAL DRIVEWAY CROSS SECTION
 Cross Section
 (not to scale)



DRIVEWAY DRAIN DETAIL
 Cross Section
 (not to scale)



CHAIN LINK FENCE DETAIL
 Cross Section
 (not to scale)

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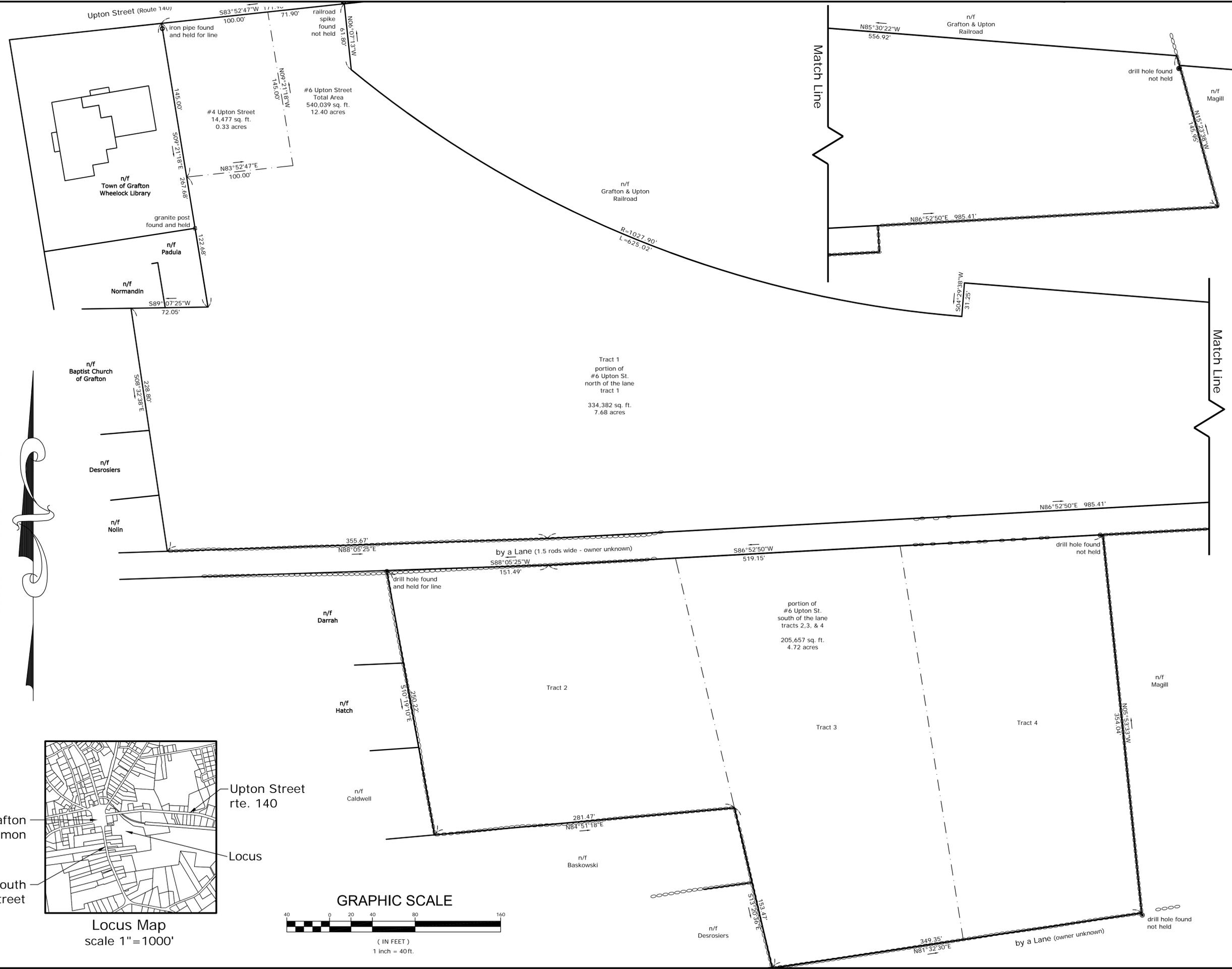
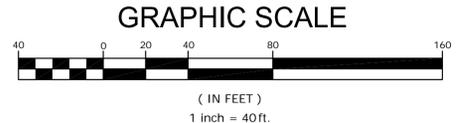
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Massachusetts State Plane



Locus Map
scale 1" = 1000'



FOR REGISTRY OF DEEDS USE ONLY

Plan of Land
Located at
4 & 6 Upton Street
Grafton, MA
Prepared for
Town of Grafton DPW
27 Upton St.
Grafton, MA 01519
Sep. 28, 2012
scale: 1"=40'

COMPLIANCE WITH ZONING OR OTHER REGULATIONS IS NEITHER EXPRESSED NOR IMPLIED.

I HEREBY CERTIFY THAT THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF THE STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

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

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