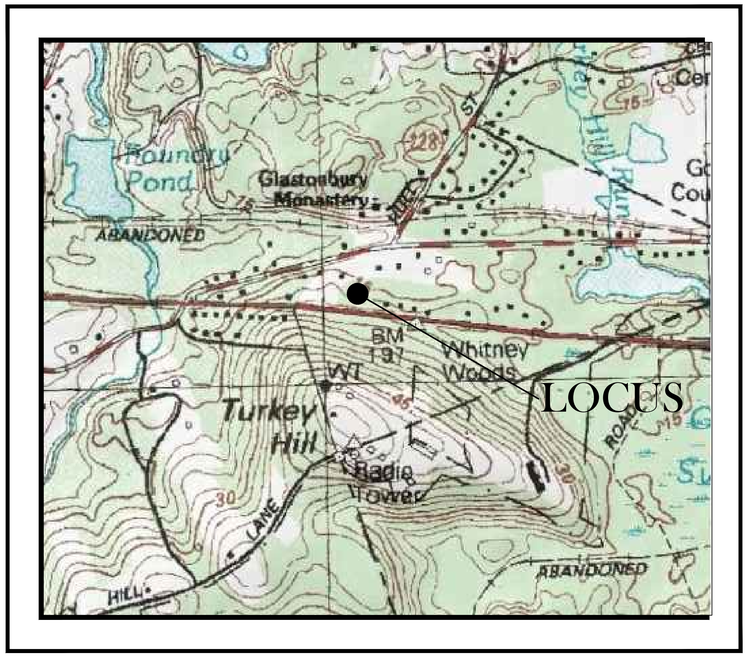
SITE PLAN REVIEW
156 JUSTICE CUSHING HIGHWAY
ASSESSOR MAP 65 LOTS 70
HINGHAM, MA 02043



LOCUS PLAN:
N.T.S.

SITE SUMMARY:

OWNER AND PARCEL INFORMATION:	CHIEF JUSTICE LLC 156 JUSTICE CUSHING HIGHWAY WEYMOUTH, MA 02190 ASSESSOR'S PARCEL: 65 - 70 DEED BOOK: 47682, PAGE: 176
APPLICANT:	FRED BUTTS 61 BURNS WAY WEYMOUTH, MA 02190
ENGINEER AND SURVEYOR:	CAVANARO CONSULTING 687 MAIN STREET P.O. BOX 5175 NORWELL, MA 02061
ZONING DISTRICT:	RESIDENTIAL DISTRICT C

SHEET INDEX:

TITLE SHEET - TS (SHEET 1 OF 9)
EXISTING CONDITIONS PLAN - EX (SHEET 2 OF 9)
GRADING AND DRAINAGE PLAN - GD (SHEET 3 OF 9)
SEPTIC SYSTEM DESIGN - SAS (SHEET 4 OF 9)
EXISTING SUBCATCHMENT AREA PLAN - ESA (SHEET 5 OF 9)
PROPOSED SUBCATCHMENT AREA PLAN - PSA (SHEET 6 OF 9)
EROSION CONTROL PLAN - EC (SHEET 7 OF 9)
LANDSCAPE PLAN - LA (SHEET 8 OF 9)
DETAIL SHEET - DT (SHEET 9 OF 9)

ZONING REQUIREMENTS
RESIDENTIAL DISTRICT C

	REQUIRED	PROPOSED
AREA	40,000 S.F.	56,890 S.F.
FRONTAGE	150 FEET	300 FEET
BUILDING HEIGHT	2.5 STORIES MAXIMUM	1.5 STORY
MINIMUM YARDS:		
FRONT	50 FEET	50.5 FEET
SIDE	20 FEET	20.2 FEET
REAR	20 FEET	150+ FEET
STOPPING SIGHT DISTANCE 50 MPH SPEED LIMIT ASSUMED BOTH NORTH AND SOUTH BOUND TRAFFIC ON ROUTE 3A.	425 FEET	550+ FEET

DRAWING REVISIONS

ACTION	DATE	DESCRIPTION
1	4/8/20	COMMENTS

FEMA:

LOCUS LIES IN F.I.R.M. ZONE X AS SHOWN ON COMMUNITY PANEL NO. 25023C0117K DATED NOVEMBER 4, 2016.

DATUM:

ELEVATIONS SHOWN HEREON REFERENCE NAVD 1988 VERTICAL DATUM.

OWNER OF RECORD:

CHIEF JUSTICE LLC
61 BURNS WAY
WEYMOUTH, MA 02190
ASSESSOR'S PARCEL: 65 – 70
DEED BOOK: 47682, PAGE: 176

UTILITIES:

UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON VISIBLE ABOVE GROUND UTILITIES AND RECORD INFORMATION OF BELOW GROUND UTILITIES AND ARE APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL NECESSARY PRECAUTIONS BEFORE BEGINNING ANY EXCAVATION. (DIGSAFE 1-800-322-4844)

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 41358 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN SULLIVAN CIVIL No. 41358 REGISTERED PROFESSIONAL ENGINEER

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

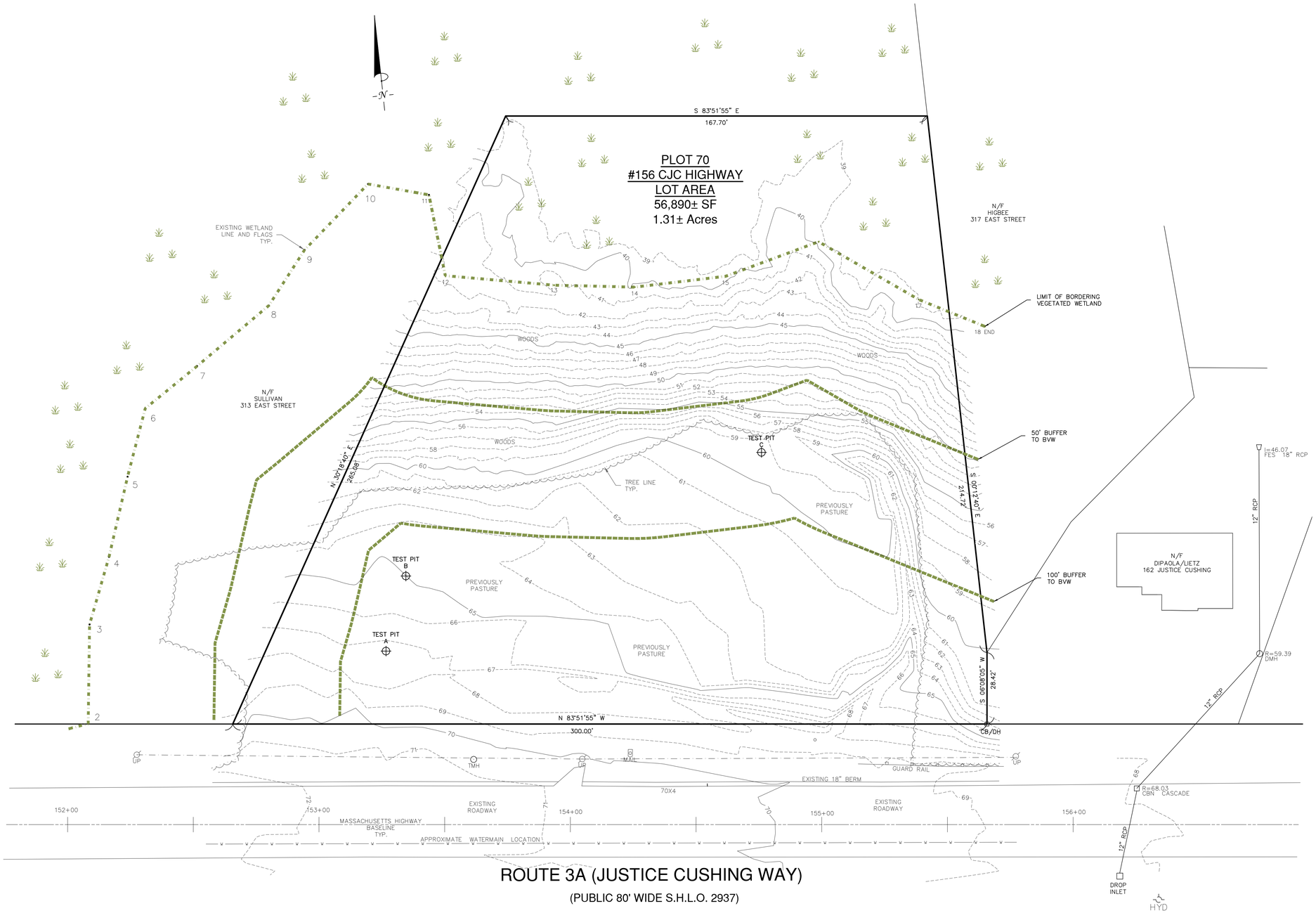
TITLE SHEET

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

PROJECT NO. : 18.124	DRAWING NO.
SCALE : AS SHOWN	TS
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB/BPS	SHEET NO. 1 OF 9
CHECKED BY : CCH/JCC	FILENAME: X:\PROJ\2018\18005\DWG\SP 4-11-19.DWG



DRAWING REVISIONS		
1	4/8/20	COMMENTS
ACTION	DATE	DESCRIPTION

FEMA:

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CHIEF JUSTICE LLC
61 BURNS WAY
WEYMOUTH, MA 02190
ASSESSOR'S PARCEL: 65 – 70
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WETLANDS:

WETLANDS WERE DELINEATED BY SOUTH RIVER ENVIRONMENTAL ON JANUARY 29, 2019 AND FILED LOCATED BY SURVEY BY THIS OFFICE.

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 46904 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN CIVIL No. 41358 REGISTERED PROFESSIONAL ENGINEER

SCALE: 1" = 20'

0' 10' 20' 40'

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

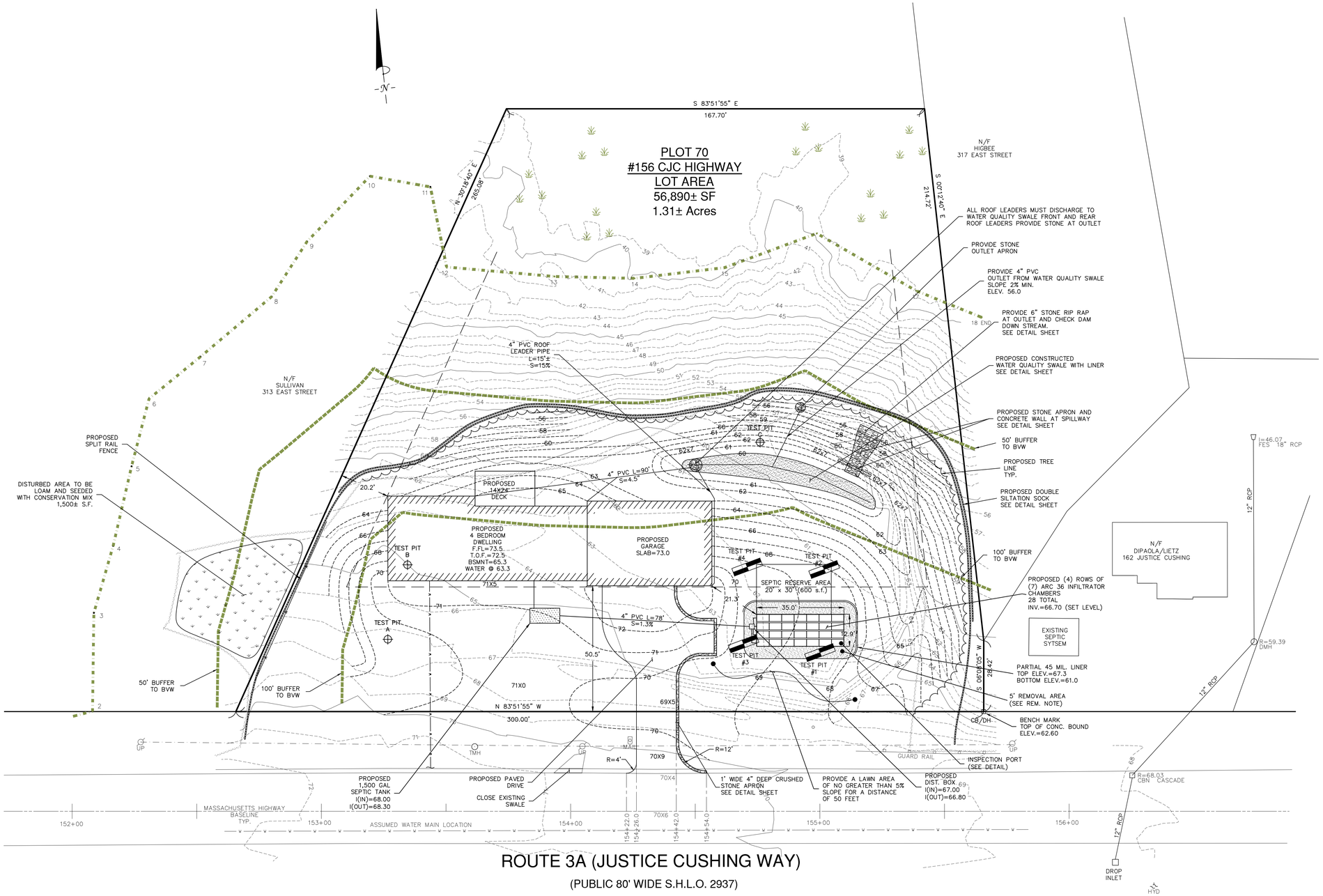
EXISTING CONDITIONS

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

PROJECT NO. : 18.124	DRAWING NO.
SCALE : AS SHOWN	EX
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB/BPS	SHEET NO. 2 OF 9
CHECKED BY : CCH/JCC	FILENAME: X:\PROJ\2018\18005\DWG\SP 4-11-19.DWG



SOIL LOGS

Date: December 13, 2019

AGENT: John Chessia P.E.
SOILS EVALUATOR: Brendan Sullivan P.E.– Cavanaro Consulting
EXCAVATOR: Al Emanuello

TP A	TP B	TP C
Grnd El. 67.2±	Grnd El. 65.0±	Grnd El. 59.3±
G.W. El. 66.2±	G.W. El. 63.3±	G.W. El. 56.1±
0" FILL	0" FILL	0" FILL
10" C Horizon SILT LOAM	14" B Horizon LOAM	16" A Horizon LOAM
36"	20" C Horizon SILT LOAM	22" B Horizon LOAM
Mottles @ 12" Weeping @ 36"	20" Mottles @ 20" No Weeping	38" C Horizon SILT LOAM
		48" Mottles @ 38" Weeping @ 38"

DRAWING REVISIONS

ACTION	DATE	DESCRIPTION
1	4/8/20	COMMENTS

FEMA:

LOCUS LIES IN F.I.R.M. ZONE X AS SHOWN ON COMMUNITY PANEL NO. 25023C0117K DATED NOVEMBER 4, 2016.

DATUM:

ELEVATIONS SHOWN HEREON REFERENCE NAVD 1988 VERTICAL DATUM.

OWNER OF RECORD:

CHIEF JUSTICE LLC
61 BURNS WAY
WEYMOUTH, MA 02190
ASSESSOR'S PARCEL: 65 – 70
DEED BOOK: 47682, PAGE: 176

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WETLANDS:

WETLANDS WERE DELINEATED BY SOUTH RIVER ENVIRONMENTAL ON JANUARY 29, 2019 AND FILED LOCATED BY SURVEY BY THIS OFFICE.

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 46824 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 41358 REGISTERED PROFESSIONAL ENGINEER

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

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

GRADING & DRAINAGE

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

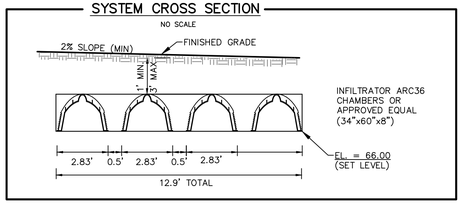
PROJECT NO. : 18.005	DRAWING NO.
SCALE : AS SHOWN	GD
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB/BPS	SHEET NO. 3 OF 9
CHECKED BY : CCH/JCC	FILENAME: X:\PROJ\2018\18005\DWG\SP 4-11-19.DWG

GENERAL NOTES:

1. All construction shall conform to the requirements of the Massachusetts Department of Environmental Protection sanitary code Title 5, and the Town of Hingham Board of Health.
2. Existing utilities shown on this plan are approximate only. Contractor shall verify the location of said utilities prior to construction and shall use extreme caution during excavation as not to disturb any of said utilities.
3. System components to withstand AASHTO H-10 loading criteria. Machinery and vehicles shall not pass over the system area after construction.
4. The proposed system shown has NOT been designed to accommodate a garbage grinder. Owner to ensure garbage grinder is not used. Deed restriction required.
5. It is the owners responsibility to ensure ALL sewerage flows exiting the building enter the proposed system.
6. If soil or groundwater conditions differing from those shown in the soil logs are encountered during construction, the design engineer and Board of Health are to be notified immediately.
7. The design engineer and Board of Health are to be notified for the following inspections:
   Excavation prior to placing sand, system prior to backfilling and final grading.
8. Contractor to ensure grading over and adjacent to the proposed system preserves existing natural onsite/offsite surface water flow patterns, such that runoff is handled on site and does not create puddling or any nuisance conditions. It is the homeowners responsibility to ensure slopes/swales are adequately vegetated and maintained to prevent erosion and provide proper surface water flow.
9. The required As Built Plan is to conform to DEP and Town of Hingham regulations.
10. System pumping and routine maintenance shall be in accordance with 310 CMR 15.351. It is recommended that the septic tank be pumped on an annual basis.
11. This plan is for the sole purpose of designing and constructing a septic system. It is not intended to be used for the determination of property ownership and/or the transfer of property.
12. No field changes are to be made to this plan without written consent of the design engineer and Board of Health.
13. No record locations available for wells on immediately adjacent lots.
14. Contractor is to verify existing sewer location and elevation prior to start of construction and notify Design Engineer of any discrepancies.
15. Septic tank outlet cover to be labeled "Filter Below".

SYSTEM CROSS SECTION

NO SCALE



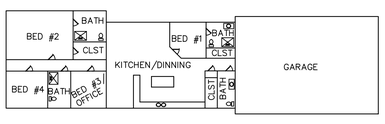
DESIGN CRITERIA

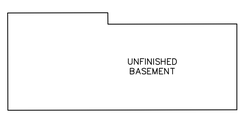
REGULATIONS USED:
STATE: 310 CMR 15.000 – TITLE 5
LOCAL: TOWN OF HINGHAM

Design Perc Rate: <2 MIN./INCH
No. of Bedrooms: 4
Daily Flow: 440 GPD
Load Rate: 0.74 GPD/SF
Soil Class: I
Area Required: 595 SF

INFILTRATOR DESIGN
Total Length of Chambers: 124 L.F. (REQ'D)
Total Length of Chambers: 140 L.F. (PROP.)
Effective Loading Rate: 4.8 SF/LF*
Area Provided: 672 SF
Capacity: 672 SF x .74 GPD/SF = 497 GPD

*PER GENERAL USE APPROVAL TO INFILTRATOR SYSTEMS.
(ARC 36 CHAMBERS (8-inch INVERT))

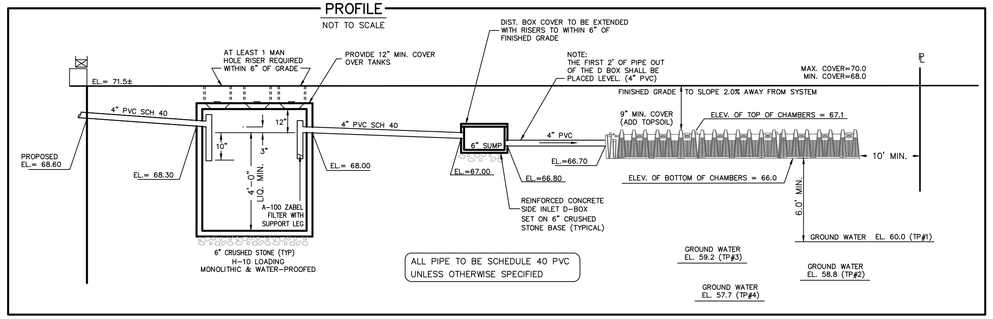




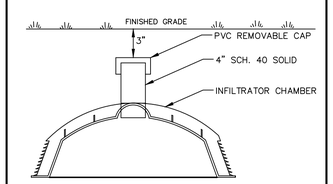
HOUSE PLAN

PROFILE

NOT TO SCALE



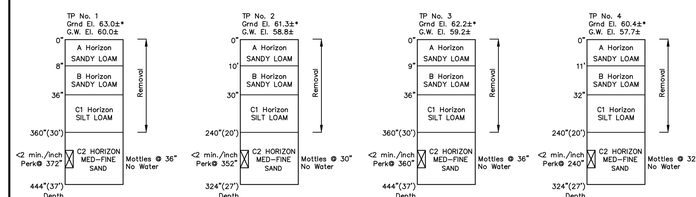
INSPECTION PORT



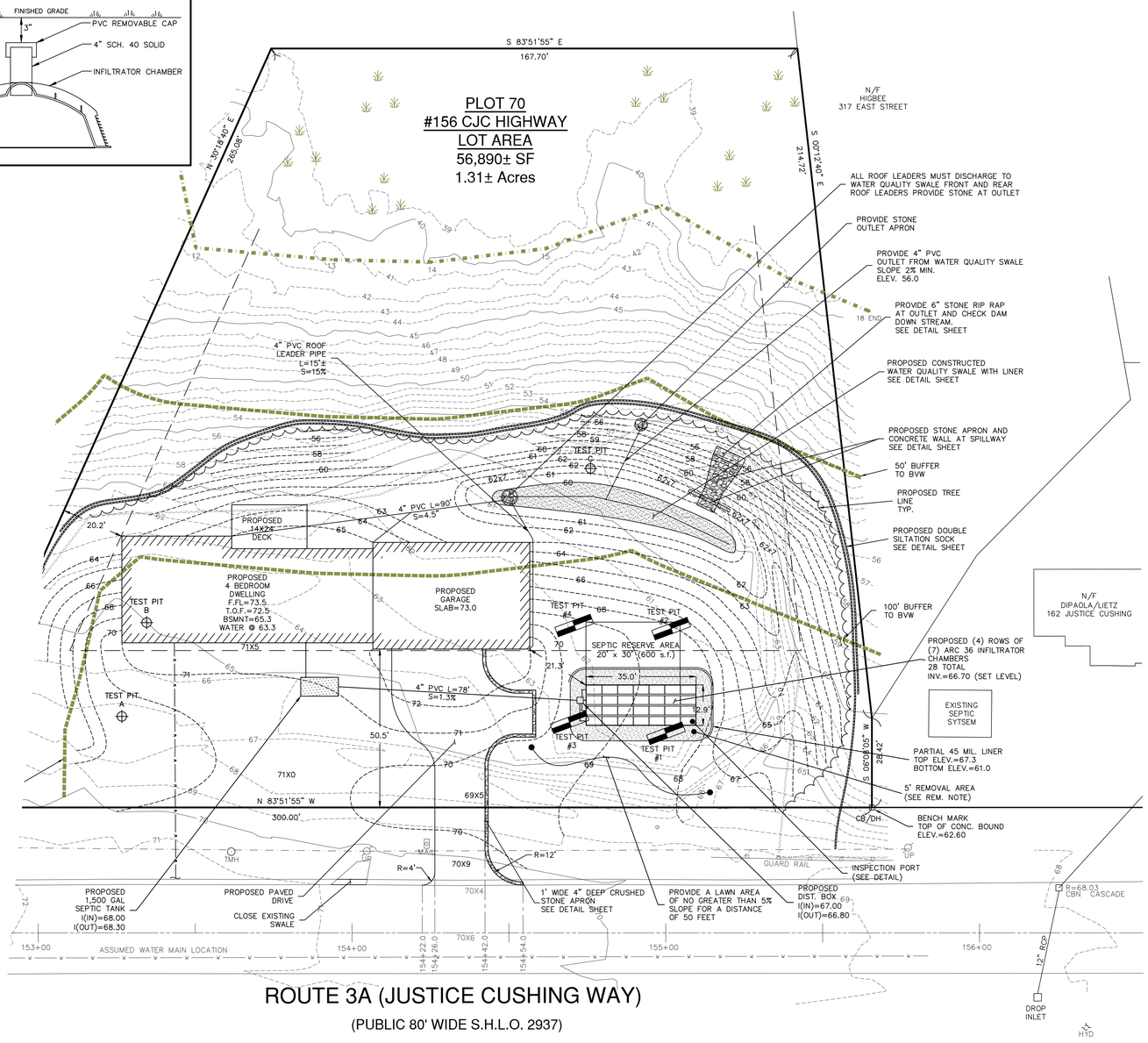
SOIL LOGS

Date: August 22-24, 2018

BOH AGENT: Susan Sarni/Betty Nee – Hingham B.O.H.
SOILS EVALUATOR: Brendan Sullivan P.E.– Cavanaro Consulting
EXCAVATOR: Al Emanuello



* ELEVATIONS WERE TAKEN PRIOR TO PERFORMING TEST PITS ON AUGUST 2018.

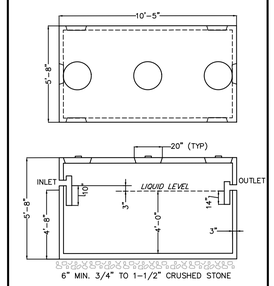


ROUTE 3A (JUSTICE CUSHING WAY)

(PUBLIC 80' WIDE S.H.L.O. 2937)

SEPTIC TANK

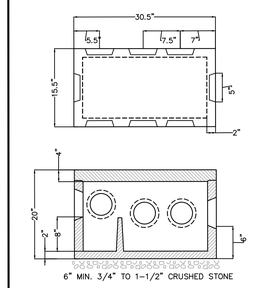
NOT TO SCALE



1,500 GALLON SEPTIC TANK
(SCITUATE PRECAST OR EQUAL)
4,000 PSI CONCRETE @ 28 DAYS

DISTRIBUTION BOX

NOT TO SCALE



5 OUTLET DISTRIBUTION BOX
(SCITUATE PRECAST OR EQUAL)
4,000 PSI CONCRETE @ 28 DAYS

SCALE: 1" = 20'

0' 10' 20' 40'

DRAWING REVISIONS

ACTION	DATE	DESCRIPTION
2	4/8/20	COMMENTS
1	6/19/19	ADDED GRADING AND INFILTRTION

FEMA:

LOCUS LIES IN F.I.R.M. ZONE X AS SHOWN ON COMMUNITY PANEL NO. 25023C0117K DATED NOVEMBER 4, 2016.

DATUM:

ELEVATIONS SHOWN HEREON REFERENCE NAVD88 VERTICAL DATUM.

OWNER OF RECORD:

CHIEF JUSTICE LLC
61 BURNS WAY
WEYMOUTH, MA 02190
ASSESSOR'S PARCEL: 65 – 70
DEED BOOK: 47682, PAGE: 176

UTILITIES:

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REMOVE & REPLACE NOTES:

REMOVE ALL UNSUITABLE MATERIAL WITHIN 5' OF THE PROPOSED SYSTEM AND AN AVERAGE OF 30 FEET BELOW THE EXISTING SURFACE ELEVATION OR UNTIL THE SECOND C-LAYER IS ENCOUNTERED, AS SOIL STRATA VARIES. REPLACE SAME UP TO THE TOP OF THE CHAMBER (ELEVATION 67.1±) WITH CLEAN, GRANULAR FILL IN ACCORDANCE WITH 310 CMR 15.255(3). APPROXIMATE QUANTITY OF SAND FILL = 1,900± CUBIC YARDS. (INCLUDES 20% FOR COMPACTION.)*

* FILL QUANTITIES ARE APPROXIMATE ONLY AND MAY VARY ACCORDING TO SOIL CONDITIONS ENCOUNTERED AT THE TIME OF CONSTRUCTION. CONTRACTOR TO VERIFY IN FIELD AS CONSTRUCTION COSTS MAY BE AFFECTED.

SITE SPECIFIC NOTES:

1. THE INTENT OF THIS DESIGN IS TO MEET STATE AND LOCAL SANITARY CODES. THE DESIGNER DOES NOT WARRANT, OR REPRESENT, THAT THE SYSTEM WILL BE INSTALLED AS DESIGNED, NOR DOES THE DESIGNER ASSURE THE OPERATION AND PERFORMANCE OVER TIME.
2. ALL TANKS SHALL BE WATERTIGHT THROUGH MANUFACTURER'S SPECIFICATION & WARRANTY.
3. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR EQUAL FOR FUTURE RELOCATION IN ACCORDANCE 310 CMR 15.221(12).
4. ALL BOOTS OR PIPE JOINTS TO BE SEALED WITH HYDRAULIC CEMENT OR INSTALLED WITH WATERTIGHT SLEEVES IN ACCORDANCE WITH 310 CMR 15.405(1)(j).
5. ANY REQUIRED TREE REMOVAL SHALL BE REVIEWED WITH THE HOMEOWNER PRIOR TO THE START OF CONSTRUCTION, AS ADDITIONAL COSTS MAY BE INCURRED.

VARIANCES REQUESTED FROM THE SUPPLEMENTARY RULES AND REGULATIONS FOR THE DISPOSAL OF SANITARY SEWERAGE:

1. SECTION VI.9 THICKNESS OF UNSATURATED, NATURAL MATERIAL 6 FEET REQUIRED BELOW BOTTOM OF SYSTEM.

   MINIMUM EXISTING DEPTH ABOVE GROUNDWATER IS 0'
2. SECTION VI.12 CONSTRUCTION IN FILL 6' THICKNESS OF NATURALLY OCCURRING UNSATURATED MATERIAL UNDER SDS.

   MINIMUM EXISTING DEPTH ABOVE GROUNDWATER IS 0'
3. SECTION VI.11 THE RESERVE AREA MUST MEET THE SAME REQUIREMENTS AS THE PRIMARY AREA.

   APPLICANT IS REQUESTING NOT TO CONSTRUCT THE RESERVE AREA AT THIS TIME.

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

SEPTIC SYSTEM DESIGN

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

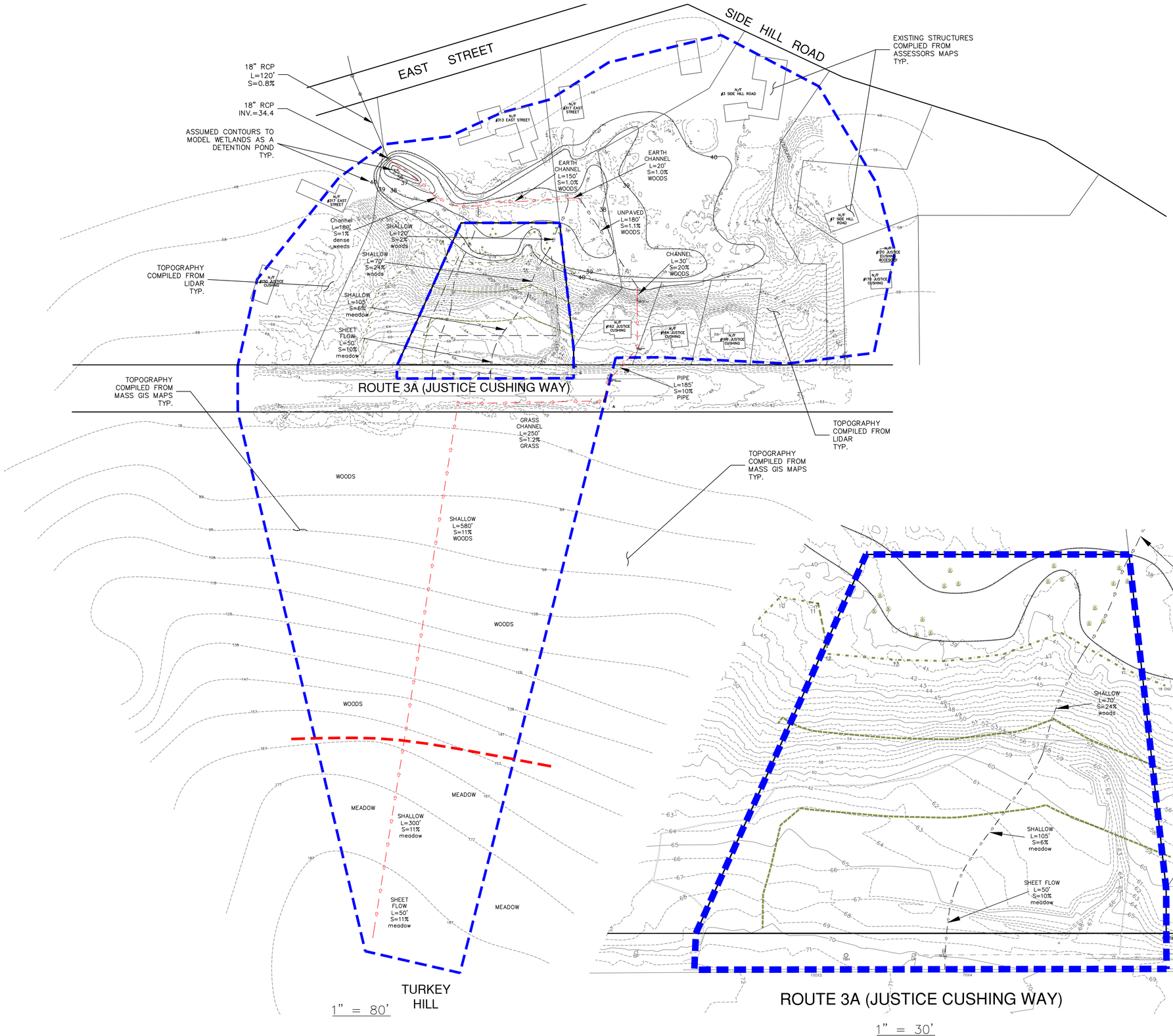
PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 46920 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 41358 REGISTERED PROFESSIONAL ENGINEER

PROJECT NO. : 18124	DRAWING NO.
SCALE : 1"=20'	SAS
DATE : 6/3/19	
DESIGNED BY : BPS	
DRAWN BY : DB	SHEET NO. 4 OF 9
CHECKED BY : BPS	FILENAME: X:\PROJECTS\2018\18062\DWG\18062_BOH.DWG



DRAWING REVISIONS		
1	4/8/20	COMMENTS
ACTION	DATE	DESCRIPTION

FEMA:

LOCUS LIES IN F.I.R.M. ZONE X AS SHOWN ON COMMUNITY PANEL NO. 25023C0117K DATED NOVEMBER 4, 2016.

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OWNER OF RECORD:

CHIEF JUSTICE LLC
61 BURNS WAY
WEYMOUTH, MA 02190
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DEED BOOK: 47682, PAGE: 176

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COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 46924 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN CIVIL No. 41358 REGISTERED PROFESSIONAL ENGINEER

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

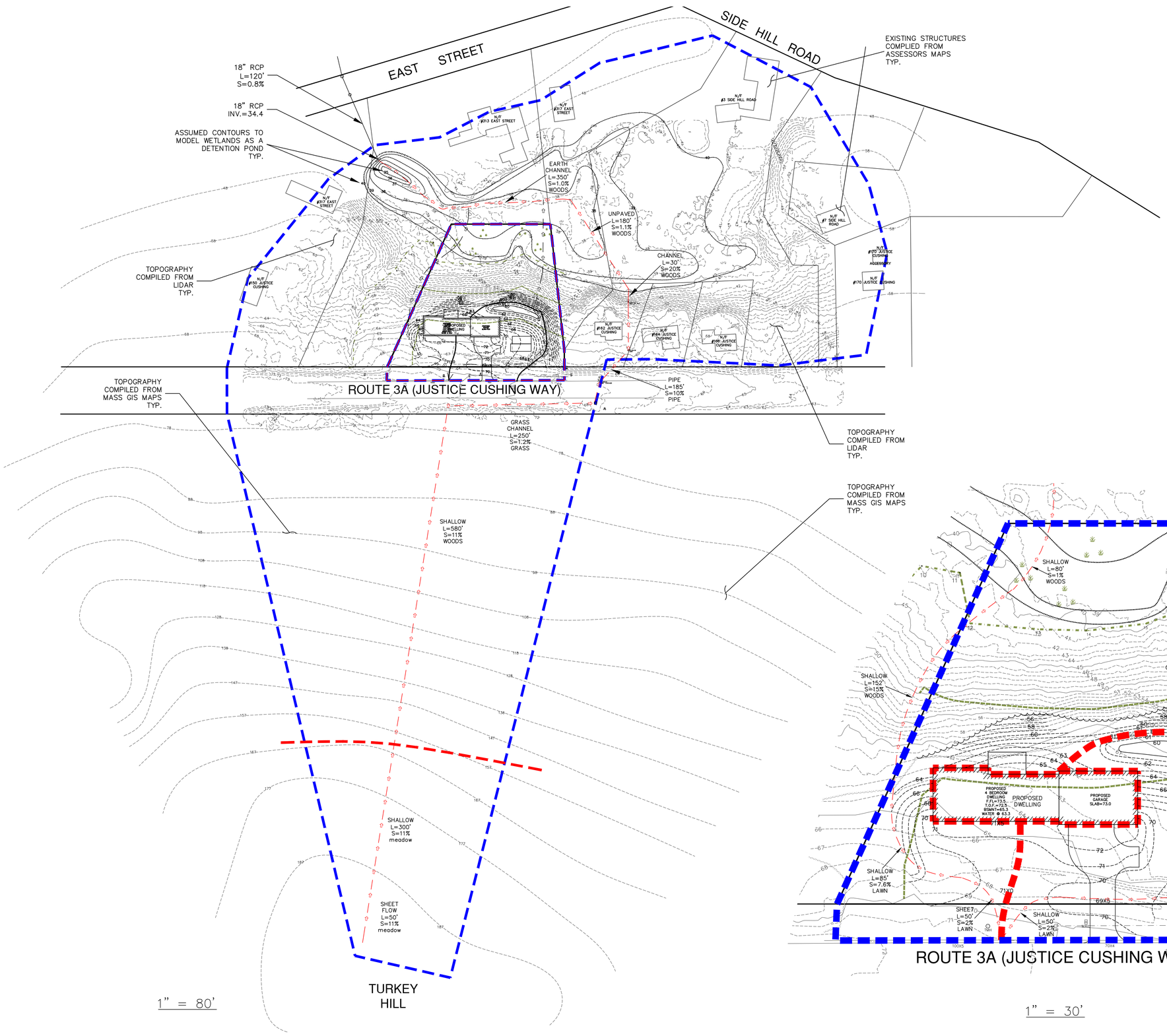
EXISTING SUBCATCHENT AREAS`

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

PROJECT NO. : 18124	DRAWING NO.
SCALE : 1"=20'	ESA
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB	SHEET NO. 5 OF 9
CHECKED BY : BPS	FILENAME: X:\PROJECTS\2018\18062\DWG\18062_BOH.DWG



DRAWING REVISIONS		
1	4/8/20	COMMENTS
ACTION	DATE	DESCRIPTION

FEMA:

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COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 46924 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN CIVIL No. 41358 REGISTERED PROFESSIONAL ENGINEER

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687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

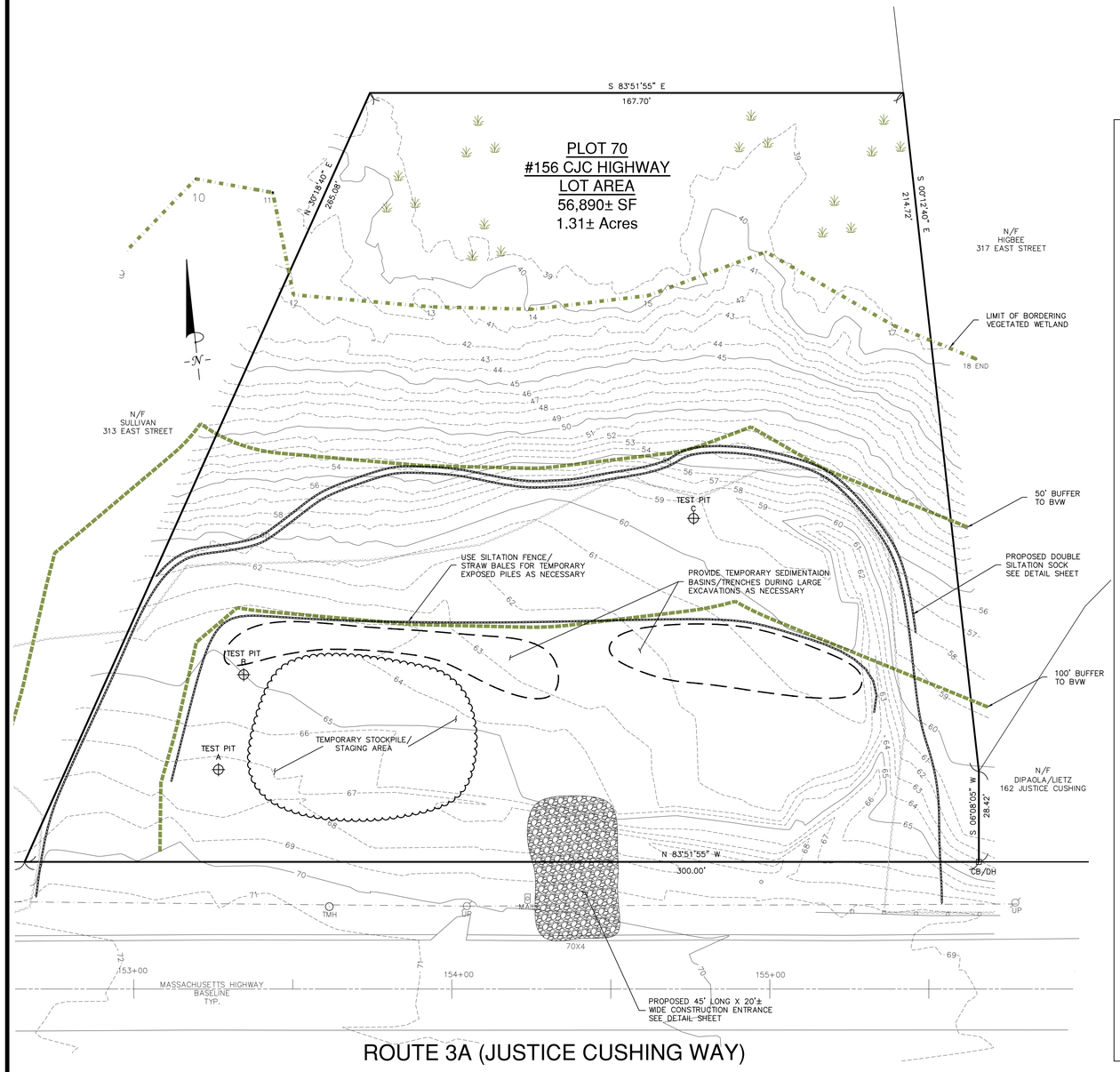
PROPOSED SUBCATCHENT AREAS

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

PROJECT NO. : 18124	DRAWING NO.
SCALE : 1"=20'	PSA
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB	SHEET NO. 6 OF 9
CHECKED BY : BPS	FILENAME: X:\PROJECTS\2018\18062\DWG\18062_BOH.DWG



CONSTRUCTION PERIOD STORMWATER OPERATION AND MAINTENANCE PLAN AND CONSTRUCTION SEQUENCING

PROPOSED RESIDENTIAL DEVELOPMENT
159 JUSTICE CUSHING HIGHWAY – HINGHAM, MA 02043
STORMWATER MANAGEMENT SYSTEM'S OWNER: FRED BUTTS
SYSTEM OWNER'S ADDRESS: 51 BURNS WAY, S. WEYMOUTH, MA 02190
PARTY RESPONSIBLE FOR OPERATIONS AND MAINTENANCE: OWNERS OF 156 JUSTICE CUSHING HIGHWAY

AS PART OF ANY INFRASTRUCTURE IMPROVEMENT THE SYSTEM MUST BE MAINTAINED IN ORDER TO WORK PROPERLY. THE FOLLOWING IS AN OPERATION AND MAINTENANCE PLAN TO FOLLOW PRIOR TO AND WHILE CONSTRUCTION ACTIVITIES ARE TAKING PLACE.

EMERGENCY CONTACT INFORMATION:

FRED BUTTS:
51 BURNS WAY
S. WEYMOUTH, MA 02190
TELEPHONE: 781–337–9064
EMERGENCY TELEPHONE: 781–337–9064 (24/7 EMERGENCY RESPONSE)
EMAIL: Uncle.fred@live.com

CONSTRUCTION SEQUENCING:

THE FOLLOWING SECTION PROVIDES CONSTRUCTION DETAILS AND HIGHLIGHTS THE CONSTRUCTION SEQUENCE AND TIMING OF EARTH MOVING ACTIVITIES.

1 INSTALLATION OF EROSION CONTROLS

EROSION AND SEDIMENTATION CONTROLS (I.E. SILT SOCK, FILTER FABRIC, STRAW BALES, CONSTRUCTION ENTRANCES) WILL BE INSTALLED AS SHOWN AND INSPECTED AT THE LIMITS OF THE WORK AREA PRIOR TO THE COMMENCEMENT OF EARTH MOVING ACTIVITIES.

4 CLEARING

THE PROJECT AREA WILL BE CLEARED OF VEGETATION, DEBRIS AND BOULDERS. MATERIALS REMOVED FROM THE SITE WILL BE DISPOSED OF PROPERLY. NO LARGE BOULDERS WILL BE BURIED ON THE SITE. ALL CLEARED VEGETATION WILL BE REMOVED FROM THE PROJECT SITE OR MULCHED AND STOCKPILED FOR FUTURE USE ON THE SITE.

5 ROUGH GRADING

DURING THIS PHASE OF CONSTRUCTION, ROUGH GRADES WILL BE ESTABLISHED FOR THE PROJECT SITE. IF SUITABLE TOPSOIL IS FOUND, IT WILL BE REMOVED AND STOCKPILED IN AN UPLAND AREA. THE STOCKPILED TOPSOIL WILL BE STORED UNTIL READY FOR RE–USE ON SITE.

6 DRAINAGE SYSTEM AND FOUNDATION INFILTRATION SYSTEM CONSTRUCTION

AFTER ROUGH GRADING IS COMPLETE, THE DRAINAGE COLLECTION, CONVEYANCE AND DISCHARGE AREAS WILL BE INSTALLED. THE DRAINAGE SYSTEM DESIGN AND STRUCTURES FOR THE PROPOSED DEVELOPMENT WILL FOLLOW THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICE STANDARDS.

7 UTILITY INSTALLATION

IN THIS PHASE OF CONSTRUCTION, UNDERGROUND UTILITIES INCLUDING WATER, SEWER, GAS, POWER, TELECOMMUNICATIONS, ETC. WILL BE INSTALLED.

8 PAVED DRIVEWAY INSTALLATION

DURING THIS PHASE OF CONSTRUCTION, THE PROPOSED PAVED DRIVEWAY SHALL BE INSTALLED.

9 SITE STABILIZATION

THE FINAL PHASE OF THE PROJECT IS THE RESTORATION AND STABILIZATION OF ALL EXPOSED SURFACES. DISTURBED AREAS WILL BE LANDSCAPED OR SEEDED AS NECESSARY ONLY AFTER ALL OTHER CONSTRUCTION IS FINAL. IN THE EVENT THAT WEATHER CONDITIONS PREVENT FINAL RESTORATION, TEMPORARY EROSION AND SEDIMENTATION MEASURES WILL BE EMPLOYED UNTIL THE WEATHER IS SUITABLE FOR FINAL CLEANUP. SHOULD FINAL GROUND STABILIZATION BE POSTPONED DUE TO WINTER CONDITIONS, THE EXPOSED GROUND SHALL BE COVERED IN HAY TO PREVENT EROSION. HAY COVER SHALL BE RESTORED AND MAINTAINED UNTIL FINAL VEGETATED COVER CAN BE ACHIEVED. A FINAL INSPECTION WILL ENSURE THAT THE PROJECT SITE IS CLEARED OF ALL PROJECT DEBRIS AND THAT EROSION AND SEDIMENTATION CONTROLS ARE FUNCTIONING PROPERLY. EROSION AND SEDIMENTATION CONTROLS WILL NOT BE REMOVED UNTIL THE SITE IS STABILIZED, THE FINAL INSPECTION IS COMPLETE AND THE HINGHAM CONSERVATION AGENT HAS APPROVED THE EROSION CONTROL REMOVAL.

EXTREME WEATHER CONDITIONS:

IN THE ANTICIPATION OF, OR DURING A HEAVY RAIN EVENT OR DURING A RAIN EVENT IN COMBINATION WITH SNOWMELT, ALL STORMWATER CONTROLS SHALL BE CHECKED TO ENSURE ADEQUATE PROTECTION AND CAPACITY IS AVAILABLE TO PROTECT ALL EXPOSED SLOPES AND BUFFER ZONES.

STORMWATER OPERATION AND MAINTENANCE DURING CONSTRUCTION:

SEDIMENT AND EROSION CONTROL

SILT SOCKS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL EVENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REPAIR SCOURED AREAS ON THE BACK SIDE OF THE SILT SOCK AT THIS TIME TO PREVENT FUTURE PROBLEMS.

SHOULD THE FABRIC OF THE SILT SOCK TEAR, DECOMPOSE OR OTHERWISE BECOME INEFFECTIVE, REPLACE IT WITHIN 24 HOURS OF DISCOVERY.

REMOVE SILT DEPOSITS ONCE THEY REACH 20 TO 30 PERCENT OF THE HEIGHT OF THE SILT SOCK TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN EVENT AND TO REDUCE PRESSURE ON THE FENCE. CARE SHOULD BE TAKEN TO AVOID UNDERMINING THE FENCE DURING CLEANOUT PROCESS.

SILT SOCKS ARE TO BE REMOVED UPON STABILIZATION OF THE CONTRIBUTING DRAINAGE AREA. ACCUMULATED SEDIMENT MAY BE SPREAD TO FORM A SURFACE FOR TURF OR OTHER VEGETATION ESTABLISHMENT, OR DISPOSED OF ELSEWHERE. THE AREA SHOULD BE RESHAPED TO PERMIT NATURAL DRAINAGE.

CRUSHED STONE CONSTRUCTION ENTRANCE SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS. ANY BUILDUP OF MATERIAL WITHIN THE APRON SHALL BE REMOVED OFFSITE AND REPLACED WITH CLEAN CRUSHED STONE AS NEEDED.

ANY SEDIMENT TRACKED FROM THE CONSTRUCTION ENTRANCE ONTO THE STREET DURING CONSTRUCTION SHALL BE REMOVED IMMEDIATELY AND THE CONSTRUCTION ENTRANCE MUST BE ADJUSTED AS NEEDED TO PREVENT ADDITIONAL SEDIMENT TRACKING.

A MINIMUM OF 100 LINEAR FEET OF SILT SOCK, 50 LINEAR FEET OF SILTATION FABRIC, 20 HAY BALES AND 15 STAKES SHALL BE KEPT ON SITE AT ALL TIMES TO MAINTAIN THE INSTALLED EROSION CONTROLS IN GOOD REPAIR AND PROVIDE HAY FOR SURFACE COVER WHEN NEEDED.

INFILTRATION/DETENTION SYSTEMS

THE FOLLOWING WORK SHALL BE DONE TO STABILIZE THE SITE PRIOR TO INSTALLING THE SUBSURFACE STRUCTURES:

– DO NOT ALLOW RUNOFF FROM ANY DISTURBED AREAS ON THE SITE TO FLOW TO THE SUBSURFACE STRUCTURES.
– ROPE OFF THE AREA WHERE THE SUBSURFACE STRUCTURES ARE TO BE PLACED.
– ACCOMPLISH ANY REQUIRED EXCAVATION WITH EQUIPMENT PLACED JUST OUTSIDE THE AREA. IF THE SIZE OF THE AREA INTENDED FOR EXFILTRATION IS TOO LARGE TO ACCOMMODATE THIS APPROACH, USE TRUCKS WITH LOW–PRESSURE TIRES TO MINIMIZE COMPACTION. DO NOT ALLOW ANY OTHER VEHICLES WITHIN THE AREA TO BE EXCAVATED.
– KEEP THE AREA ABOVE AND IMMEDIATELY SURROUNDING THE SUBSURFACE SYSTEM ROPED OFF TO ALL CONSTRUCTION VEHICLES UNTIL THE FINAL TOP SURFACE IS INSTALLED.
– AT NO TIME SHALL THE AREA FOR THE INFILTRATION SYSTEM BE USED AS A TEMPORARY SEDIMENT BASIN. STOCKPILES SHALL BE PLACED AWAY FROM THE SUBSURFACE INFILTRATION SYSTEM AND SEDIMENTATION FENCES SHALL BE PLACED AROUND THE PERIMETER OF THE INFILTRATION AREA TO PREVENT THE ACCUMULATION OF SEDIMENT WITHIN THE NATIVE SOILS.

ALL INFILTRATION AREAS SHALL BE EXCAVATED AND INSTALLED AFTER THE CONSTRUCTION OF THE FOUNDATION SYSTEMS. NO HEAVY EQUIPMENT SHALL TRAVERSE THE PROPOSED INFILTRATION AREAS BEFORE OR AFTER INSTALLATION.

DUST CONTROL

SPRINKLE WATER AS NECESSARY TO CONTROL DUST DURING CONSTRUCTION.

MATERIAL STOCKPILING

STOCKPILES OF MATERIAL MUST BE PLACED OUTSIDE ALL WETLAND RESOURCE AREA BUFFERS. IF LEFT OVERNIGHT, MATERIAL STOCKPILING MUST BE PROTECTED FROM THE WEATHER.

GOOD HOUSEKEEPING

THE FOLLOWING GOOD HOUSEKEEPING BMP'S WILL BE IMPLEMENTED IN ORDER TO PREVENT POLLUTION DURING CONSTRUCTION:

PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

IF PORTABLE SANITARY UNITS ARE USED, SANITARY WASTE WILL BE REMOVED AS NECESSARY TO AVOID OVERFILLING.

ALL PAINT AND OTHER HAZARDOUS WASTE MATERIALS WILL BE TIGHTLY SEALED AND STORED WHEN NOT IN USE. EXCESS MATERIAL WILL NOT BE DISCHARGED INTO THE PUBLIC STORMWATER SYSTEM, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

IF SPRAY GUNS ARE USED, THEY WILL BE CLEANED ON A REMOVABLE TARP.

DRAWING REVISIONS

ACTION	DATE	DESCRIPTION
1	4/8/20	COMMENTS

FEMA:

LOCUS LIES IN F.I.R.M. ZONE X AS SHOWN ON COMMUNITY PANEL NO. 25023C0117K DATED NOVEMBER 4, 2016.

DATUM:

ELEVATIONS SHOWN HEREON REFERENCE NAVD 1988 VERTICAL DATUM.

OWNER OF RECORD:

CHIEF JUSTICE LLC
61 BURNS WAY
WEYMOUTH, MA 02190
ASSESSOR'S PARCEL: 65 – 70
DEED BOOK: 47682, PAGE: 176

UTILITIES:

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COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN No. 46925 REGISTERED PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS BRENDAN P. SULLIVAN CIVIL No. 41358 REGISTERED PROFESSIONAL ENGINEER

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

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

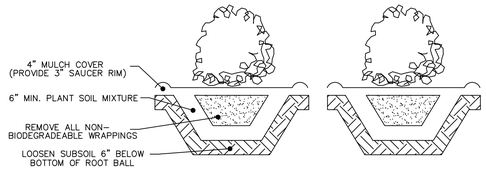
EROSION CONTROL PLAN

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

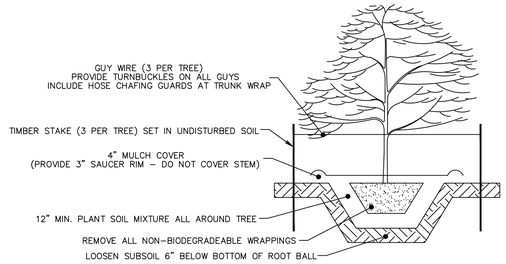
FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

PROJECT NO. : 18.005	DRAWING NO.
SCALE : AS SHOWN	EC
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB/BPS	SHEET NO. 7 OF 9
CHECKED BY : CCH/JCC	FILENAME: X:\PROJ\2018\18005\DWG\SP 4-11-19.DWG



SHRUB PLANTING DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

PLANTING NOTES

1. ALL PLANTS SHALL BE GUARANTEED FOR ONE YEAR FROM DATE OF INSTALLATION. ALL PLANTS SHALL BE HEALTHY, LIVE, AND FULL IN APPEARANCE. OWNER RESERVES THE RIGHT TO REJECT ANY PLANTING, WHIICH IS NOT SUITABLE UPON DELIVERY TO THE SITE.

2. LANDSCAPE CONTRACTOR SHALL PROVIDE ALL REQUIRED MAINTENANCE TO PLANTS FOR A MINIMUM OF (6) WEEKS AFTER DATE OF INSTALLATION. IF PLANTS ARE INSTALLED AFTER MAY 15TH, MAINTENANCE SHALL BE PROVIDED UNTIL AUGUST 30TH OR (6) WEEKS, WHICHEVER GREATER.

3. ALL NEW LAWN AREAS SHALL RECEIVE A MINIMUM OF 6 INCHES OF TOPSOIL OF THE PROPER PH AND ORGANIC COMPOSITION SUITABLE FOR HEALTHY LAWN GROWTH.

4. NON-APPROVED SUBSTITUTIONS WILL NOT BE ACCEPTED IF PLANTED. OWNER SHALL BE PROVIDED WITH A LIST OF PROPOSED SUBSTITUTE PLANTS PRIOR TO INSTALLATION.

5. ALL TREES SHAL BE STAKED WITH A MINIMUM OF (3) STAKES PER TREE PER INDUSTRY STANDARDS. TREES SHALL BE SET PLUMB WITH TRUNK STEM NOT BURIED IN BACKFILL. ALL NON-BIODEGRADABLE WRAPS AND CAGES SHALL BE REMOVED FROM THE PLANTING PRIOR TO BACKFILLING.

6. PROVIDE A MINIMUM OF 12" OF TOPSOIL AROUND AND BENEATH THE PLANTING. LANDSCAPE CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE EXACT LIMITS AND TYPES OF MULCHING AROUND TREES AND OTHER PLANTINGS.

7. ALL DISTURBED AREAS NOT DELINEATED ON THE PLANS SHALL BE SLICE SEEDED OR HYDROSEEDED WITH AN APPROPRIATE SEASON SEED MIXTURE. DRAINAGE AREAS SHALL BE SEEDED ACCORDING TO THEIR DESIGN SPECIFICATIONS. REFER TO EROSION & CONTROL PLAN FOR ADDITIONAL SEEDING PROCEDURES.

8. ALL EXISITNG PLANT MATERIAL OUTSIDE THE SCOPE OF THE PROPOSED DEVELOPMENT SITE WORK SHALL REMAIN.

SUGGESTED PLANTING LIST:

TREES

BOTANICAL NAME	COMMON NAME
ABIES CONCOLOR	WHITE FIR
PICEA ABIES	NORWAY SPRUCE
TSUGA CANADENSIS	CANADIAN HEMLOCK

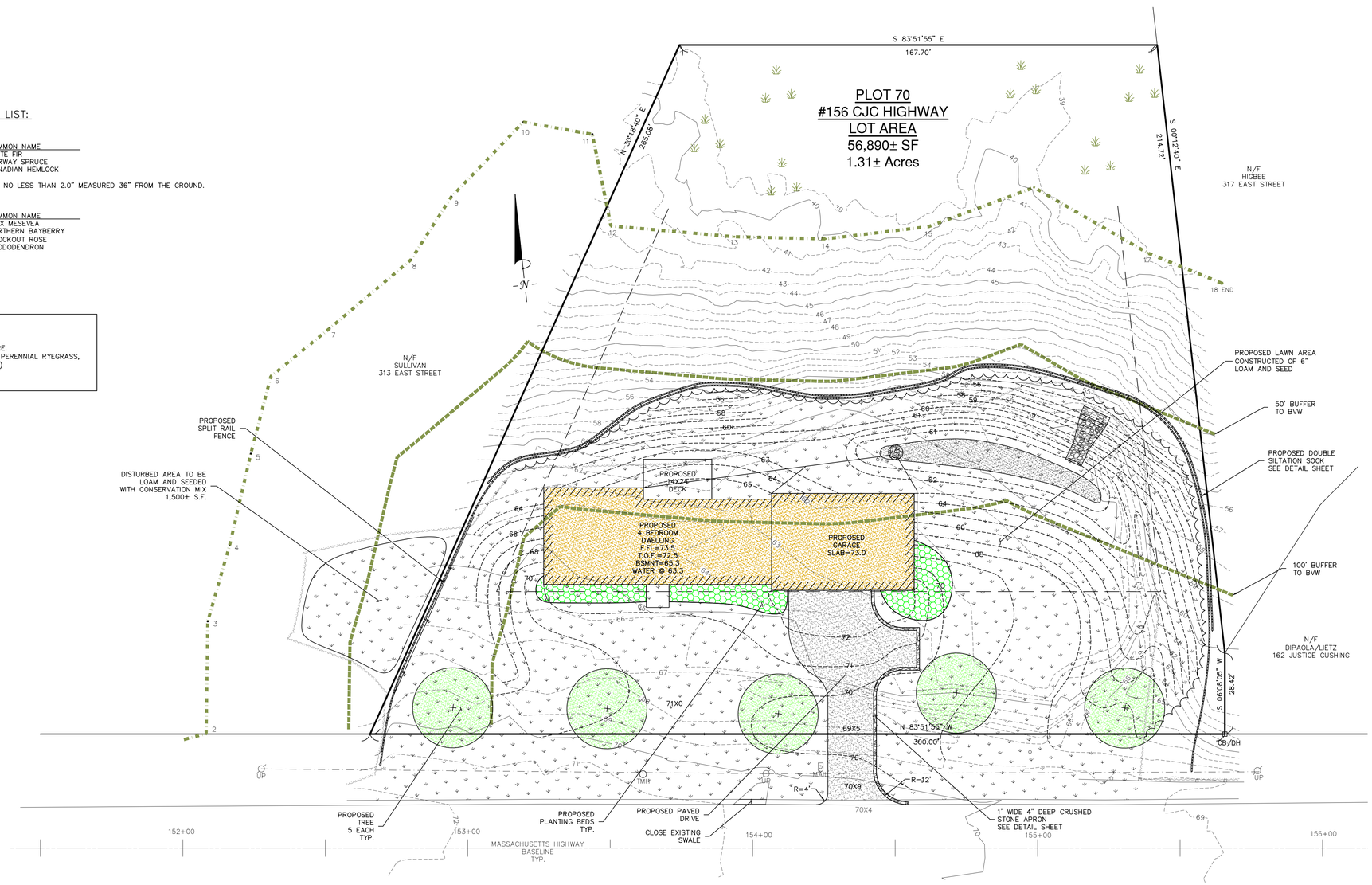
CALIPER OF ALL TREES SHALL BE NO LESS THAN 2.0" MEASURED 36" FROM THE GROUND.

SHRUBS

BOTANICAL NAME	COMMON NAME
BLUE PRINCESS HOLLY	LLEX MESEVEA
MYRICA PENSYLVANICA	NORTHERN BAYBERRY
ROSA 'BLUSHING PINK'	KNOCKOUT ROSE
ENGLISH ROSEUM	RHODODENDRON

CONSERVATION SEED MIX:

SEEDING RATE: 50 LB PER ACRE.
ANNUAL RYEGRASS (50%) AND PERENNIAL RYEGRASS, BLACKCAT II (TURF TYPE) (50%)



DRAWING REVISIONS		
1	4/8/20	COMMENTS
ACTION	DATE	DESCRIPTION

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ASSESSOR'S PARCEL: 65 - 70
DEED BOOK: 47682, PAGE: 176

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P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

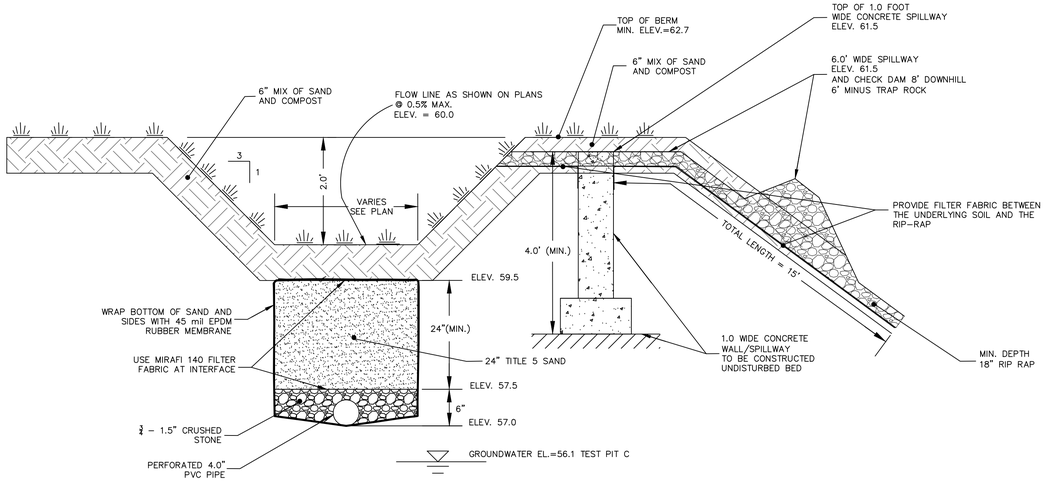
LANDSCAPE PLAN

SITE PLAN SET
156 JUSTICE CUSHING HWY
HINGHAM, MA 02043

PREPARED FOR:

FRED BUTTS
51 BURNS WAY
S. WEYMOUTH, MA 02190

PROJECT NO. : 18.124	DRAWING NO.
SCALE : AS SHOWN	LP
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB/BPS	SHEET NO. 8 OF 9
CHECKED BY : CCH/JCC	FILENAME: X:\PROJ\2018\18005\DWG\SP 4-11-19.DWG



WATER QUALITY SWALE

NOT TO SCALE

SOIL LOGS

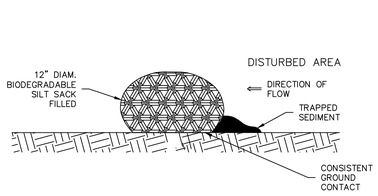
Date: December 13, 2019

AGENT: John Chessia P.E.
SOILS EVALUATOR: Brendan Sullivan P.E.– Cavanaro Consulting
EXCAVATOR: Al Emanuello

TP A	TP B	TP C
Grnd El. 67.2± G.W. El. 66.2±	Grnd El. 65.0± G.W. El. 63.3±	Grnd El. 59.3± G.W. El. 56.1±
0" FILL	0" FILL	0" FILL
10" C Horizon SILT LOAM	14" B Horizon LOAM	16" A Horizon LOAM
	20" C Horizon SILT LOAM	22" B Horizon LOAM
36"	20"	38" C Horizon SILT LOAM
		48"
Mottles @ 12" Weeping @ 36"	Mottles @ 20" No Weeping	Mottles @ 38" Weeping @ 38"

Planning Board Decision under Section IV–B.6.b.2 dated March 19, 2020.

1. Applicant shall coordinate with the Police Chief or his designee regarding requirements for Police Details during construction.
2. The Table of Zoning Requirements and sight distances shall be added to the plans.
3. The applicant shall revise plans to address outstanding comments on the stormwater standards and submit them for review by the peer review engineer prior to the start of work and not less than two weeks before the preconstruction meeting. The edits include, but are not limited to the following: clarify the proposed contours on the east side of the proposed water quality swale; confirm that all data sources are tied to the same datum, provide outlet, pipe and invert sizing data, modify the water quality swale as detailed, supplement the O & M plan and construction management plan. The Applicant shall also design the drainage to provide for recharge to the maximum extent practicable.
4. A pre-construction review meeting with inspection of the erosion control installation and marked limits of clearing shall be required as a condition of approval for all projects. The preconstruction meeting shall include the Police Chief or his designee, the Director of Community Planning, and the DPW superintendent or his designee at a minimum and will be coordinated by the Director of Community Planning.
5. Inspections shall be required during construction, and prior to issuance of a certificate of occupancy, of all elements of the project related to or affecting erosion control during construction and the approved drainage and stormwater system installed for the project.
6. Upon project completion an as-built plan must be submitted to the Building Commissioner prior to the issuance of a certificate of occupancy, and in no event later than two years after the completion of construction. In addition to such other requirements as are imposed by the Building Commission, the as-built plan must demonstrate substantial conformance with the stormwater system design and performance standards of the approved project plans.
7. Prior to the start of work the Applicant must secure the street opening permit from the Mass DOT. If the project design is altered during that process a modification of site plan review may be required by the Planning Board, particularly with regard to drainage prior to the start of any construction.



SINGLE SILT SOCK

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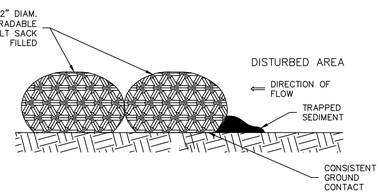

DOUBLE SILT SOCK

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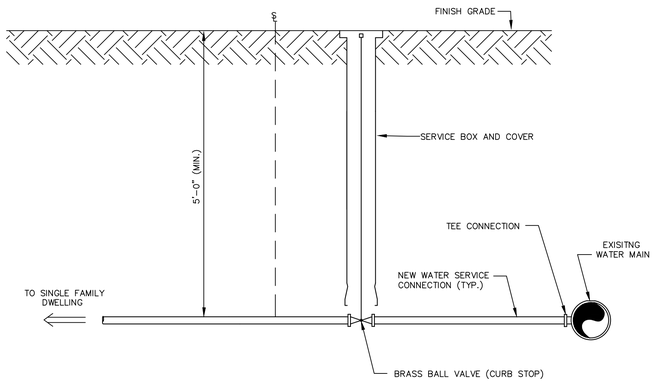

WATER SERVICE CONNECTION

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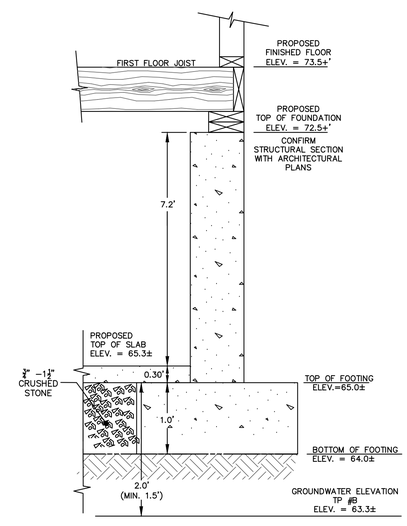
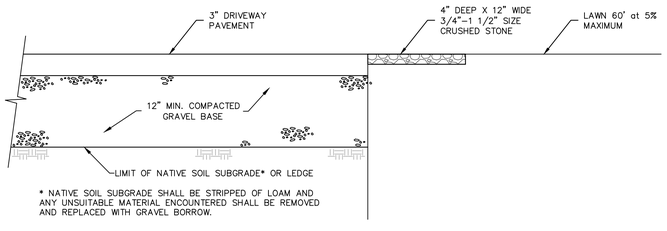


FOUNDATION DETAIL

N.T.S.



TYPICAL DRIVEWAY CROSS SECTION

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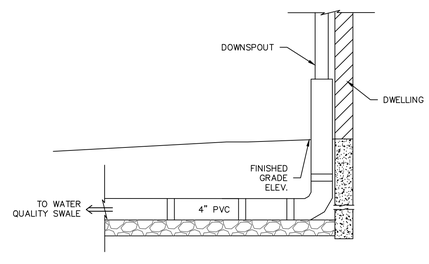
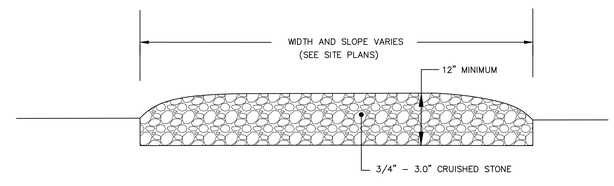


ROOF LEADER DETAIL

NOT TO SCALE



CONSTRUCTION ENTRANCE DETAIL

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ASSESSOR'S PARCEL: 65 – 70
DEED BOOK: 47682, PAGE: 176

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DIG SAFE
MA – RI – ME – NH – VT
CALL
TOLL FREE
1-888-344-7233
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM

CAVANARO CONSULTING
687 MAIN STREET
P.O. BOX 5175
NORWELL, MASSACHUSETTS 02061
PHONE: 781.659.8187
FAX: 781.659.8186

DEATIL SHEET

SITE PLAN SET
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PREPARED FOR:

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PROJECT NO. : 18.124	DRAWING NO.
SCALE : AS SHOWN	DT
DATE : 1/20/20	
DESIGNED BY : BPS	
DRAWN BY : DB/BPS	SHEET NO. 9 OF 9
CHECKED BY : CCH/JCC	FILENAME: X:\PROJ\2018\18005\DWG\SP 4-11-19.DWG