

"THE VILLAGE AT NORFOLK"

A RESIDENTIAL DEVELOPMENT IN NORFOLK, MASSACHUSETTS

LOCUS
SCALE: 1" = 1000'



GENERAL NOTES

- PROPERTY LINE & TOPOGRAPHIC SURVEY REFERENCES:
 - PROPERTY LINE INFORMATION TAKEN FROM RECORDED PLANS FROM NORFOLK COUNTY REGISTRY OF DEEDS:
 - PLAN OF LAND OF ERVIN D. WARE NORFOLK, MASS PLAN BK 202 NO. 1338.
 - PLAN OF LAND IN NORFOLK, MASS DATED AUGUST 17, 1977 "PARCEL A" BY LANDMARK ENGINEERING OF NEW ENGLAND INC.
 - THE TOPOGRAPHY SHOWN HEREON IS FROM A FIELD SURVEY PERFORMED BY OUTBACK ENGINEERING, INC. IN OCTOBER 2016.
 - ALL EXISTING UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE ONLY, COMPILED FROM RECORD PLANS WHERE AVAILABLE AND/OR BY FIELD SURVEY OF DIGSAFE MARKINGS AS PERFORMED BY OUTBACK ENGINEERING. ALL EXISTING UTILITIES MAY NOT BE SHOWN, AND CONTRACTOR MUST VERIFY ALL UTILITY LOCATIONS AND ELEVATIONS PRIOR TO COMMENCING CONSTRUCTION. CONTRACTORS SHALL NOTIFY DIGSAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO THE ONSET OF ANY CONSTRUCTION TO HAVE ALL EXISTING UTILITIES LOCATED AND CLEARLY MARKED.
 - DRAINAGE INFORMATION TAKEN FROM "DRAINAGE DIAGRAM FOR EC NORFOLK BUSINESS DISTRICT" PREPARED BY COLER & COLANTONIO, INC. DATED 2/2/2010. (REFER TO "STORMWATER DRAINAGE ANALYSIS DOWNTOWN DEVELOPMENT DISTRICT NORFOLK, MASSACHUSETTS" PREPARED BY COLER & COLANTONIO, INC. DATED DECEMBER 2009.)
 - ABUTTING SEPTIC INFORMATION TAKEN FROM RECORD PLANS AND IS APPROXIMATE ONLY.
 - VERTICAL ELEVATIONS ARE BASED ON NAVD88. HORIZONTAL DATUM IS BASED ON NAD83.
- THE LAND SHOWN HEREON FALLS WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR NORFOLK COUNTY, MA. (MAP NUMBER 25021C0322E, WITH AN EFFECTIVE DATE OF JULY 17, 2012).
- SITE IS NOT LOCATED WITHIN A ZONE II OR I/WPA GROUNDWATER RESOURCE PROTECTION AREA. SITE IS NOT LOCATED WITHIN A ZONE A, B, OR C SURFACE WATER PROTECTION AREA.
- THE SITE IS NOT LOCATED WITHIN A NATURAL HERITAGE AND ENDANGERED SPECIES PROGRAM (NHESP) PRIORITY HABITAT OF RARE SPECIES OR WITHIN AN NHESP ESTIMATED HABITAT OF RARE WILDLIFE PER THE LATEST ON-LINE MASSGIS MAPPING INFORMATION.
- THE SITE IS NOT LOCATED WITHIN A STATE DESIGNATED AREA OF CRITICAL ENVIRONMENTAL CONCERN.
- NO KNOWN PUBLIC OR COMMUNITY WATER SUPPLY WELLS ARE WITHIN 1000' OF THE SUBJECT PROPERTY.
- SITE HAS TOWN WATER, ELECTRIC, CABLE & GAS SERVICE AVAILABLE IN ROCKWOOD ROAD

LEGEND

EXISTING	PROPOSED
SPOT ELEVATION 100x0	100x0
MAJOR CONTOUR 80	80
MINOR CONTOUR 82	82
STOCKADE FENCE	
WATER	
WATER GATE	
HYDRANT	
GAS	
GAS GATE	
SEWER	
SEWER MANHOLE	
DRAIN	
DRAIN MANHOLE	
ELECTRIC	
ELEC/TEL/CABLE	
CATCH BASIN	
UTILITY POLE	
OVERHEAD WIRE	
STOCKADE FENCE	
CHAIN LINK FENCE	
ZONING BOUNDARY	
SILT FENCE	

- DRAINAGE TEST PITS
 BOH WITNESSED SOIL OBSERVATION LOCATION
 MONITORING WELL
 "NO PARKING THIS SIDE" SIGN



VICINITY PLAN
1" = 100'

PROJECT SUMMARY

PROPOSED USE PER MGL Ch. 40B, SECTION 20-23: RESIDENTIAL CONDOS
32 CONDOMINIUM UNITS:
(11 X 2-BEDROOMS) + (21 X 3-BEDROOMS) = 85 BEDROOMS

TOTAL PARCEL AREA	= 285,697. (6.56 AC)
CONTIGUOUS UPLAND AREA	= 285,697 S.F. (6.56 AC.)
TOTAL FOOTPRINT AREA OF BLDGS*	= 38,458 S.F.
*INCLUDES UNITS AND GARAGES	
TOTAL BUILDING COVERAGE	= 38,458 S.F./285,697 S.F. = 13.5%
TOTAL PAVEMENT AREA**	= 64,800 S.F.
**INCLUDES DRIVEWAYS, SIDEWALKS AND WALKWAYS	
TOTAL PAVEMENT COVERAGE	= 64800 S.F./285697 S.F.= 22.7%
TOTAL IMPERVIOUS AREA	= 103,258 S.F.
TOTAL IMPERVIOUS COVERAGE	= 103,258 S.F./285,697 S.F. = 36.1%
TOTAL LANDSCAPE/NATURAL AREA	= 182,439 S.F.
TOTAL LANDSCAPE/NAT COVERAGE	= 182,439 S.F./285,697 S.F.= 63.9%

WATER DEMAND ESTIMATE (PER ENV PARTNERS GROUP)

32 RESIDENTIAL UNITS X 154 GPD/SERVICE = 4,928 GPD (AVG. DAILY DEMAND)

SEWAGE DESIGN FLOW PER TITLE 5

32 UNITS (11 X 2-BEDROOMS & 21 X 3-BEDROOMS) = 85 BEDROOMS
85 BEDROOMS X 110 GPD/BEDROOM = 9,350 GPD PER TITLE V

PARKING SUMMARY

PARKING REQUIREMENTS PER ZONING BY-LAW:
1.5 SPACES PER DWELLING UNIT, OTHER THAN A SINGLE FAMILY DWELLING
SPACE SIZE: 9'W X 19'L

FOR PROPOSED USE WITH: 11 CONDOMINIUM UNITS (2 BEDROOMS EACH),
21 CONDOMINIUM UNITS (3 BEDROOMS EACH)

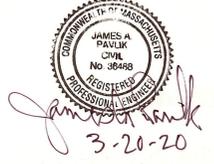
TOTAL PARKING REQUIRED = 32 UNITS X 1.5 SPACES/UNIT = 48 SPACES
TOTAL PARKING SPACES PROVIDED = 156 AS FOLLOWS:

- 61 GARAGE SPACES IN UNITS
- 3 GARAGE SPACES (DETACHED)
- 29 GENERAL SPACES (ALL 9' X 18' MIN.)
- 63 DRIVEWAY SPACES*

*ALL 9' X 19' MIN. EXPECT 11 SPACES AT UNITS 6-11 ARE 9'X18' MIN.
NOTE: UNIT 31 HAS 4 DRIVEWAYS SPACES, UNITS 17, 20, AND 21 HAVE 1 DRIVEWAY SPACE AND ALL OTHER UNITS HAVE 2 DRIVEWAYS SPACES.

THIS PROJECT IS PERMITTED PER A COMPREHENSIVE PERMIT UNDER M.G.L. CH. 40B.

CIVIL DRAWINGS INDEX		LANDSCAPE DRAWINGS INDEX		ZONING INFORMATION	
SHEET	DESCRIPTION	SHEET	DESCRIPTION	BUSINESS (B-1) DISTRICT (OUTSIDE CORE)	
1	SITE PLANS COVER SHEET	L-0	SITE RENDERING	LOT AREA	30,000 S.F.
2	EXISTING CONDITIONS PLAN	L-1.01	FULL SITE PLANTING PLAN	LOT FRONTAGE	100 FEET
3	LAYOUT PLAN	L-1.1	TYPICAL UNIT PLANTING	FRONTYARD SETBACK	25 FEET
4	UTILITY PLAN	L-1.2	PLANTING DETAILS	REARYARD SETBACK	0 FEET
5	GRADING AND DRAINAGE PLAN	L-2.0	FENCING PLAN	BUILDING SETBACK	10 FEET
6	EROSION PREVENTION & SEDIMENT CONTROL PLAN	L-2.1	ENTRANCE PLAN	MAX. LOT COVERAGE	60 %
7-11	DETAIL SHEETS	L-2.2	WALL ELEVATIONS		
		L-3.0	SITE LIGHTING		
		L-3.1	BUILDING HEIGHT		
		L-4.0	PRECEDENT IMAGES		



FOR REGISTRY USE ONLY
I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

DATE: 3-20-20
DATE PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20-23

NORFOLK ZONING BOARD
I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE ZONING BOARD APPROVAL, AND THAT NO APPEAL HAS BEEN FILED AT THIS OFFICE.

TOWN CLERK - TOWN OF NORFOLK
REVISIONS

NO.	DATE	DESCRIPTION
1	5/11/17	BETA ENG./TOWN COMMENTS
2	6/16/17	GENERAL
3	9/1/2020	BETA ENG. COMMENTS

OWNER & APPLICANT
THE VILLAGE AT NORFOLK, LLC
32 NORFOLK AVENUE
S. EASTON, MA 02375

SITE PLANS FOR COMPREHENSIVE PERMIT "THE VILLAGE AT NORFOLK" IN NORFOLK MASSACHUSETTS



165 EAST GROVE STREET
MIDDLEBOROUGH, MA 02346
TEL: (508)-946-9231
FAX: (508)-947-8873
www.outback-eng.com

DATE: FEBRUARY 21, 2017
DRAWN BY: CJV CHECKED BY: JAP
SCALE: 1"=100' SHEET 1 OF 11
0' 100' 200' 300'
OE-3012

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.



3-20-20
DATE PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20A.03

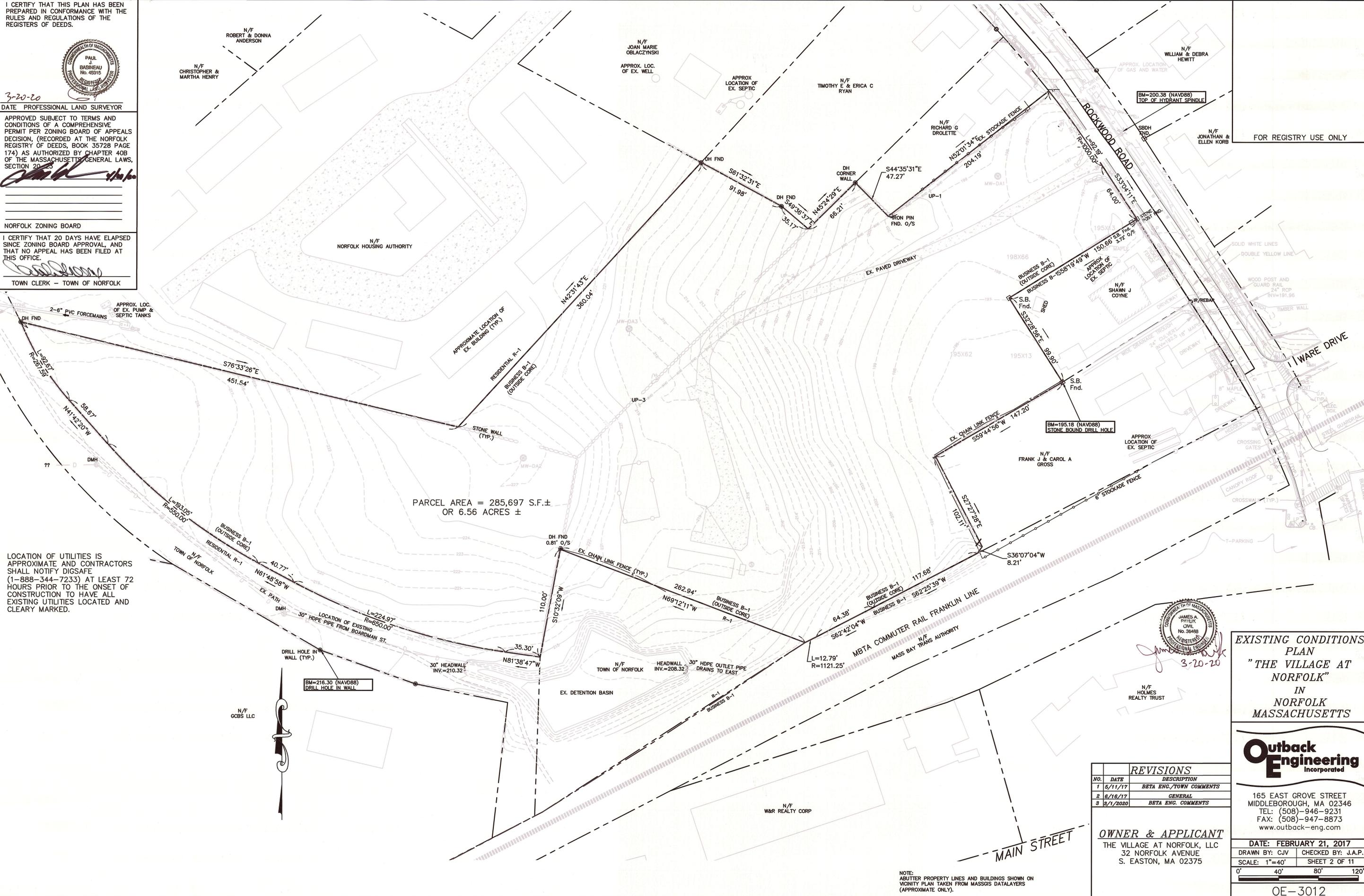
[Signature]

NORFOLK ZONING BOARD

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[Signature]

TOWN CLERK - TOWN OF NORFOLK



LOCATION OF UTILITIES IS APPROXIMATE AND CONTRACTORS SHALL NOTIFY DIGSAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO THE ONSET OF CONSTRUCTION TO HAVE ALL EXISTING UTILITIES LOCATED AND CLEARLY MARKED.

PARCEL AREA = 285,697 S.F. ±
OR 6.56 ACRES ±

EXISTING CONDITIONS
PLAN
"THE VILLAGE AT NORFOLK"
IN
NORFOLK
MASSACHUSETTS

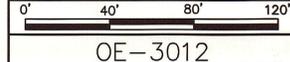


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REVISIONS		
NO.	DATE	DESCRIPTION
1	5/11/17	BETA ENG./TOWN COMMENTS
2	6/16/17	GENERAL
3	9/1/2020	BETA ENG. COMMENTS

OWNER & APPLICANT
THE VILLAGE AT NORFOLK, LLC
32 NORFOLK AVENUE
S. EASTON, MA 02375

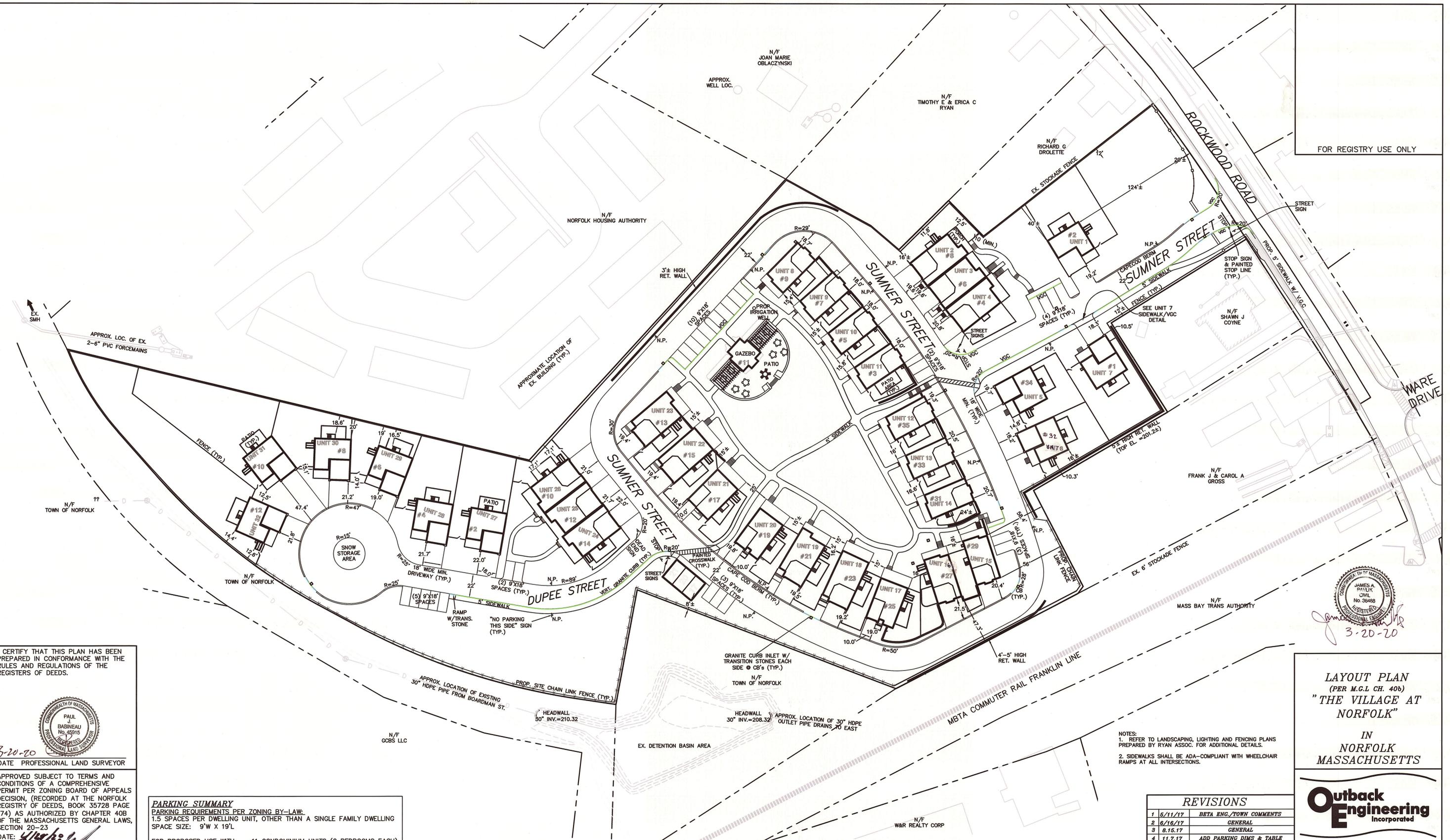
DATE: FEBRUARY 21, 2017
DRAWN BY: CJV CHECKED BY: J.A.P.
SCALE: 1"=40' SHEET 2 OF 11



NOTE:
ADJUTTER PROPERTY LINES AND BUILDINGS SHOWN ON VICINITY PLAN TAKEN FROM MASSGIS DATALAYERS (APPROXIMATE ONLY).

OE-3012

FOR REGISTRY USE ONLY



I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

PAUL J. BABINEAU
No. 45915
PROFESSIONAL LAND SURVEYOR
3-20-20
DATE PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20-23.
DATE: *[Signature]*
NORFOLK ZONING BOARD
I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE ZONING BOARD APPROVAL, AND THAT NO APPEAL HAS BEEN FILED AT THIS OFFICE.
[Signature]
TOWN CLERK - TOWN OF NORFOLK

PARKING SUMMARY
PARKING REQUIREMENTS PER ZONING BY-LAW:
1.5 SPACES PER DWELLING UNIT, OTHER THAN A SINGLE FAMILY DWELLING SPACE SIZE: 9' W X 19' L
FOR PROPOSED USE WITH: 11 CONDOMINIUM UNITS (2 BEDROOMS EACH), 21 CONDOMINIUM UNITS (3 BEDROOMS EACH)
TOTAL PARKING REQUIRED = 32 UNITS X 1.5 SPACES/UNIT = 48 SPACES
TOTAL PARKING SPACES PROVIDED = 156 AS FOLLOWS:
61 GARAGE SPACES IN UNITS
3 GARAGE SPACES (DETACHED)
29 GENERAL SPACES (ALL 9' X 18' MIN.)
63 DRIVEWAY SPACES*
*ALL 9' X 19' MIN. EXPECT 11 SPACES AT UNITS 6-11 ARE 9'X18' MIN.
NOTE: UNIT 31 HAS 4 DRIVEWAYS SPACES, UNITS 17, 20, AND 21 HAVE 1 DRIVEWAY SPACE AND ALL OTHER UNITS HAVE 2 DRIVEWAYS SPACES.

#34 ---DENOTES HOUSE NUMBERS PER TOWN
UNIT 5 ---DENOTES UNIT NUMBER

CURBING LEGEND

 VERTICAL GRANITE CURB (USED AT ALL SIDEWALKS, AND INTERSECTION RADII'S)
 VERTICAL GRANITE CURB HEADER W/ 6" TRANSITION CURBING (REQUIRED AT ALL CATCH BASINS)
 CAPE COD BERM (AT CUL DE SAC AND ON LOW SIDE OF ROAD)

NOTES: 1. 6' LONG GRANITE CURB INLETS REQUIRED AT ALL CB'S
2. PROVIDE 6" GRANITE TRANSITION STONES TO CAPE COD BERM @ RADII AND CB'S

NOTES:
1. REFER TO LANDSCAPING, LIGHTING AND FENCING PLANS PREPARED BY RYAN ASSOC. FOR ADDITIONAL DETAILS.
2. SIDEWALKS SHALL BE ADA-COMPLIANT WITH WHEELCHAIR RAMPS AT ALL INTERSECTIONS.

REVISIONS

NO.	DATE	DESCRIPTION
1	5/11/17	BETA ENG./TOWN COMMENTS
2	6/16/17	GENERAL
3	8.15.17	GENERAL
4	11.7.17	ADD PARKING DIMS & TABLE
5	3/1/2020	BETA ENG. COMMENTS

OWNER & APPLICANT
THE VILLAGE AT NORFOLK, LLC
32 NORFOLK AVENUE
S. EASTON, MA 02375

JAMES A. PAYLICK
No. 36488
REGISTERED PROFESSIONAL ENGINEER
3-20-20

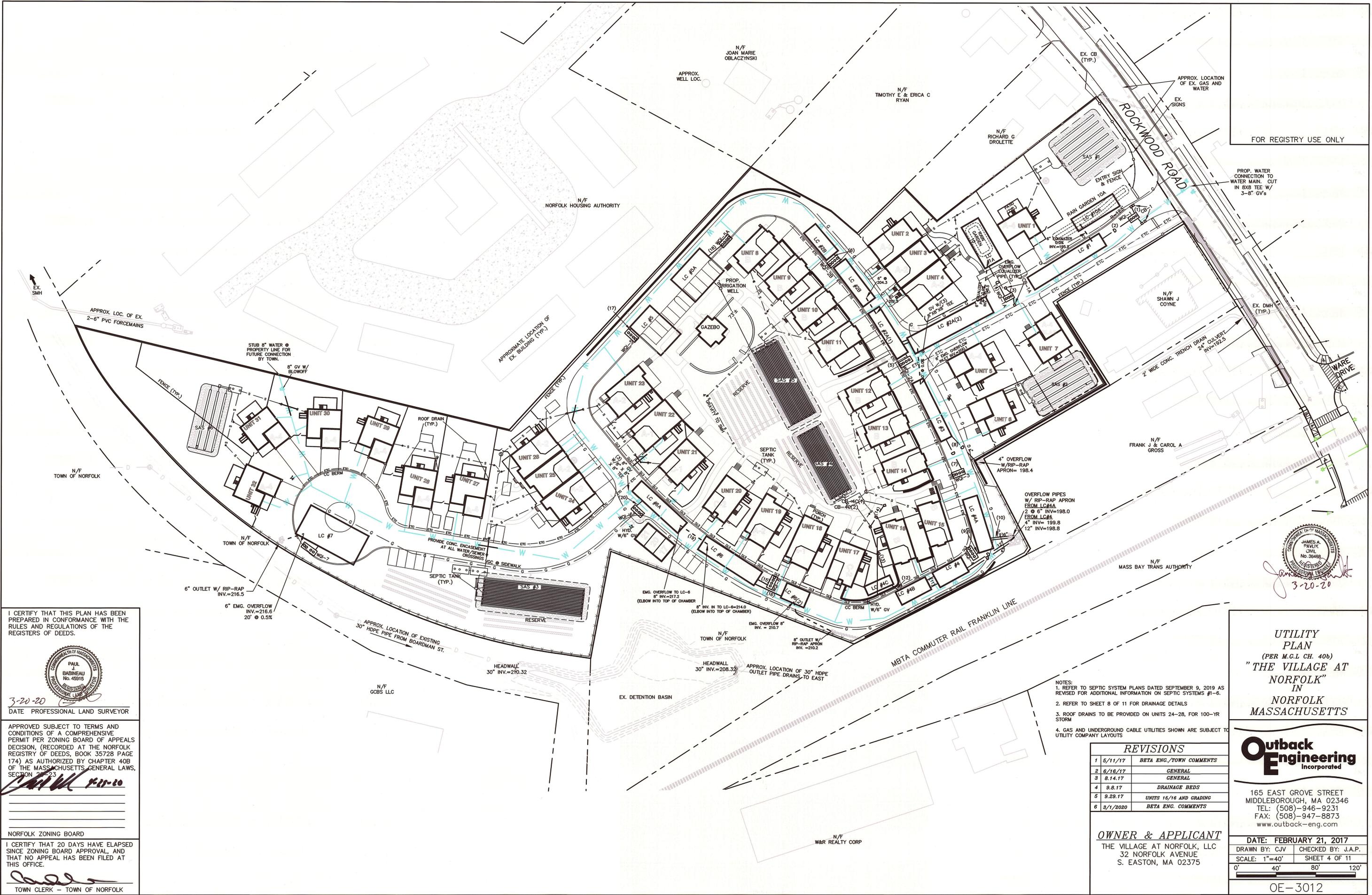
LAYOUT PLAN
(PER M.C.L. CH. 40B)
"THE VILLAGE AT NORFOLK"
IN
NORFOLK
MASSACHUSETTS

Outback Engineering Incorporated

165 EAST GROVE STREET
MIDDLEBOROUGH, MA 02346
TEL: (508)-946-9231
FAX: (508)-947-8873
www.outback-eng.com

DATE: FEBRUARY 21, 2017
DRAWN BY: CJV CHECKED BY: J.A.P.
SCALE: 1"=40' SHEET 3 OF 11
0' 40' 80' 120'

OE-3012



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3-20-20
DATE PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 23B.

NORFOLK ZONING BOARD

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TOWN CLERK - TOWN OF NORFOLK

UTILITY PLAN
(PER M.C.L. CH. 40B)
"THE VILLAGE AT NORFOLK"
IN
NORFOLK
MASSACHUSETTS



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DATE: FEBRUARY 21, 2017
DRAWN BY: CJV CHECKED BY: J.A.P.

SCALE: 1"=40' SHEET 4 OF 11

0' 40' 80' 120'

- NOTES:
1. REFER TO SEPTIC SYSTEM PLANS DATED SEPTEMBER 9, 2019 AS REVISED FOR ADDITIONAL INFORMATION ON SEPTIC SYSTEMS #1-6.
 2. REFER TO SHEET 8 OF 11 FOR DRAINAGE DETAILS
 3. ROOF DRAINS TO BE PROVIDED ON UNITS 24-28, FOR 100-YR STORM
 4. GAS AND UNDERGROUND CABLE UTILITIES SHOWN ARE SUBJECT TO UTILITY COMPANY LAYOUTS

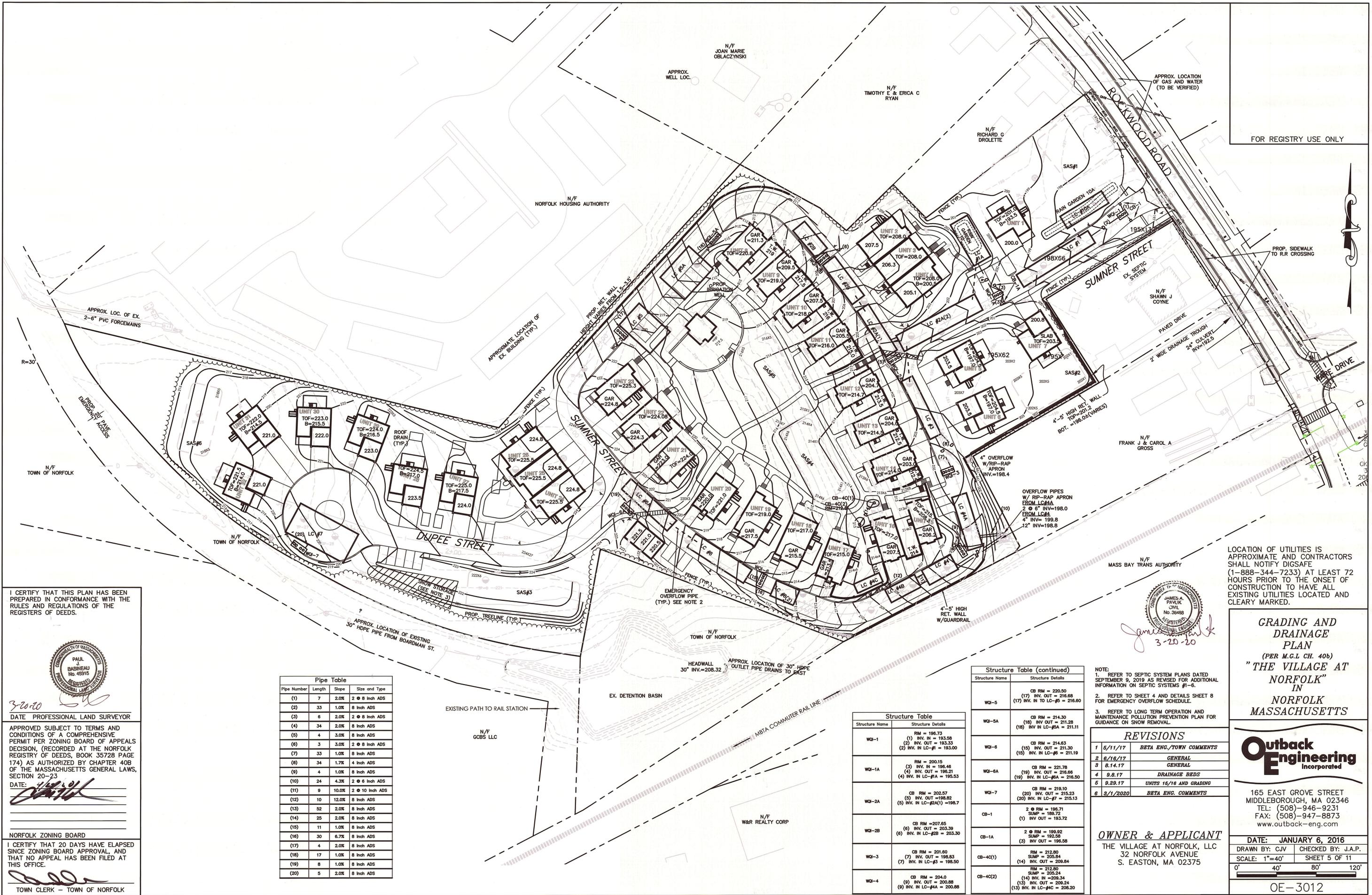
REVISIONS	
1	5/11/17 BETA ENG./TOWN COMMENTS
2	6/16/17 GENERAL
3	8.14.17 GENERAL
4	9.8.17 DRAINAGE BEDS
5	9.29.17 UNITS 16/16 AND GRADING
6	3/1/2020 BETA ENG. COMMENTS

OWNER & APPLICANT
THE VILLAGE AT NORFOLK, LLC
32 NORFOLK AVENUE
S. EASTON, MA 02375



3-20-20

OE-3012



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DATE: 3-20-20
 PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20-23

DATE: [Signature]
 NORFOLK ZONING BOARD

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DATE: [Signature]
 TOWN CLERK - TOWN OF NORFOLK

Pipe Number	Length	Slope	Size and Type
(1)	7	2.0%	2 @ 8 inch ADS
(2)	33	1.0%	8 inch ADS
(3)	8	2.0%	2 @ 8 inch ADS
(4)	34	2.0%	8 inch ADS
(5)	4	3.0%	8 inch ADS
(6)	3	3.0%	2 @ 8 inch ADS
(7)	33	1.0%	8 inch ADS
(8)	34	1.7%	4 inch ADS
(9)	4	1.0%	8 inch ADS
(10)	24	4.3%	2 @ 6 inch ADS
(11)	9	10.0%	2 @ 10 inch ADS
(12)	10	12.0%	8 inch ADS
(13)	52	2.0%	8 inch ADS
(14)	25	2.0%	8 inch ADS
(15)	11	1.0%	8 inch ADS
(16)	30	6.7%	8 inch ADS
(17)	4	2.0%	8 inch ADS
(18)	17	1.0%	8 inch ADS
(19)	8	1.0%	8 inch ADS
(20)	5	2.0%	8 inch ADS

Structure Name	Structure Details
WQI-1	RM = 196.73 (1) INV. IN = 193.56 (2) INV. OUT = 193.33 (2) INV. IN LC-#1 = 193.00
WQI-1A	RM = 200.15 (3) INV. IN = 198.48 (4) INV. OUT = 198.21 (4) INV. IN LC-#1A = 195.53
WQI-2A	CB RIM = 202.57 (5) INV. OUT = 198.82 (5) INV. IN LC-#2A(1) = 198.7
WQI-2B	CB RIM = 207.65 (6) INV. OUT = 203.39 (6) INV. IN LC-#2B = 203.30
WQI-3	RM = 212.80 (7) INV. IN = 198.83 (7) INV. IN LC-#3 = 198.50
WQI-4	RM = 212.80 (8) INV. IN = 200.88 (8) INV. IN LC-#4A = 200.88

Structure Name	Structure Details
WQI-5	CB RIM = 220.50 (17) INV. OUT = 216.68 (17) INV. IN TO LC-#5 = 216.60
WQI-5A	CB RIM = 214.30 (18) INV. OUT = 211.28 (18) INV. IN TO LC-#5A = 211.11
WQI-6	CB RIM = 214.63 (15) INV. OUT = 211.30 (15) INV. IN TO LC-#6 = 211.19
WQI-6A	CB RIM = 221.78 (19) INV. OUT = 216.66 (19) INV. IN TO LC-#6A = 216.50
WQI-7	CB RIM = 219.10 (20) INV. OUT = 215.23 (20) INV. IN TO LC-#7 = 215.13
CB-1	2 @ RIM = 196.71 SUMP = 189.72 (1) INV. OUT = 193.72
CB-1A	2 @ RIM = 199.82 SUMP = 192.58 (3) INV. OUT = 196.58
CB-4C(1)	RM = 212.80 SUMP = 205.84 (14) INV. OUT = 209.84
CB-4C(2)	RM = 212.80 SUMP = 205.24 (14) INV. IN = 209.34 (13) INV. OUT = 209.24 (13) INV. IN TO LC-#4C = 208.20

- NOTE:
- REFER TO SEPTIC SYSTEM PLANS DATED SEPTEMBER 9, 2019 AS REVISED FOR ADDITIONAL INFORMATION ON SEPTIC SYSTEMS #1-6.
 - REFER TO SHEET 4 AND DETAILS SHEET 8 FOR EMERGENCY OVERFLOW SCHEDULE.
 - REFER TO LONG TERM OPERATION AND MAINTENANCE POLLUTION PREVENTION PLAN FOR GUIDANCE ON SNOW REMOVAL.

REVISIONS	
1	5/11/17 BETA ENG./TOWN COMMENTS
2	8/18/17 GENERAL
3	8/14/17 GENERAL
4	8.8.17 DRAINAGE BEDS
5	9.29.17 UNITS 16/16 AND GRADING
6	3/1/2020 BETA ENG. COMMENTS

OWNER & APPLICANT
 THE VILLAGE AT NORFOLK, LLC
 32 NORFOLK AVENUE
 S. EASTON, MA 02375

GRADING AND DRAINAGE PLAN
 (PER M.C.I. CH. 40B)
 "THE VILLAGE AT NORFOLK"
 IN
 NORFOLK
 MASSACHUSETTS



165 EAST GROVE STREET
 MIDDLEBOROUGH, MA 02346
 TEL: (508)-946-9231
 FAX: (508)-947-8873
 www.outback-eng.com

DATE: JANUARY 6, 2016
 DRAWN BY: CJV CHECKED BY: J.A.P.
 SCALE: 1"=40' SHEET 5 OF 11

OE-3012

CONSTRUCTION SEQUENCE

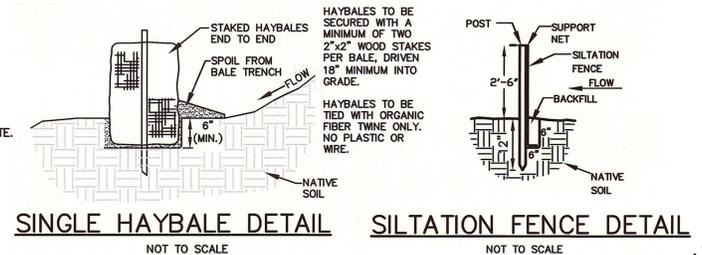
- CLEAR TREES TO LIMIT OF WORK SHOWN.
- INSTALL SILT FENCE AROUND WORK AREA AS SHOWN (AS NECESSARY, HAY BALES MAY ALSO BE USED).
- CLEAR AND GRUB THE SITE.
 - INSTALL STRAW WATTLES ACROSS STONE ENTRANCE PAD AT NIGHT AND PRIOR TO RAIN EVENTS
 - INSTALL STONE ENTRANCE PAD. (SEE DETAIL).
- WHERE SITE IS GRADED TOWARDS ROADWAY AND/OR PROPERTY LINES, STAKED HAY BALES OR STRAW WATTLES IS TO BE PLACED AT PAVEMENT EDGE/PROPERTY LINE, AS NECESSARY DURING CONSTRUCTION.
 - MAINTAIN ALL EROSION CONTROL BARRIERS DURING CONSTRUCTION.
- CONTRACTOR TO USE STREWN STRAW OR STUMP GRINDINGS ATOP BARE SOILS AS NECESSARY TO MINIMIZE POTENTIAL EROSION, AS NECESSARY DURING CONSTRUCTION.
- CONTRACTOR MAY UTILIZE ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY, SUCH AS HAY BALES, STRAW WATTLES, CRUSHED STONE, EARTHEN BERMS, AND SEDIMENT TRAPS TO CONTAIN SOILS ON SITE. MODIFICATIONS MAY BE IMPLEMENTED AS CONSTRUCTION PROGRESSES, AS NECESSARY DURING CONSTRUCTION.
- CONTRACTOR TO REMOVE AND DISPOSE OF BITUMINOUS CONCRETE PAVEMENT, EXISTING HOUSE FOUNDATION AND ABANDONED FOUNDATION, FILL IN POOL AREA, AND REMOVE AND DISPOSE OF ANY AND ALL EXISTING UTILITIES ON SITE.
- CONTRACTOR TO CONSTRUCT ROADWAY, PARKING, UTILITIES AND OTHER INFRASTRUCTURE PER SCHEDULE BY OWNER, FOR ALL OF SUMNER STREET
 - CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES DURING CONSTRUCTION UNTIL SITE IS FINISH LANDSCAPED AND SOILS ARE STABILIZED.
- DEVELOPER TO CONSTRUCT HOME WITH EACH SEPTIC SYSTEM GENERALLY AS FOLLOWS:

SEPTIC SYSTEM #	UNITS
1	1-4
2	5-7
3	21-29
4	12-17
5	8-11, 18-20
6	28-30
- COMPLETE LANDSCAPING, FINISH GRADING AND ROADWAY. CLEAN UP SITE AND STABILIZE ALL DISTURBED AREAS.

CONSTRUCTION OPERATION AND MAINTENANCE SCHEDULE

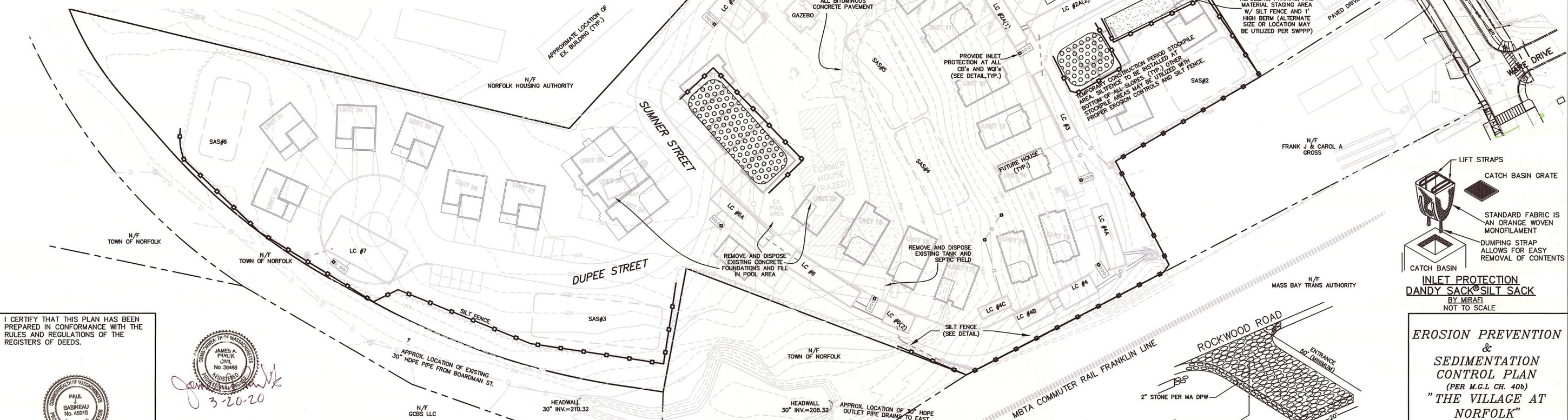
THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PHASE IS THE RESPONSIBILITY OF THE OWNER AND/OR SITE CONTRACTOR. THE OUTLINE BELOW SHALL BE ADHERED TO AS CLOSELY AS POSSIBLE TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE SYSTEM.

- PRIOR TO CONSTRUCTION, EROSION CONTROLS (SILT FENCE) SHALL BE INSTALLED PER THE APPROVED PLANS. SILT FENCE SHALL BE INSPECTED PRIOR TO A LARGE STORM EVENT TO ENSURE THAT THE EROSION CONTROL WILL FUNCTION AS REQUIRED AND FOLLOWING A STORM TO INSPECT FOR DAMAGE TO THE EROSION CONTROL ELEMENTS. ANY DAMAGE OR IMPROPER INSTALLATION THAT IS NOTICED PRIOR TO OR FOLLOWING A STORM EVENT SHALL BE PROMPTLY REPLACED OR REPAIRED IN A SATISFACTORY MANNER SO AS TO PREVENT SEDIMENT FROM BYPASSING THE EROSION CONTROL BARRIER.
- IN CONJUNCTION WITH THE SITE CONSTRUCTION, ALL DRAINAGE STRUCTURES INCLUDING CATCH BASIN, WATER QUALITY INLETS AND SUBSURFACE INFILTRATION STRUCTURES SHALL BE CONSTRUCTED AND STABILIZED AS SOON AS POSSIBLE. CATCH BASINS AND WATER QUALITY INLETS SHALL BE PROTECTED WITH SILT SACKS AS SHOWN.
- THE CATCH BASINS AND WATER QUALITY TANKS SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. ANY SEDIMENT BUILDUP OF EIGHT (8) INCH DEPTH IN ANY OF THE STRUCTURES SHALL BE PROMPTLY REMOVED BY HAND OR MECHANICAL METHODS AND ALL DEBRIS REMOVED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
 - PROTECT CATCH BASIN AND WATER QUALITY TANK INLETS FROM RECEIVING SEDIMENT-LADEN STORM RUNOFF THAT MAY CLOG UNDERGROUND LEACHING SYSTEMS BY GRADING GRAVEL SUBBASE AWAY FROM THESE INLETS PRIOR TO PAVING.
- THE SITE SHALL BE INSPECTED WEEKLY OR AFTER ALL RAINFALL EVENTS GREATER THAN 1/2 INCH, WHICHEVER OCCURS SOONER. ANY EROSION SHALL BE FILLED AND RESTABILIZED IN A MANNER TO PREVENT FUTURE EROSION.

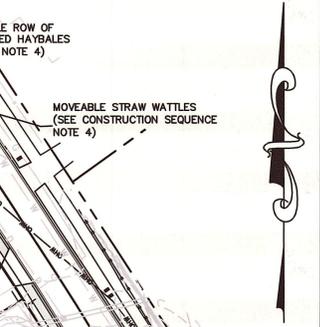


SINGLE HAYBALE DETAIL
NOT TO SCALE

SILTATION FENCE DETAIL
NOT TO SCALE



FOR REGISTRY USE ONLY



INLET PROTECTION
DANDY SACK® SILT SACK
BY MIRAFI
NOT TO SCALE

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.



3-20-20

EROSION & SEDIMENT CONTROL NOTES

- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES SHOWN ON THIS PLAN AND ANY ADDITIONAL MEASURES AS MAY BE NECESSARY OR REQUIRED THROUGHOUT CONSTRUCTION, UNTIL FINAL SURFACE FINISHES HAVE BEEN ESTABLISHED AND ACCEPTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION AND SEDIMENTATION. IT IS INTENDED THAT THE IMPLEMENTATION OF THE FOLLOWING MEASURES WILL MEET THIS GOAL. WHEN IT IS CLEAR TO THE DESIGNER THAT EROSION AND SEDIMENTATION HAVE BEEN ADEQUATELY CONTROLLED WITHOUT THE IMPLEMENTATION OF EVERY MEASURE, ADDITIONAL MEASURES NEED NOT BE IMPLEMENTED. ALTERNATIVELY, IF ALL OF THE FOLLOWING MEASURES HAVE BEEN IMPLEMENTED AND THE CONTROL OF EROSION AND SEDIMENTATION IS INADEQUATE, THE CONTRACTOR MUST EMPLOY SUFFICIENT SUPPLEMENTAL MEASURES BEYOND THE SCOPE OF THIS PLAN.
- ALTHOUGH NOT SHOWN HEREON, CONTRACTOR MAY UTILIZE ADDITIONAL EROSION CONTROL MEASURES SUCH AS, BUT NOT LIMITED TO SEDIMENT TRAPS AND EROSION CONTROL BLANKETS.
- EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE MOST CURRENT VERSION OF THE "MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS," THE STANDARDS OF THE TOWN OF NORFOLK, AND AS SHOWN ON THESE PLANS, WHICHEVER IS THE MOST STRINGENT.
- EROSION CONTROLS MUST BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. LIMITED CLEARING (BUT NO GRUBBING) AND SITE DISTURBANCE IS ALLOWED IN ORDER TO FACILITATE INSTALLATION OF EROSION CONTROLS.
- WHERE SEVERAL TYPES OF EROSION CONTROL DEVICES ARE CALLED OUT ON THE PLAN, THE CONTRACTOR MAY SELECT FROM THOSE DETAILED FOR INDIVIDUAL AREAS THAT MAY BEST FIT HIS CONSTRUCTION OPERATIONS WHILE STILL MAINTAINING PROTECTIONS THAT MEET ALL CONTRACT AND REGULATORY REQUIREMENTS.
- ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, WHETHER INSIDE THE CONTRACT LIMIT LINE OR BEYOND, NOT COVERED BY BUILDINGS OR PAVEMENTS, SHALL BE TOP SOILED AND SEEDED AS LAWN.
- THE CONTRACTOR SHALL MONITOR ALL NEW AND MODIFIED DRAINAGE STRUCTURE SUMPS WITHIN THE CONTRACT LIMITS AND SHALL PUMP SUMPS CLEAN OF SILT AND DEBRIS WHEN MORE THAN 3/4 FULL AND/OR IMMEDIATELY PRIOR TO FINAL ACCEPTANCE.
- AREAS THAT ARE NOT THE LOCATION OF ACTIVE CONSTRUCTION WHICH ARE TO BE LEFT BARE FOR OVER ONE MONTH BEFORE FINISHED GRADING AND SEEDING IS ACHIEVED, SHALL BE MULCHED OR RECEIVE TEMPORARY STABILIZATION SUCH AS JUTE NETTING OR SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYEGRASS APPLIED TO A RATE OF 2 LBS./1,000 SQ. FT. LIMESTONE (EQUIVALENT TO BE 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 90 LBS./1,000 SQ. FT. PLANTING SEASONS SHALL BE APRIL 1 TO JUNE 1 AND AUGUST 1 TO OCTOBER 1. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COARSE MATTER.
- STABILIZATION OF SLOPES IN CUT AREAS (USING MULCH OR GRASS) AND THE INSTALLATION OF CONTROL LINE (STRAWBALE CHECK OR FILTER FABRIC) AT THE TOE OF SLOPE SHALL BE INITIATED WITHIN FOURTEEN (14) DAYS OF COMPLETION.
- SEDIMENT REMOVED FROM CONTROL STRUCTURES WILL BE DISPOSED IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN. ALL LINEAR EROSION CONTROLS RETAINING SEDIMENT OVER 1/2 THEIR HEIGHT SHALL HAVE THE SEDIMENT REMOVED AND ALL DAMAGED EROSION CONTROLS SHALL BE REPAIRED OR REPLACED.
- THE CONTRACTOR WILL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN.
- STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN FOURTEEN (14) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH. IF SOIL STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF STRAWBALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF THEIR CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO SPRINKLING OF WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC.
- IF FINAL GRADING IS TO BE DELAYED FOR MORE THAN FOURTEEN (14) DAYS AFTER LAND DISTURBANCES CEASE, TEMPORARY VEGETATION OR MULCH SHALL BE USED TO STABILIZE SOILS.

TEMPORARY SITE CONSTRUCTION ENTRANCE PAD
N.T.S.

REVISIONS	
1	5/11/17 BETA ENG./TOWN COMMENTS
2	8/18/17 GENERAL
3	8/14/17 GENERAL
4	9.8.17 DRAINAGE BEDS
5	9.29.17 UNITS 15/16 AND GRADING
6	3/1/2020 BETA ENG. COMMENTS

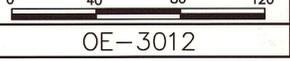
OWNER & APPLICANT
THE VILLAGE AT NORFOLK, LLC
32 NORFOLK AVENUE
S. EASTON, MA 02375

EROSION PREVENTION & SEDIMENTATION CONTROL PLAN
(PER M.G.L. CH. 40B)
"THE VILLAGE AT NORFOLK"
IN
NORFOLK MASSACHUSETTS

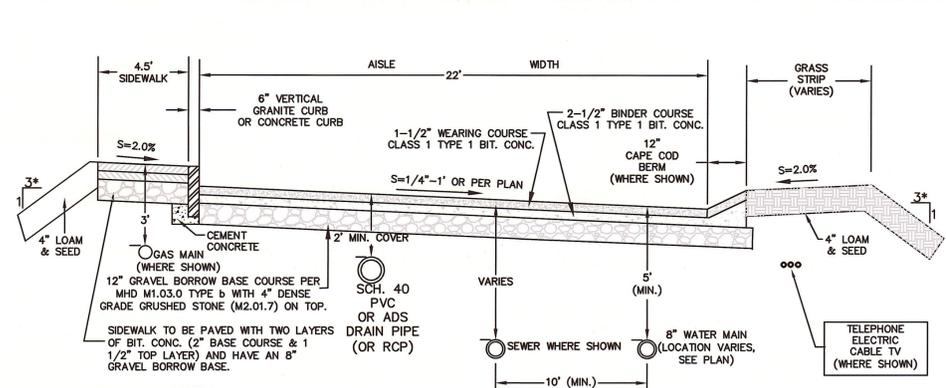


165 EAST GROVE STREET
MIDDLEBOROUGH, MA 02346
TEL: (508)-946-9231
FAX: (508)-947-8873
www.outback-eng.com

DATE: JANUARY 6, 2016
DRAWN BY: CJV CHECKED BY: J.A.P.
SCALE: 1"=40' SHEET 6 OF 11

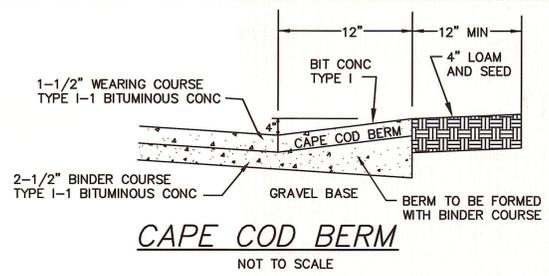


OE-3012

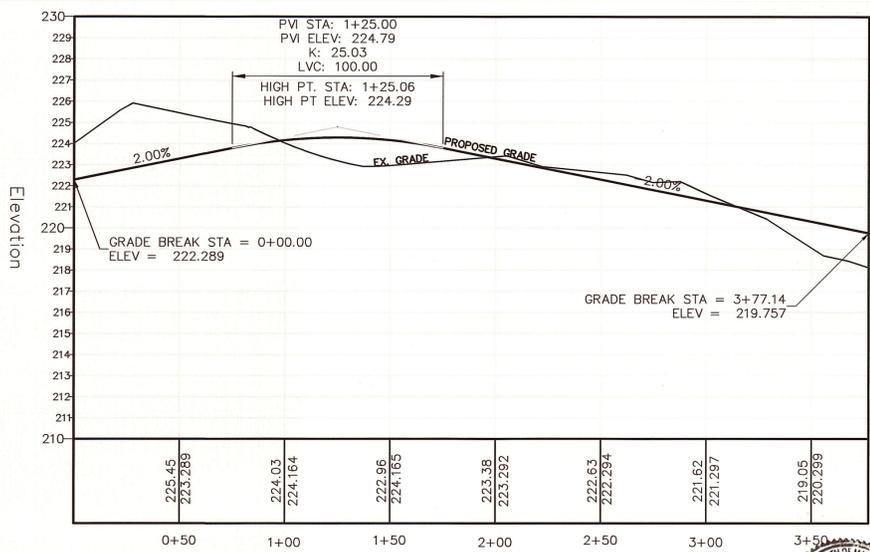


- NOTES:
 1. BACKFILL SHALL BE COMPACTED TO 95% USING THE MODIFIED PROCTOR TEST IN ACCORDANCE WITH ASTM D 1557-67T, METHOD D
 2. WATER MAIN INSTALLATION SHALL CONFORM TO THE TOWNS GUIDELINES AND SPECIFICATIONS FOR A FIRE PROTECTION DISTRIBUTION SYSTEM (FPDS) LATEST EDITION.

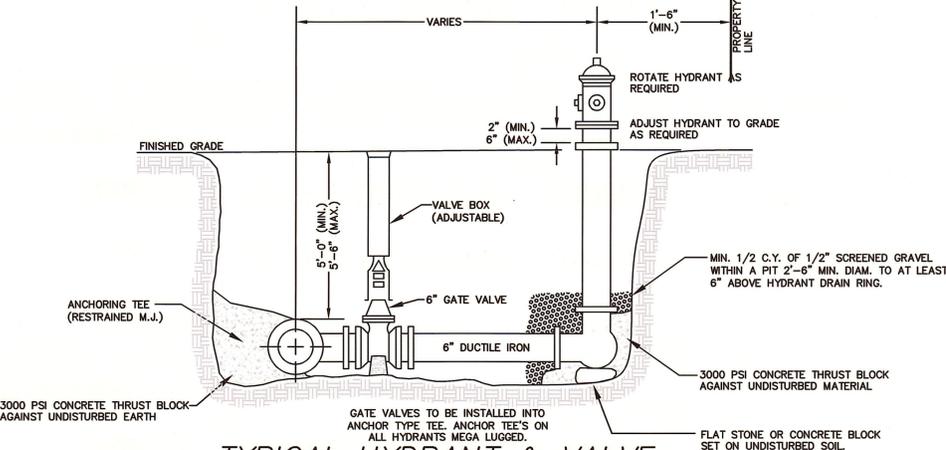
TYPICAL ROADWAY CROSS SECTION
NOT TO SCALE



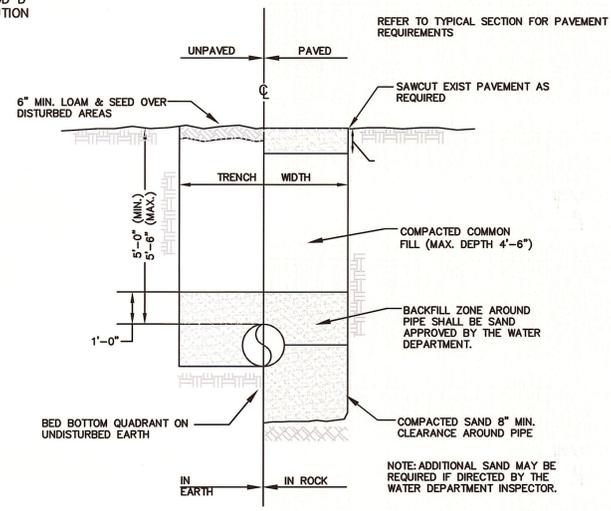
CAPE COD BERM
NOT TO SCALE



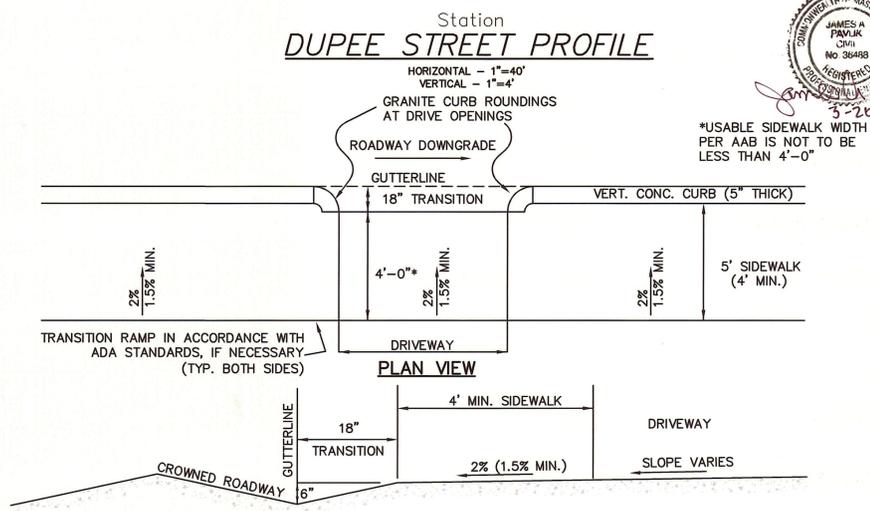
DUPEE STREET PROFILE



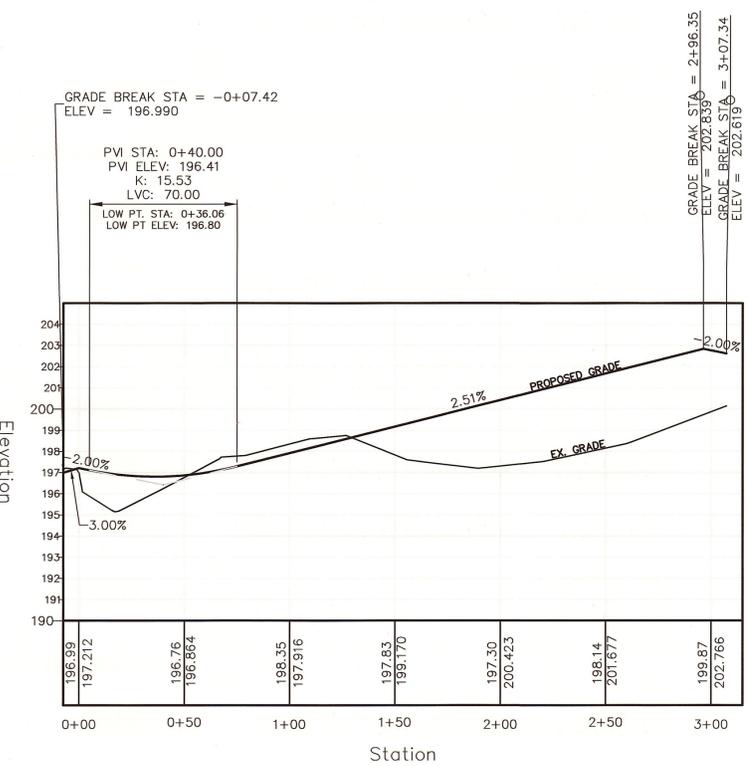
TYPICAL HYDRANT & VALVE
NOT TO SCALE



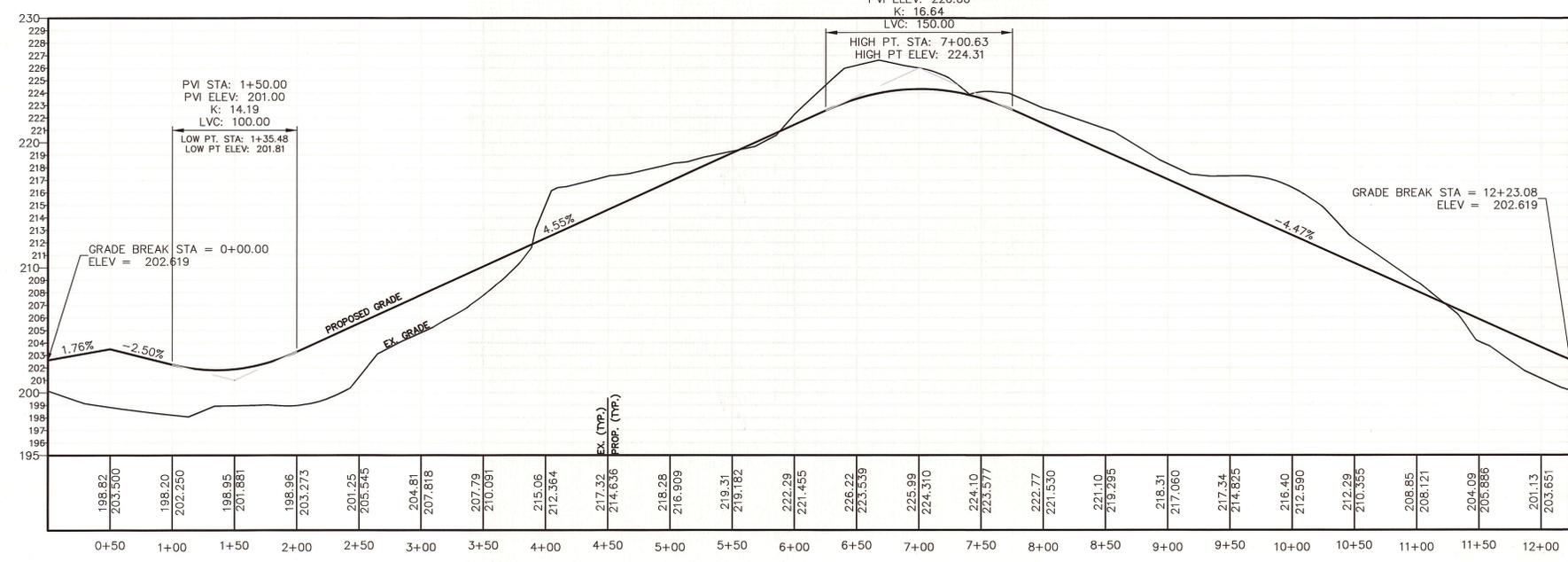
WATER TRENCH
NOT TO SCALE



TYPICAL SIDEWALK TO DRIVEWAY TRANSITION
NOT TO SCALE



SUMNER STREET PROFILE (ENTRANCE)
HORIZONTAL - 1\"/>



SUMNER STREET PROFILE
HORIZONTAL - 1\"/>

FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.



DATE: 7/20/20 PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20-23
 DATE: 7/25/20

NORFOLK ZONING BOARD

I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE ZONING BOARD APPROVAL, AND THAT NO APPEAL HAS BEEN FILED AT THIS OFFICE.

TOWN CLERK - TOWN OF NORFOLK

REVISIONS	
1	5/11/17 BETA ENG./TOWN COMMENTS
2	6/16/17 GENERAL
3	3/1/2020 BETA ENG. COMMENTS

OWNER & APPLICANT
 THE VILLAGE AT NORFOLK, LLC
 32 NORFOLK AVENUE
 S. EASTON, MA 02375

DETAILS SHEET FOR "THE VILLAGE AT NORFOLK"

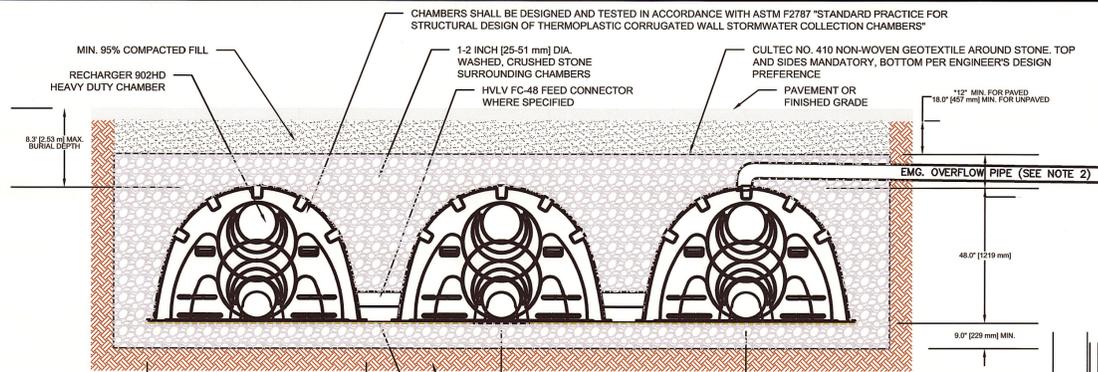
IN NORFOLK MASSACHUSETTS



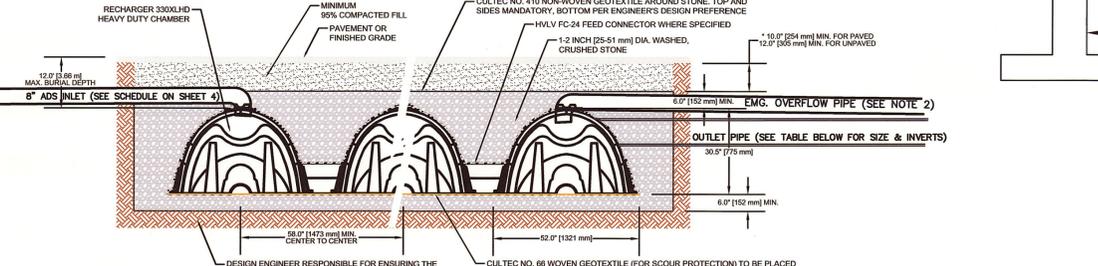
165 EAST GROVE STREET
 MIDDLEBOROUGH, MA 02346
 TEL: (508)-946-9231
 FAX: (508)-947-8873
 www.outback-eng.com

DATE: FEBRUARY 21, 2017
 DRAWN BY: CJV CHECKED BY: J.A.P.
 SCALE: NTS SHEET 7 OF 11

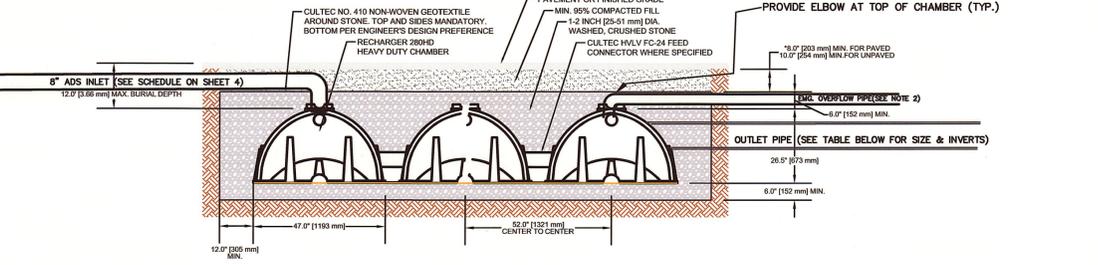
OE-3012



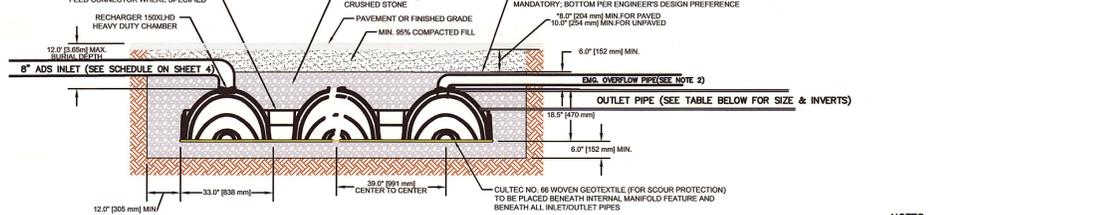
TYPICAL CULTEC RECHARGER 902HD CHAMBER BED DETAIL



TYPICAL CULTEC RECHARGER 330XLHD HEAVY DUTY CHAMBER BED DETAIL



TYPICAL CULTEC RECHARGER 280HD HEAVY DUTY CHAMBER BED DETAIL

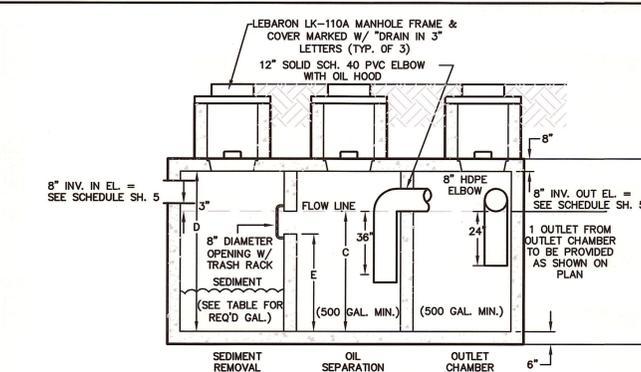
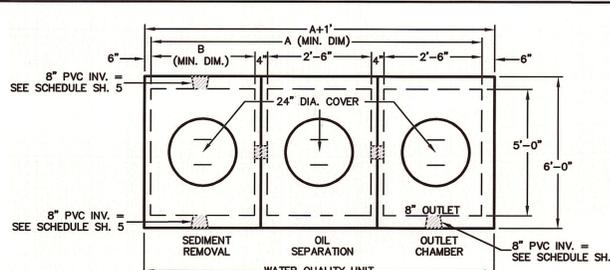


TYPICAL CULTEC RECHARGER 150XLHD CHAMBER BED DETAIL

LEACHING BED DETAILS & ELEVATIONS

BED #	TYPE	TOTAL # OF CHAMBERS	BED DIM. (W' X L' X D')	SIDE STONE (IN.)	END STONE (IN.)	BOT STONE (EL.)	BOT. CHMBR (EL.)	TOP CHMBR (EL.)	TOP STONE (EL.)	FINISH GRADE	PEAK EL. (100 YR)	OUTLET EL.	GW ELEV.	EMG. OVERFLOW EL.
LC-1	150XLHD	32 (4 X 8)	14.5 X 84.75 X 3.29	12	12	192.0	192.75	194.29	195.29	197.25-199.4	195.06	NONE	188.8 (TP-11)	6" EQ. @ 195.2
LC-1A	902HD	22 (2 X 11)	19.5 X 47.37 X 6.0	36	36	191.5	192.5	196.5	197.5	200.0±	197.46	NONE	188.8 (TP-36)	6" EQ. @ 198.5
LC-2B	330XLHD	20 (2 X 10)	15.17 X 79.5 X 4.29	36	24*	199.0	200.0	202.54	203.29	205.2-207.8	203.23	NONE	NONE 196.3**	6" EMG. OVERFLOW @ 204.3
LC-2A(1)	330XLHD	14 (2 X 7)	13.17 X 54.5 X 4.54	24	24	196.0	197.0	199.54	200.54	202.5-209.8	200.21	NONE	192.1 (TP-14)	NONE
LC-2A(2)	330XLHD	36 (3 X 12)	18 X 89.5 X 4.29	24	24	194.5	195.75	197.91	198.79	200.7-203.0	198.54	NONE	190.0 (TP-35)	8" EQ. @ 200.1
LC-3	150XLHD	18 (3 X 6)	12.25 X 65.25 X 2.54	18	18	197.85	198.35	199.85	200.39	202.1-203.1	200.02	4" @ 199.0	195.1 (TP-15)	NONE
LC-4	280HD	12 (3 X 4)	16.75 X 33.0 X 3.71	24	24	199.3	199.8	202.01	203.01	204.8-206.6	202.97	12" @ 200.9 4" @ 201.5	196.3 (TP-18)	NONE
LC-4A	150XLHD	15 (3 X 5)	15.25 X 56 X 2.54	36	24	197.7	198.2	199.7	200.24	201.95-203.4	199.72	(2) 6" @ 199.0	194.2 (TP-17)	NONE
LC-4B	150XLHD	12 (4 X 3)	14.5 X 33.5 X 2.54	12	12	202.0	202.5	204.0	204.54	207.5-208.5	204.45	(2) 10" @ 202.9	199.8 (TP-33)	NONE
LC-4C	280HD	4 (1 X 4)	7.92 X 33.0 X 3.71	24	24	202.5	203.5	205.71	206.21	214.0-214.3	206.17	(3) 8" @ 205.4	199.8 (TP-33)	NONE
LC-5	330XLHD	25 (5 X 5)	29.67 X 42.5 X 3.54	36	36	213.5	214.0	216.54	217.04	219.0-220.8	216.23	NONE	NONE 210.4**	NONE
LC-5A	902HD	40 (4 X 10)	33.25 X 42.7 X 5.75	30	30	208.00	208.75	212.75	213.75	215.8-217.5	213.23	NONE	NONE 210.4**	NONE
LC-6	280HD	27 (3 X 9)	16.08 X 67.33 X 3.21	20	20	210.0	210.5	212.71	213.21	215.2-218.5	212.78	8" @ 212.0	NONE 206.0**	214.0 IN FROM LC-6A (8" EMG. OVERFLOW)
LC-6(2)	150XLHD	12 (4 X 3)	16.5 X 25.25 X 2.54	24	24	208.5	209.0	210.5	211.04	212.8-213.3	208.95	NONE	NONE 209.4**	8" EMG. OVERFLOW @ 210.7
LC-6A	330XLHD	16 (2 X 8)	14.17 X 62.5 X 3.54	30	30	214.0	214.5	217.0	217.54	219.8-222.8	216.18	NONE	NONE 210.7**	8" EMG. OVERFLOW @ 217.2
LC-7	150XLHD	54 (9 X 6)	62.25 X 32.75 X 2.54	24	24	214.0	214.5	216.0	216.54	218.5-220.8	216.23	NONE	206.2 (TP-27)	8" EMG. OVERFLOW @ 216.6
LC-10A	280HD	12 (2 X 6)	14.33 X 49.0 X 3.96	36	36	191.0	191.75	193.96	194.96	198.0±	194.64	NONE	NONE 186.7**	6" EQ. @ 195.2

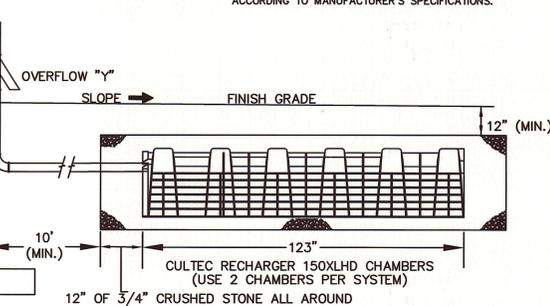
*END STONE DIM. SHOWN IS THE EFFECTIVE LENGTH WHERE BED IS SPLIT INTO 2 (END STONE USED FOR CALC IS 48"). **ELEVATIONS INDICATE NO WATER ENCOUNTERED AT BOTTOM HOLE PER NEAREST TEST PIT.



WATER QUALITY INLET DETAIL (H-20)

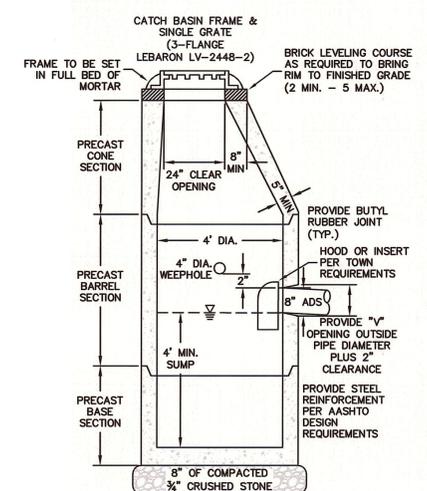
	WQI-1	WQI-1A
A (MIN. DIM.)	9'-5"	8'-2"
B (MIN. DIM.)	4'-0"	2'-6"
C	5'-6"	5'-6"
D	7'-0"	7'-0"
E	5'-0"	5'-0"
F	8'-0"	8'-0"
1ST CHAMBER GAL. REQUIRED	735	343
1ST CHAMBER GAL. PROVIDED	823	515
MIN. CAPACITY REQUIRED*	1,989 GAL.	1,681 GAL.

*INTERIOR VOLUME TO FLOW LINE IS SHOWN. SELECT TANK SIZE TO PROVIDE THIS MINIMUM VOLUME. USE SHEA PRECAST CONCRETE TANKS (MODIFIED AS SHOWN), OR EQUIVALENT.



ROOF DRAIN SYSTEM DETAIL

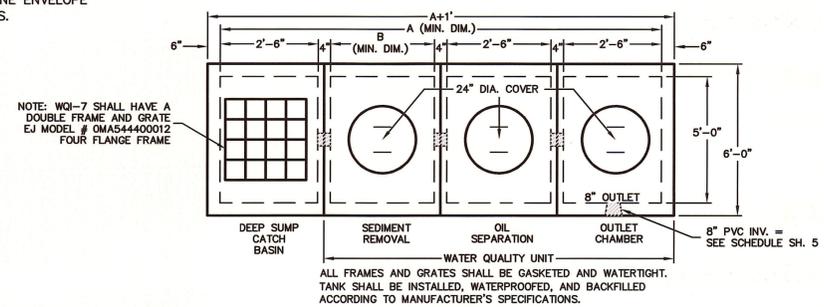
NOTES:
1) CONTRACTOR TO REFER TO THE MANUFACTURERS RECOMMENDATIONS FOR INSTALLATION PROCEDURES.
2) ROOF DRAIN SYSTEMS TO BE INSTALLED FOR THE FRONT AND REAR ROOF FOR UNITS 27-28 AND FOR THE REAR ROOF OF UNITS 24-26. REFER TO SHEET 4 FOR LOCATIONS.
3) ALL INSTALLATIONS SHALL INCORPORATE A 1 FOOT WIDE 3/4" CRUSHED STONE ENVELOPE AROUND THE CHAMBERS, AND 6" OF 3/4" STONE ABOVE AND BELOW CHAMBERS.



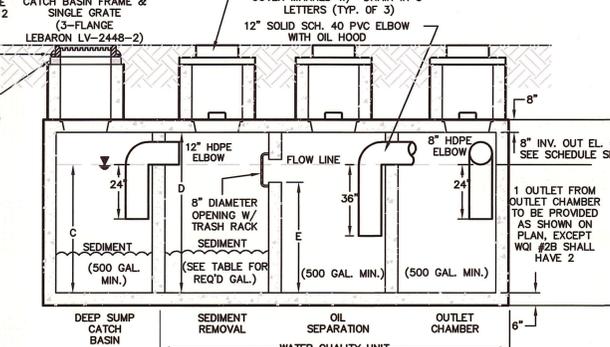
CONCRETE CATCH BASIN

NOT TO SCALE

NOTES:
1. CULTEC REQUIRES A MINIMUM OF 8"-12" COMPACTED GRAVEL OVER ITS CHAMBERS WHEN UNDER PAVEMENT (SEE DETAIL), WHEREAS PROJECT REQUIRES 4" DENSE GRADE ATOP 12" GRAVEL BORROW (16" TOTAL). FINISH GRADES IN TABLE REFLECT A MINIMUM OF 20" OVER TOP OF STONE ELEVATION TO ACCOUNT FOR 2 PAVEMENT COURSES (SEE ROAD CROSS SECTION).
2. SEE UTILITY SHEET 4 FOR EMERGENCY OVERFLOW LOCATIONS. SEE TABLE BELOW FOR SIZE AND ELEVATIONS.



CATCH BASIN/WATER QUALITY INLET DETAIL (H-20)



CATCH BASIN/WATER QUALITY INLET DETAIL (H-20)

	WQI-2A	WQI-2B	WQI-3	WQI-4	WQI-5	WQI-5B	WQI-6	WQI-6A	WQI-7
A	13'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	13'-0"	12'-0"	15'-0"
B (MIN. DIM.)	4'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"	3'-0"	6'-0"
C	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
D	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"
E	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	3'-4"
F	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"
2ND CHAMBER GAL. REQUIRED	735	343	444	581	240	552	658	481	1,026
2ND CHAMBER GAL. PROVIDED	823	617	617	617	617	617	823	617	1,234
MIN. CAPACITY REQUIRED*	2,675 GAL.	2,469 GAL.	2,675 GAL.	2,469 GAL.	3,086 GAL.				

*INTERIOR VOLUME TO FLOW LINE IS SHOWN. SELECT TANK SIZE TO PROVIDE THIS MINIMUM VOLUME. USE SHEA PRECAST CONCRETE TANKS (MODIFIED AS SHOWN), OR EQUIVALENT.

FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.



DATE: 3-20-20
PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20A. DATE: [Signature]

NORFOLK ZONING BOARD
I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE ZONING BOARD APPROVAL, AND THAT NO APPEAL HAS BEEN FILED AT THIS OFFICE. DATE: [Signature]
TOWN CLERK - TOWN OF NORFOLK

REVISIONS

NO.	DATE	DESCRIPTION
1	5/11/17	BETA ENG./TOWN COMMENTS
2	6/16/17	GENERAL
3	8.14.17	GENERAL
4	9.8.17	DRAINAGE BEDS
5	3/1/2020	BETA ENG. COMMENTS

OWNER & APPLICANT
THE VILLAGE AT NORFOLK, LLC
32 NORFOLK AVENUE
S. EASTON, MA 02375

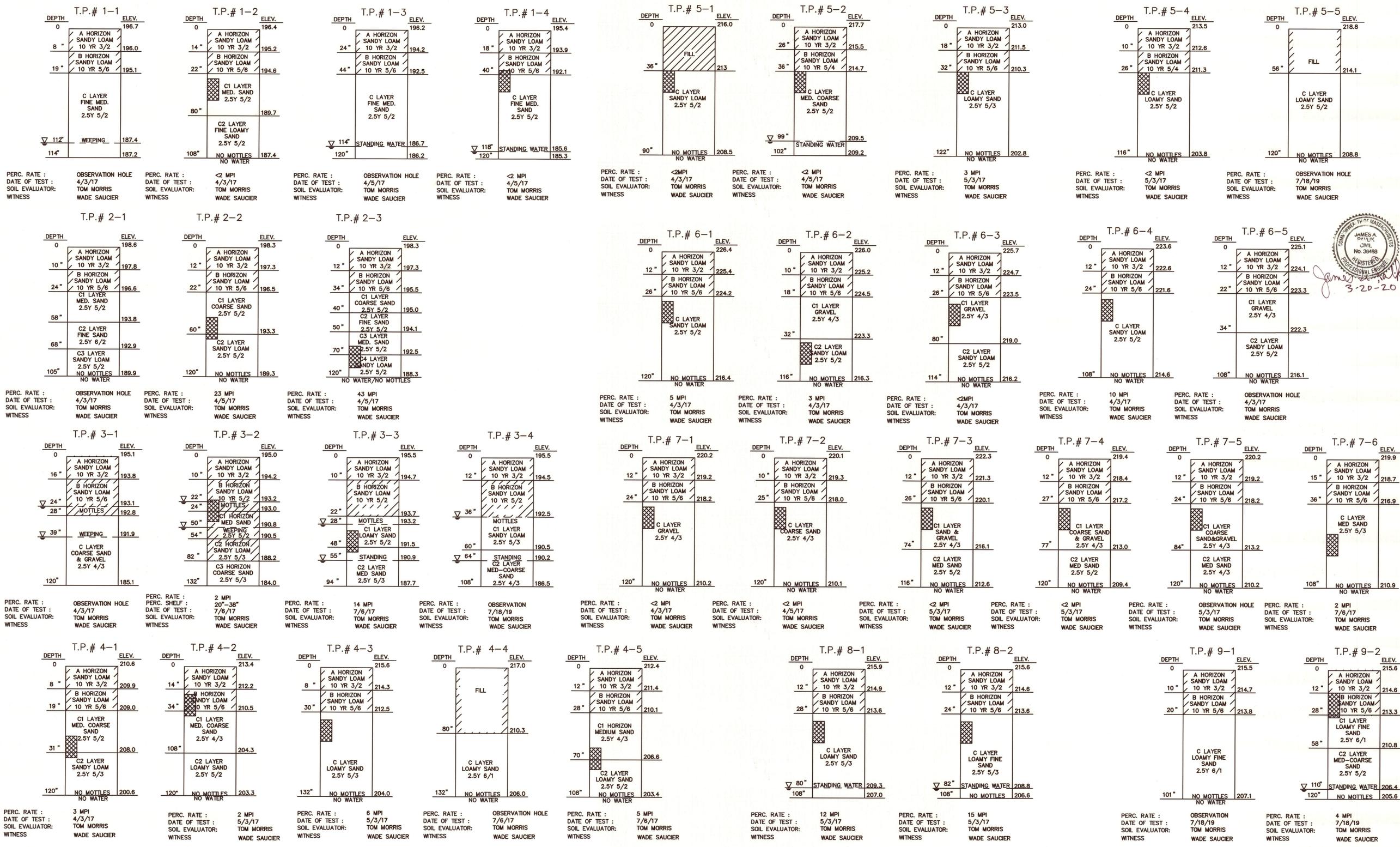
DETAILS SHEET FOR "THE VILLAGE AT NORFOLK"

IN NORFOLK MASSACHUSETTS



165 EAST GROVE STREET
MIDDLEBOROUGH, MA 02346
TEL: (508)-946-9231
FAX: (508)-947-8873
www.outback-eng.com

DATE: FEBRUARY 21, 2017
DRAWN BY: CJV CHECKED BY: J.A.P.
SCALE: NTS SHEET 8 OF 11



FOR REGISTRY USE ONLY

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.



3-20-20
DATE PROFESSIONAL LAND SURVEYOR

APPROVED SUBJECT TO TERMS AND CONDITIONS OF A COMPREHENSIVE PERMIT PER ZONING BOARD OF APPEALS DECISION, (RECORDED AT THE NORFOLK REGISTRY OF DEEDS, BOOK 35728 PAGE 174) AS AUTHORIZED BY CHAPTER 40B OF THE MASSACHUSETTS GENERAL LAWS, SECTION 20-23.
DATE: 7/18/19

NORFOLK ZONING BOARD

I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE ZONING BOARD APPROVAL, AND THAT NO APPEAL HAS BEEN FILED AT THIS OFFICE.

TOWN CLERK - TOWN OF NORFOLK

REVISIONS		
1	5/11/17	BETA ENG./TOWN COMMENTS
2	6/16/17	GENERAL
3	8/1/2020	BETA ENG. COMMENTS

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S. EASTON, MA 02375

DETAILS SHEET
FOR
"THE VILLAGE AT NORFOLK"

IN
NORFOLK
MASSACHUSETTS

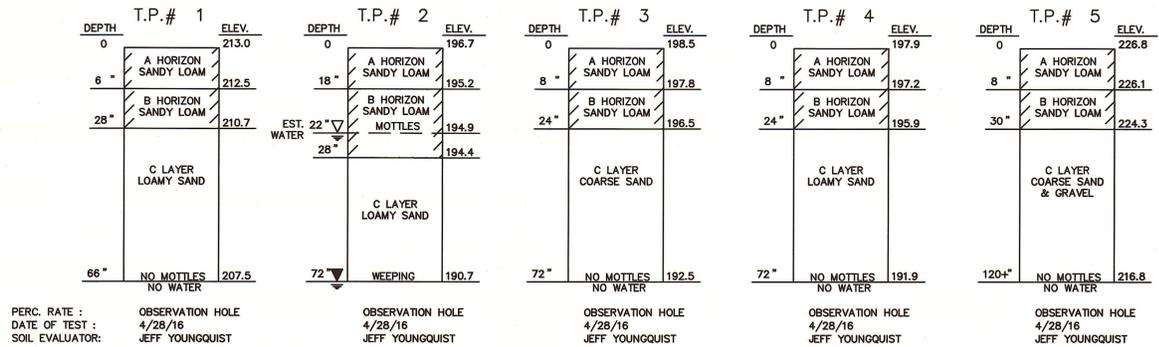


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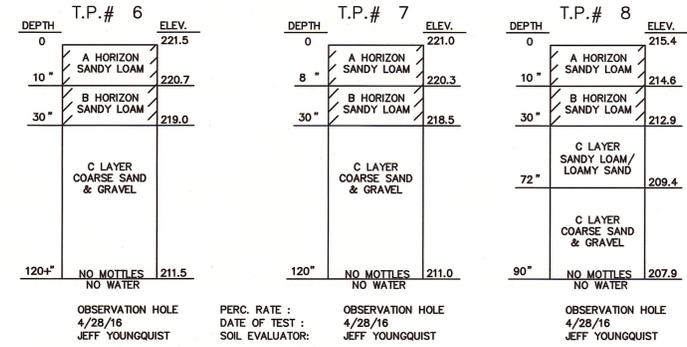
DATE: FEBRUARY 21, 2017
DRAWN BY: CJV CHECKED BY: J.A.P.
SCALE: NTS SHEET 10 OF 11

OE-3012

SEPTIC SYSTEM SOIL LOGS
NOT TO SCALE



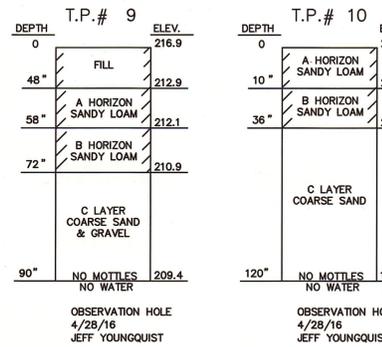
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DATE OF TEST :
SOIL EVALUATOR :



OBSERVATION HOLE
DATE OF TEST :
SOIL EVALUATOR :

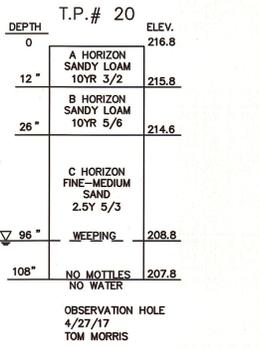
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DATE OF TEST :
SOIL EVALUATOR :

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DATE OF TEST :
SOIL EVALUATOR :

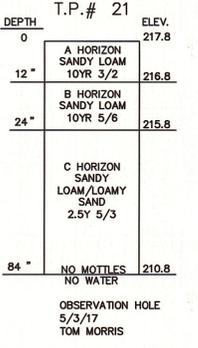


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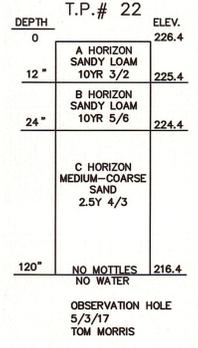
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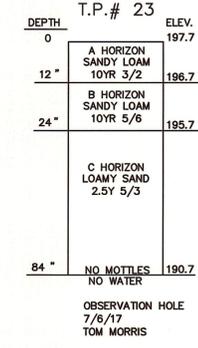
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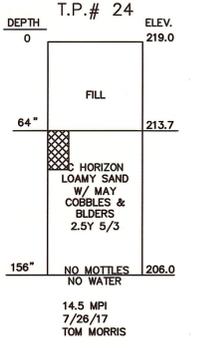
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SOIL EVALUATOR :



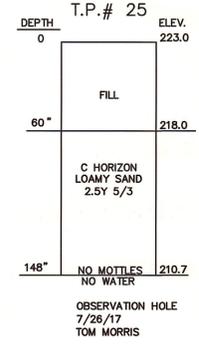
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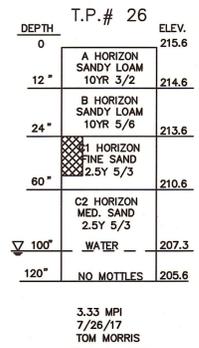
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SOIL EVALUATOR :



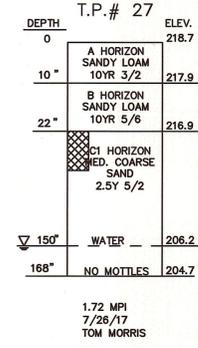
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SOIL EVALUATOR :



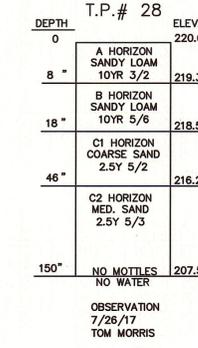
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DATE OF TEST :
SOIL EVALUATOR :



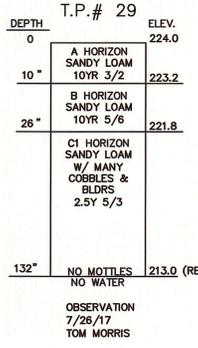
3.33 MPI
7/26/17
TOM MORRIS



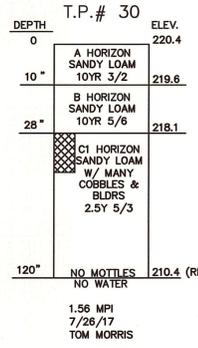
1.72 MPI
7/26/17
TOM MORRIS



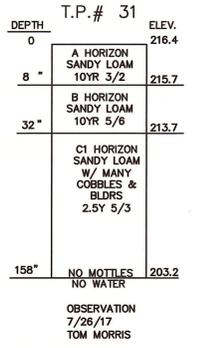
OBSERVATION
7/26/17
TOM MORRIS



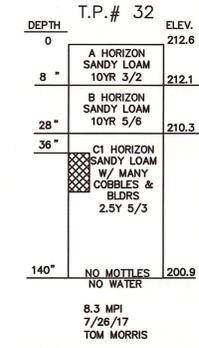
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7/26/17
TOM MORRIS



1.56 MPI
7/26/17
TOM MORRIS

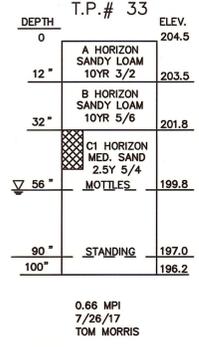


OBSERVATION
7/26/17
TOM MORRIS

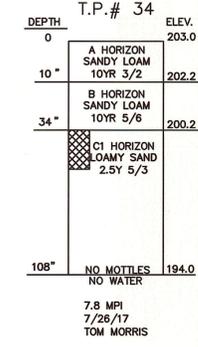


8.3 MPI
7/26/17
TOM MORRIS

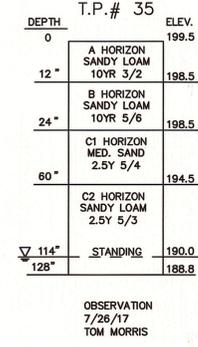
SEPTIC SYSTEM SOIL LOGS



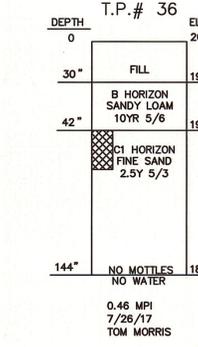
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7/26/17
TOM MORRIS



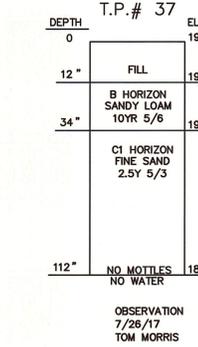
7.8 MPI
7/26/17
TOM MORRIS



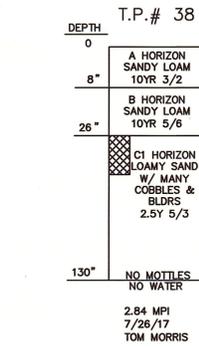
OBSERVATION
7/26/17
TOM MORRIS



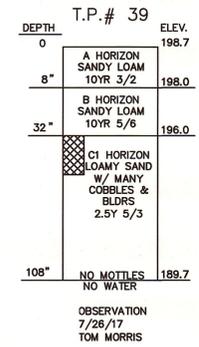
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7/26/17
TOM MORRIS



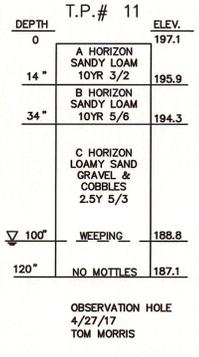
OBSERVATION
7/26/17
TOM MORRIS



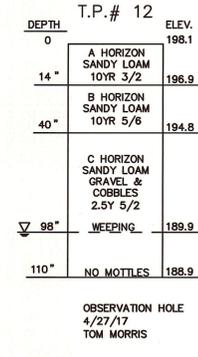
2.84 MPI
7/26/17
TOM MORRIS



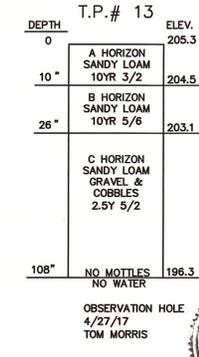
OBSERVATION
7/26/17
TOM MORRIS



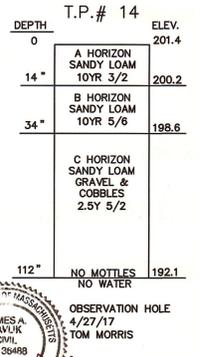
OBSERVATION HOLE
DATE OF TEST :
SOIL EVALUATOR :



OBSERVATION HOLE
DATE OF TEST :
SOIL EVALUATOR :



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TOWN CLERK - TOWN OF NORFOLK

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SCALE: NTS SHEET 11 OF 11