

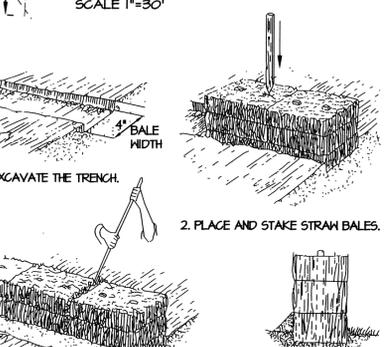
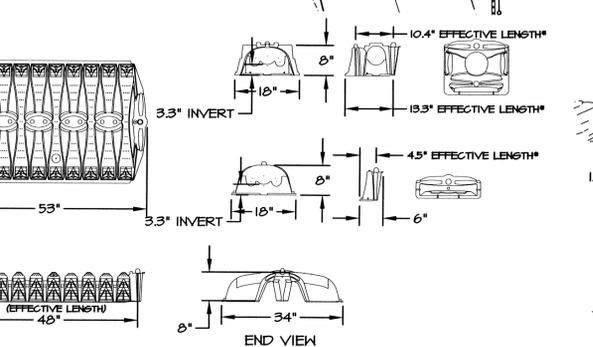
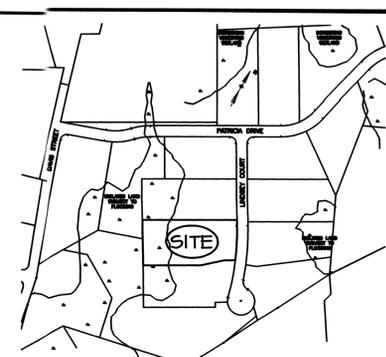
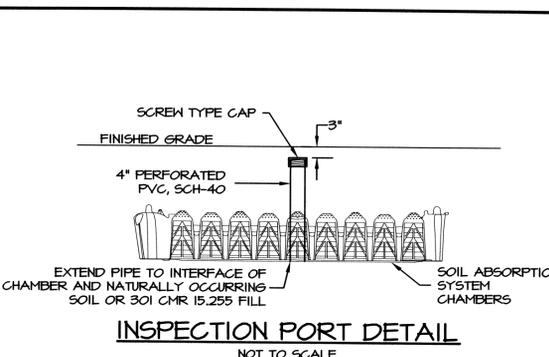
**DESIGN DATA**

DAILY SEWAGE FLOW  
 • 4 BEDROOMS  
 • DAILY FLOW = 110 GAL/BEDROOM = 440 GALLONS PER DAY

SEPTIC TANK REQUIREMENTS  
 • VOLUME = 2 X DAILY FLOW = 880 GALLONS  
 • USE 1500 GALLON SEPTIC TANK

LEACHING AREA REQUIREMENTS  
 • PERCOLATION RATE = 16 MPI (DOH 00-17B) - SOIL TEXTURE CLASS II  
 • DESIGN EFFLUENT LOADING RATE (20 MPI) = 0.53 GAL/SF  
 • USE INFILTRATOR QUICK 4 PLUS STANDARD LP (3.3 INCH)  
 • IN FIELD CONFIGURATION - EFFECTIVE LEACHING AREA = 4.73 SF/LP  
 • PROVIDE 5 ROWS WITH 4 CHAMBERS PER ROW - 45 UNITS  
 • TOTAL LEACHING AREA = 45 CHAMBERS X 4 LF/AUNIT X 10 END CAPS X .375 LF/CAP = 163.125 LF  
 • TOTAL LEACHING CAPACITY = 163.125 LF X 4.73 SF/LF = 864 SF.  
 • 864 SF. X 0.53 GAL/SF = 461 GAL/DAY > 440 GPD

CONVENTIONAL SAS  
 • REQUIRED LEACHING AREA - 440 GPD/0.53 GPD/SF = 830 SF  
 • LEACHING FIELD - 18' X 48' = 864 SF > 830 SF



**EROSION & SEDIMENTATION CONTROL NOTES:**

- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK.
- ACCESSIBLE RESERVES OF HAY BALES AND STAKES ARE TO BE MAINTAINED ON SITE FOR ROUTINE MAINTENANCE AND IN THE EVENT OF UNANTICIPATED PROBLEMS REQUIRING EMERGENCY RESPONSE.
- HAY BALES SHOULD BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED.
- NO WORK IS TO OCCUR ON THE WETLAND SIDE OF THE PERIMETER EROSION AND SEDIMENTATION CONTROLS. ALL PERIMETER CONTROLS SERVE AS THE PROJECT LIMIT OF DISTURBANCE.
- NO STONES, BRUSH, CONSTRUCTION DEBRIS, LITTER, OR OTHER MATERIALS ARE TO BE DEPOSITED ON THE WETLAND SIDE OF THE EROSION AND SEDIMENTATION CONTROLS.
- ALL DISTURBED SOILS NOT DESIGNATED FOR OTHER SURFACE TREATMENT ARE TO BE LOAMED AND SEEDED IMMEDIATELY FOLLOWING FINAL GRADING.
- APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO PREVENT THE TRANSPORT OF SOIL OFFSITE FROM CONSTRUCTION EQUIPMENT.
- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE PROPERLY MAINTAINED AND MUST REMAIN IN PLACE UNTIL THE SOILS HAVE BEEN STABILIZED TO THE SATISFACTION OF THE ENGINEER AND THE SEEKONK CONSERVATION COMMISSION.
- THE SPLIT RAIL FENCE SERVES AS THE LIMIT OF LAWN AND FUTURE YARD ACTIVITIES AND SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.
- NO STRUCTURES ARE TO BE WITHIN 50' OF THE WETLAND.

**ELEVATION SCHEDULE**

DESCRIPTION	ELEVATION
INVERT AT FOUNDATION	144.00
INVERT IN - SEPTIC TANK	143.65
INVERT OUT - SEPTIC TANK	143.40
INVERT IN - DIST. BOX	143.00
INVERT OUT - DIST. BOX	142.00
INVERT BEGINNING CHAMBERS	142.44
ELEV. TOP OF CHAMBERS (BREAKOUT)	143.33
ELEV. BOTTOM OF CHAMBERS	142.67
EST. SEASONAL HIGH GW	138.54

**NOTES:**

- WORK SHALL CONFORM TO THE 310 CMR 15.00 STATE ENVIRONMENTAL CODE - TITLE 5 AND THE RULES AND REGULATIONS OF THE SEEKONK BOARD OF HEALTH.
- STRIP ALL TOPSOIL, SUBSOIL AND UNSUITABLE MATERIAL, TREE ROOTS AND STUMPS AND ANY OTHER IMPERVIOUS OR SPECIFIED SOIL IN THE AREA OF THE SYSTEM AND 5 FEET HORIZONTALLY BEYOND THE EDGE OF THE SYSTEM STONE IN ALL DIRECTIONS, WHERE POSSIBLE. STRIP MATERIAL VERTICALLY 3" MINIMUM INTO THE NATURALLY OCCURRING PERVIOUS MATERIAL. REPLACE WITH GRANULAR FILL MEETING THE LATEST SPECIFICATIONS OF 310 CMR 15.25(3). ACTUAL FILL MATERIAL IS SUBJECT TO APPROVAL BY THE DESIGN ENGINEER AND/OR SEEKONK HEALTH AGENT. THE DESIGN ENGINEER AND/OR THE SEEKONK HEALTH AGENT MAY ALSO REQUIRE A SIEVE ANALYSIS OF THE FILL MATERIAL.
- THE CONTRACTOR IS TO REMOVE ALL UNSUITABLE MATERIAL BELOW THE PROPOSED SOIL ABSORPTION SYSTEM PRIOR TO INSTALLATION. SEE DEEP OBSERVATION HOLES SOIL DATA FOR FURTHER INFORMATION.
- UNUSABLE MATERIAL USED TO BACKFILL THE TEST HOLES SHALL BE REMOVED AND REPLACED WITH GRANULAR FILL MEETING THE LATEST SPECIFICATIONS OF 310 CMR 15.25(3).
- ALL PIPE TO BE 4" P.V.C. SCHEDULE 40 UNLESS OTHERWISE NOTED.
- PLACE 6" MINIMUM COMPACTED CRUSHED STONE UNDER SEPTIC TANK AND DISTRIBUTION BOX.
- SOIL TESTING FOR THIS PROJECT WAS PERFORMED BY DEAN MONSEES AND WITNESSED BY CAPUTO AND WICK, LTD. AND WITNESSED BY BETH HALLAL, SEEKONK BOARD OF HEALTH AGENT. IF CONDITIONS ENCOUNTERED DURING CONSTRUCTION VARY SUBSTANTIALLY FROM THOSE SHOWN ON THIS PLAN, NOTIFY CAPUTO AND WICK, LTD. BEFORE PROCEEDING WITH CONSTRUCTION. **IF IN DOUBT, ASK.**
- GARBAGE GRINDER IS NOT ALLOWED WITH THIS DESIGN.
- INLET AND OUTLET TIES FOR SEPTIC TANK ARE TO BE LOCATED DIRECTLY BELOW ACCESS COVERS.
- SEPTIC TANK AND DISTRIBUTION BOX SHALL BE DESIGNED FOR H5-10, AND SHALL BE PROTECTED FROM VEHICULAR TRAFFIC BOTH DURING AND AFTER INSTALLATION.
- IT IS RECOMMENDED THAT THE SEPTIC TANK BE INSPECTED TWICE A YEAR, AND BE CLEANED WHEN THE SOLIDS EQUAL ONE THIRD THE LIQUID DEPTH. EFFLUENT FILTER MUST BE CLEANED ANNUALLY, AT A MINIMUM.
- BREAKOUT ELEVATION = 143.33. NO FINISHED GRADE BELOW 143.33 FOR 15 FEET (MINIMUM) FROM THE EDGE OF THE LEACHING AREA.
- CONTRACTOR SHALL CONTACT "DIG-SAFE" PRIOR TO CONSTRUCTION. LOCATION OF UTILITIES ON THIS PLAN ARE FROM BEST AVAILABLE EXISTING INFORMATION BUT ARE ONLY TO BE CONSIDERED APPROXIMATE.
- EXISTING AND PROPOSED WATER WELLS FOUND WITHIN 200' OF PROPOSED SEWAGE DISPOSAL SYSTEM ARE INDICATED ON THE PLAN. EXISTING AND PROPOSED SEWAGE DISPOSAL SYSTEMS FOUND WITHIN 200' OF PROPOSED WATER WELL ARE INDICATED ON THE PLAN.
- MATERIAL AND EQUIPMENT FROM ALTERNATE MANUFACTURERS MAY BE USED IF EQUAL. APPROVAL FOR ALTERNATE MATERIAL AND/OR EQUIPMENT REQUIRED FROM ENGINEER AND THE BOARD OF HEALTH PRIOR TO CONSTRUCTION. FULL SPECIFICATIONS FOR ALTERNATE EQUIPMENT MUST BE PROVIDED BY THE CONTRACTOR.
- THE DESIGNER EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR MONITORING, INSPECTING OR SUPERVISING THE ACTUAL CONSTRUCTION WORK. AFTER EXCAVATING AND PRIOR TO INSTALLING ANY IMPORTED MATERIAL, CONTACT THE BOARD OF HEALTH AGENT FOR A BOTTOM OF EXCAVATION INSPECTION. AFTER SYSTEM COMPONENTS ARE IN PLACE AND PRIOR TO BACKFILLING, CONTACT THE DESIGNER TO VERIFY THE LOCATION AND ELEVATION OF SYSTEM COMPONENTS AND PREPARE A RECORD DRAWING AS REQUIRED BY THE BOARD OF HEALTH.
- THE DESIGNER EXPRESSLY DISCLAIMS ANY RESPONSIBILITY FOR THE INSTALLATION AND MAINTENANCE OF THE SYSTEM. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO CONSTRUCT THE SYSTEM IN ACCORDANCE WITH 310 CMR 15.00 AND LOCAL BOARD OF HEALTH REGULATIONS AND THE RESPONSIBILITY OF THE OWNER FOR PROPERLY MAINTAINING THE SYSTEM IN ACCORDANCE WITH 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS.
- REFER TO 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS FOR ADDITIONAL INFORMATION CONCERNING THE CONSTRUCTION AND OPERATION OF THE SYSTEM. THE INSTALLER AND OWNER SHOULD REVIEW AND APPLY 310 CMR 15.00 AND THE LOCAL BOARD OF HEALTH REGULATIONS TO THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR MUST BE FAMILIAR WITH CHAMBER PRODUCTS PROPOSED FOR THIS SITE. SEE INFILTRATOR INSTALLATION MANUAL FOR ADDITIONAL DETAILS OF CHAMBER INSTALLATION.
- FILL MEETING THE REQUIREMENTS OF 310 CMR 15.25(3) MUST BE PLACED ON SCARIFIED, RELATIVELY DRY NATURAL SOIL. THE CONTRACTOR SHALL PROVIDE FOR DEWATERING AS REQUIRED AND ALL WORK SHALL BE PERFORMED UNDER DRY CONDITIONS PER 310 CMR 15.25(6).
- THE CELLAR FLOOR ELEVATION SHOWN HAS BEEN SUGGESTED AS A MINIMUM BASED ON OBSERVED GROUNDWATER CONDITIONS. SINCE THE GROUNDWATER LEVELS FLUCTUATE ANNUALLY, NO WARRANTY OF A DRY CELLAR IS EXPRESSED OR IMPLIED.
- INSTALL MAGNETIC TAPE OVER ALL PIPE AND SYSTEM COMPONENTS.
- PLAN EXISTING GRADES MAY VARY FROM ORIGINAL GRADES DUE TO SUBDIVISION CONSTRUCTION ACTIVITY.
- CONTRACTOR MUST BE FAMILIAR WITH CHAMBER PRODUCTS PROPOSED FOR THIS SITE. SEE INFILTRATOR INSTALLATION MANUAL FOR ADDITIONAL DETAILS OF CHAMBER INSTALLATION.

**LOT 5 - DEEP OBSERVATION HOLE 00-17A**  
 ORIGINAL ELEVATION - 139.33

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
+3 - 0	O						
0 - 4"	A	SANDY LOAM	10 YR 2/1				
4" - 24"	B	LOAMY SAND	10 YR 7/8				
24" - 126"	C	LOAMY SAND	2.5 Y 6/3				SILT POCKETS

OBSERVED STANDING GROUNDWATER - 120"  
 GROUNDWATER READING - 10" ON 3/23/01  
 PERC. @ 50" = 11 MPI  
 SOIL TESTING BY DEAN MONSEES ON 9/7/00 WITNESSED BY HAROLD CHENEVERT, JR., SEEKONK BOARD OF HEALTH AGENT

**LOT 5 - DEEP OBSERVATION HOLE 00-17B**  
 ORIGINAL ELEVATION - 138.83

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
+3 - 0	O						
0 - 3"	A	SANDY LOAM	10 YR 2/1				
3" - 24"	B	LOAMY SAND	10 YR 7/8				
24" - 132"	C	LOAMY SAND	2.5 Y 6/3				SILT POCKETS

OBSERVED STANDING GROUNDWATER - 120"  
 GROUNDWATER READING - 10" ON 3/23/01  
 PERC. @ 63" = 16 MPI  
 SOIL TESTING BY DEAN MONSEES ON 9/7/00 WITNESSED BY HAROLD CHENEVERT, JR., SEEKONK BOARD OF HEALTH AGENT

**LOT 5 - DEEP OBSERVATION HOLE 1**  
 ORIGINAL ELEVATION - 139.20

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 4"	A	SANDY LOAM	10 YR 3/3		MASSIVE	FRAGILE	GRAVELLY
4" - 30"	Bw	SANDY LOAM	10 YR 4/6		MASSIVE	FRAGILE	GRAVELLY, COBBLY
30" - 114"	Cd	SANDY LOAM	2.5 Y 4/4		MASSIVE	FRAGILE	GRAVELLY, COBBLY, STONY
114"	R						BOULDERS/LEDGE

OBSERVED STANDING GROUNDWATER - NONE  
 GROUNDWATER READING - 10" ON 3/23/01  
 PERC. @ 34" + 18" = 9 MPI  
 SOIL TESTING BY DEAN MONSEES ON 9/7/00 WITNESSED BY HAROLD CHENEVERT, JR., SEEKONK BOARD OF HEALTH AGENT

**LOT 5 - DEEP OBSERVATION HOLE 2**  
 ORIGINAL ELEVATION - 139.37

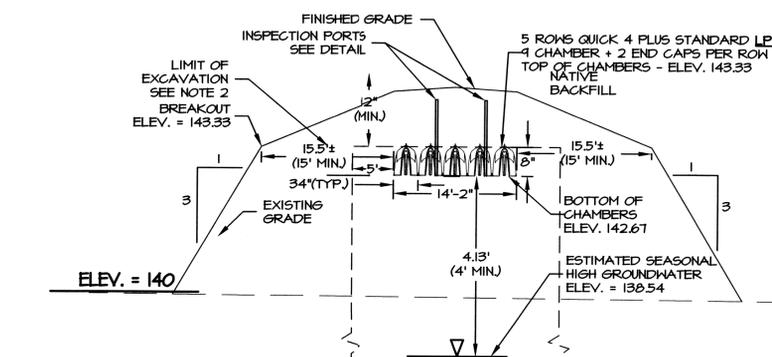
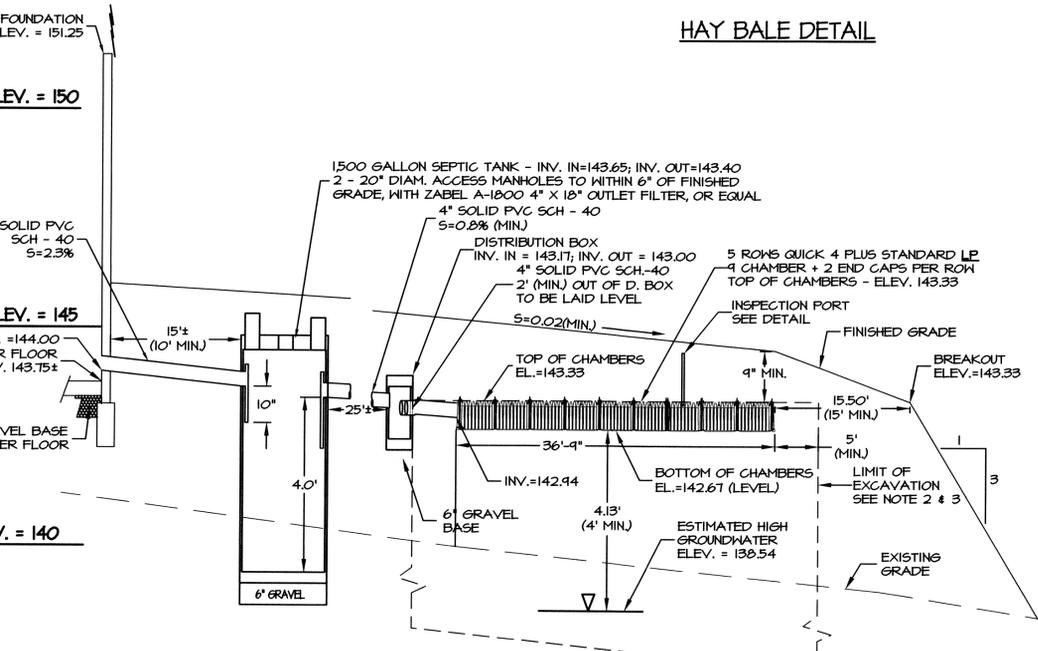
DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 6"	A	SANDY LOAM	10 YR 3/3		MASSIVE	FRAGILE	GRAVELLY
6" - 48"	Bg	SILT LOAM	2.5 Y 3/2		MASSIVE	FRAGILE	GRAVELLY
48" - 115"	Cd	SANDY LOAM	2.5 Y 3/3		MASSIVE	FRAGILE	GRAVELLY, COBBLY, VERY STONY
115"	R						BOULDERS/LEDGE

OBSERVED STANDING GROUNDWATER - NONE  
 GROUNDWATER READING - 10" ON 3/23/01  
 PERC. @ 34" + 18" = 9 MPI  
 SOIL TESTING BY DEAN MONSEES ON 9/7/00 WITNESSED BY HAROLD CHENEVERT, JR., SEEKONK BOARD OF HEALTH AGENT

**LOT 5 - DEEP OBSERVATION HOLE 3**  
 ORIGINAL ELEVATION - 140.00

DEPTH	HORIZON	TEXTURE	COLOR	MOTTLING	STRUCTURE	CONSISTENCE	OTHER
0 - 6"	A	SANDY LOAM	10 YR 3/3		MASSIVE	FRAGILE	GRAVELLY
6" - 30"	Bw	SANDY LOAM	10 YR 5/4		MASSIVE	FRAGILE	GRAVELLY, COBBLY
30" - 48"	Cd1	COARSE SANDY LOAM	10 YR 4/4		MASSIVE	CEMENTED	GRAVELLY, COBBLY
48" - 134"	Cd2	SANDY LOAM	2.5 Y 4/4		MASSIVE	FRAGILE	GRAVELLY, COBBLY, STONY

OBSERVED STANDING GROUNDWATER - 134"  
 GROUNDWATER READING - 132" ON 3/23/01  
 PERC. @ 22" = 22 MPI  
 SOIL TESTING BY DEAN MONSEES ON 9/7/00 WITNESSED BY HAROLD CHENEVERT, JR., SEEKONK BOARD OF HEALTH AGENT



**LOT INFORMATION**  
 9 LINDSEY COURT  
 ASSESSORS PLAT 26, LOT 161  
 HOLLAND WOODS LOT 5  
 ZONE - R-4  
 AREA = 88,179 S.F.

**LEGEND**

- 100' - EXISTING CONTOUR
- 100' - PROPOSED CONTOUR
- MA. STD. - MASSACHUSETTS STANDARD
- INV. - INVERT OF PIPE
- P.V.C. - POLYVINYL CHLORIDE PIPE
- S.D.R. - STANDARD DIMENSION RATIO
- R.C.P. - REINFORCED CONCRETE PIPE
- CONC. - CONCRETE (BIT. OR P.C.)
- BIT. - BITUMINOUS
- P.C. - PORTLAND CEMENT
- TYP. - TYPICAL
- F.G. 100X00 - FINISHED SPOT GRADE
- 100X00 - EXISTING SPOT GRADE
- T.C. - TOP OF CURB
- B.C. - BOTTOM OF CURB
- P.L. - PROPERTY LINE
- X-CLF-X- - CHAIN LINK FENCE
- ST - SEPTIC TANK
- DB - DISTRIBUTION BOX
- OH - DEEP OBSERVATION HOLE
- PH - PERCOLATION TEST HOLE

I CERTIFY THAT I HAVE CONTACTED THE SEEKONK WATER DISTRICT FOR THE LOCATION OF THE EXISTING WATER SERVICE CURB STOP FOR PLAT 26, LOT 161 AND WAS INFORMED THAT THERE IS NO CURB STOP CURRENTLY FOR THIS LOT. THE PROPOSED DWELLING WILL BE SERVED BY PRIVATE WELL TO BE INSTALLED IN CONFORMANCE WITH THE SEEKONK BOARD OF HEALTH REGULATIONS.

**SEWAGE DISPOSAL SYSTEM**  
 9 LINDSEY COURT  
 ASSESSORS PLAT 26 - LOT 161  
 SEEKONK, MASSACHUSETTS

**CAPUTO AND WICK LTD.**  
 Land Surveying, Civil Engineering,  
 Environmental Services, Traffic Engineering and  
 Architectural Engineering  
 110 PARTCREEK AVE.  
 HOLLAND, MA 01906-1897  
 TEL: 603-434-8880  
 FAX: 603-434-1615

DATE: AUGUST 2014  
 SHEET: 1