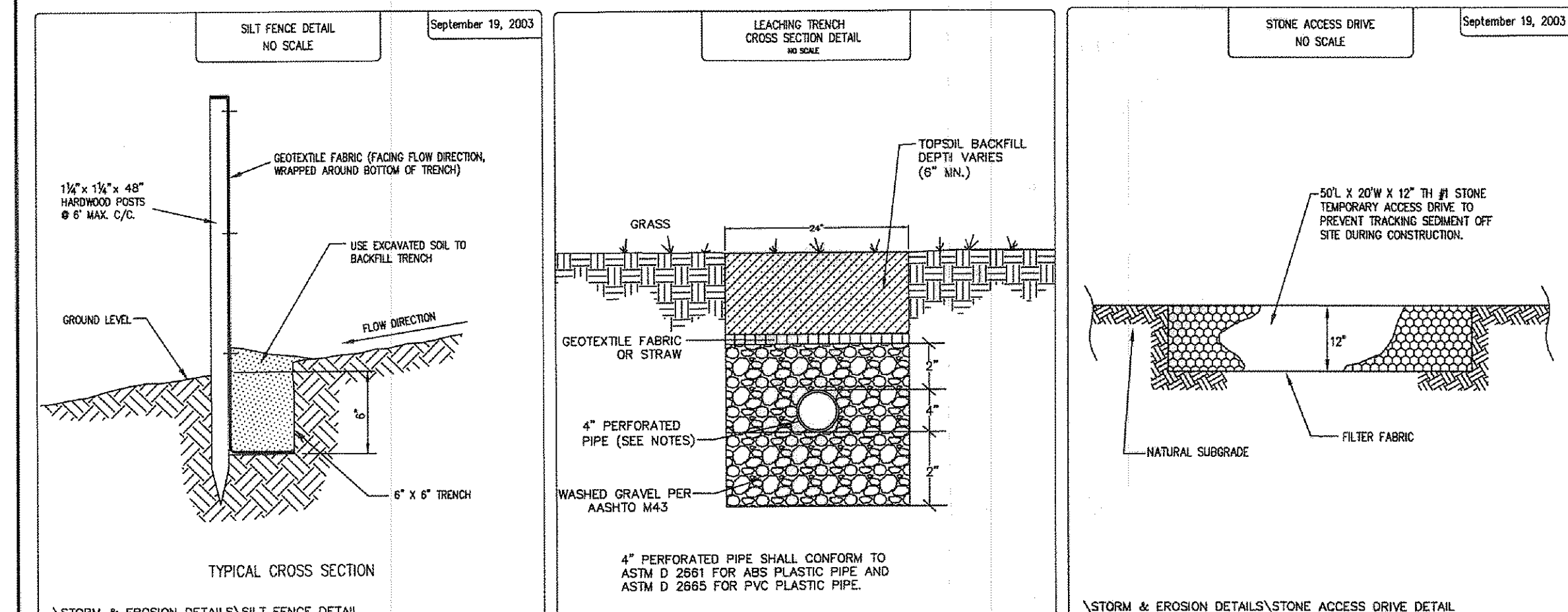


SEPTIC SYSTEM NOTES:
 THE SEPTIC SYSTEM SOIL ABSORPTION AREA SHALL BE STAKED OUT AND ROPED OFF OR FENCED OFF PRIOR TO START OF CONSTRUCTION. HEAVY EQUIPMENT SHALL BE OPERATED IN THESE AREAS, NO PARKING OR MATERIAL STORAGE SHALL OCCUR IN THESE AREAS. THESE AREAS SHALL REMAIN UNDISTURBED.
 THE SEPTIC SYSTEM SOIL ABSORPTION AREA SHALL BE FREE OF ANY SITE DISTURBANCE. IF ANY DISTURBANCE OR DAMAGE HAS OCCURRED, INSTALLATION SHALL NOT PROCEED AND THE REGISTERED INSTALLER SHALL CONTACT THE OWNER AND THE BOARD OF HEALTH.
 PRIOR TO EXCAVATION THE REGISTER INSTALLER SHALL CHECK ALL ELEVATIONS IN THE LAYOUT PLAN RELATIVE TO THE ESTABLISHED BENCHMARK INCLUDING THE SURFACE, CONTOUR AND PROPOSED BOTTOM ELEVATION OF EACH TRENCH AND THE FLOW LINE ELEVATION OF THE SITE COMPONENTS TO ASSURE PROPER FLOW THROUGH THE SYSTEM.
 WHEN SOIL CONDITIONS ARE SUITABLE, LEACHING TRENCHES SHALL BE INSTALLED TO MEET ALL OF THE SPECIFICATIONS AND REQUIREMENTS SET FORTH IN CHAPTER 3701-20-131 OF THE OHIO DEPARTMENT OF HEALTH RULES AND REGULATIONS. THE AS-BUILT RECORD SHALL PROVIDE SUFFICIENT DOCUMENTATION TO VERIFY THE TRENCH BOTTOM AND NATURAL SURFACE GRADE ELEVATIONS TO PROVE COMPLIANCE. LEACHING TRENCH MATERIAL SHALL BE PLACED IN A MANNER THAT PREVENTS COMPACTION OF THE INFILTRATIVE SURFACE. OPEN TRENCHES SHALL BE AVOIDED FOR ANY LENGTH OF TIME TO PREVENT IMPACTS FROM SEDIMENTS IN RUNOFF AND WINDBLOWN SILT.
 SUITABLE BACK FILL AND COVER MATERIAL AS REQUIRED IN THIS RULE OR PROPRIETARY COMPONENT SPECIFICATIONS SHALL NOT BE COMPACTED AND SHALL ALLOW FOR SETTLEMENT UNLESS OTHERWISE SPECIFIED BY THE PROPRIETARY PRODUCT INSTALLATION INSTRUCTIONS. THE COMPLETE SITE AREA SHALL BE PROTECTED FROM EROSION THROUGH SURFACE WATER DIVERSION AND PROVISION OF SUITABLE VEGETATIVE COVER, MULCHING, OR OTHER SPECIFIED MEANS OF PROTECTION.
 A LEACHING TRENCH SOIL ABSORPTION COMPONENT SHALL BE SITED TO AVOID NATURAL DRAINAGE FEATURES AND DEPRESSIONS THAT MAY HOLD SURFACE WATER. THE LEACHING TRENCH SHALL NOT BE SITED ON SLOPES GREATER THAN FIFTY PERCENT UNLESS THE SITE PLAN INCLUDES SPECIAL INSTALLATION CRITERIA. SITES WITH LARGE TREES OR NUMEROUS SMALLER TREES ARE LESS DESIRABLE FOR LEACHING TRENCHES AND SUCH CONDITIONS SHALL BE AVOIDED OR SHALL BE IDENTIFIED AND ADDRESSED.
 SOIL MOISTURE CONDITIONS SHALL BE EVALUATED AT THE TIME OF INSTALLATION, AND THE EXCAVATION OR PREPARATION OF THE SOIL INFILTRATION INTERFACE, SUCH AS A TRENCH OR BASIN AREA, SHALL NOT PROCEED WHEN THERE IS A RISK OF SHEARING OR COMPACTION AS EVIDENCED BY A DEFORMABILITY TEST, COMMONLY REFERRED TO AS REBBERING, OR OTHER MEANS ESTABLISHED BY THE BOARD OF HEALTH.
 A BUILDING SEWER SHALL BE WATER-TIGHT, HAVE A MINIMUM DIAMETER OF FOUR INCHES AND BE CONSTRUCTED OF DURABLE MATERIAL CONFORMING TO ASTM D 2681 FOR ABS PLASTIC PIPE AND ASTM D 2685 FOR PVC PLASTIC PIPE (TYPE DWV) OR EQUIVALENT. PIPE FITTINGS AND JOINTING MATERIALS SHALL BE CHECKED AND PHYSICALLY COMPATIBLE.
 CLEANOUTS SHALL BE REQUIRED IN A BUILDING SEWER AT ANY TURN IN THE PIPE GREATER THAN FORTY-FIVE DEGREES AND AT THE POINT A BUILDING SEWER PIPE EXCEEDS ONE HUNDRED FEET AND AT EVERY ONE HUNDRED FEET INTERVAL THEREAFTER.
 CASINGS SHALL BE PROVIDED IN AREAS WHERE A BUILDING SEWER MAY BE SUBJECT TO LOADS WHICH MAY CAUSE DAMAGE.
 PROPRIETARY SOIL ABSORPTION COMPONENTS OR ALTERNATIVE AGGREGATE PRODUCT SPECIFIED IN AN APPROVED DESIGN PLAN OR LAYOUT PLAN SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PRODUCT SPECIFICATIONS PROVIDED THESE DO NOT CONFLICT WITH REQUIREMENTS SET FORTH BY THE BOARD OF HEALTH.
 BASELINE RECORDS AND ANY SOIL ABSORPTION COMPONENT OPERATION AND MAINTENANCE INSTRUCTIONS SHALL BE PROVIDED BY THE INSTALLER TO BOTH THE OWNER AND THE BOARD OF HEALTH AS A CONDITION ON INSTALLATION APPROVAL.
 THE STS INSTALLER IS REQUIRED TO CONSULT WITH THE DESIGNER REGARDING ANY INTENDED CHANGES TO THE PLAN.
 THE STS INSTALLER SHALL COORDINATE WITH THE DESIGNER FOR THE PROVISION OF AN ACCURATE AS-BUILT RECORD.
 FOLLOWING INSTALLATION AND BEFORE ITS APPROVAL BY THE BOARD OF HEALTH, THE RESPONSIBLE PARTY AND/OR THE REGISTERED INSTALLER SHALL CONDUCT A START-UP PROCEDURE AND DOCUMENT BASELINE MEASUREMENTS NEEDED FOR FUTURE O&M AND MONITORING. BASELINE MEASUREMENTS AND MONITORING INFORMATION SHALL INCLUDE BUT IS NOT LIMITED TO DOSE RATES AND FLUSHING FLOW RATES FOR EACH ZONE AND CALCULATION OF DAILY FLOW AVERAGING. AS-BUILT RECORDS INCLUDING BASELINE MEASUREMENTS AND O&M INSTRUCTIONS SHALL BE PROVIDED TO THE OWNER, SERVICE PROVIDER, AND BOARD OF HEALTH.
 THE OWNER SHALL BE REQUIRED TO HIRE AN APPROVED SEPTIC HAULER (PER RULE 3701-20-02 OF THE ADMINISTRATIVE CODE) TO PUMP THE SEPTIC TANK AS REQUIRED BASED UPON FLOWS, SOLID BUILD UP, ETC.
 THE OWNER SHALL BE RESPONSIBLE FOR ALL OPERATION AND MAINTENANCE (O&M) REQUIRED FOR THE SEPTIC SYSTEM.
 ALL O&M SHALL BE PER MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS FOR THE PARTICULAR SYSTEM COMPONENT.
SEPTIC TANK NOTES:
 1. SEPTIC TANKS MUST BE STRUCTURALLY SOUND, WATER-TIGHT, AND OF PROPER CAPACITY.
 2. JOINT SEALANTS / CONNECTIONS SHALL BE WATER-TIGHT AND SHALL MEET ASTM C900.
 3. INLET AND OUTLET PIPE CONNECTIONS TO THE TANKS MUST BE WATER-TIGHT AND MEET ASTM C 902.
 4. CONTRACTOR MUST PERFORM A WATER LEAKAGE TEST ON THE TANKS AFTER INSTALLATION AS PER OCM REQUIREMENTS.
 5. TANK CAPACITY REQUIREMENTS ARE AS FOLLOWS:
 1-2 BEDROOMS -1000 GALLONS
 3 BEDROOMS -1500 GALLONS (TWO COMPARTMENTS)
 4-5 BEDROOMS -2000 GALLONS (TWO COMPARTMENTS)
 6 OR MORE BEDROOMS -4000 GALLONS PLUS 250 GALLONS PER ADDITIONAL BEDROOM (2 COMPARTMENTS)
 6. WHEN USING 2 COMPARTMENT TANKS, THE FIRST COMPARTMENT MUST NOT BE LESS THAN ONE HALF OR MORE THAN TWO THIRDS OF THE TOTAL CAPACITY.
 7. WHEN USING TANKS IN A SERIES, THE FIRST TANK, IF OF A DIFFERENT SIZE, SHALL BE THE LARGER TANK.
 8. THE INLET LEVEL OF THE INLET SHALL BE NOT LESS THAN TWO INCHES ABOVE THE LIQUID LEVEL OF THE TANK. A VENTED INLET BATTLE OR ICE SHALL OVER THE INCOMING SEWER DOWNWARD PENETRATING AT LEAST SIX INCHES BELOW THE LIQUID LEVEL, BUT SHALL NOT BE GREATER THAN THAT FOR THE OUTLET DEVICE.
 9. THE OUTLET SHALL BE FITTED WITH A VENTED ICE OR BATTLE THAT SHALL EXTEND NOT LESS THAN SIX INCHES ABOVE AND NOT LESS THAN EIGHTEEN INCHES BELOW THE LIQUID LEVEL OF THE TANK, AND SHALL INCLUDE AN EFFLUENT FILTER OR BATTLE THAT RETAINS SOLIDS GREATER THAN ONE SIXTEENTH OF AN INCH IN SIZE.
 10. THE SEPTIC TANK SHALL HAVE A LIQUID DRAWING DEPTH OF NOT LESS THAN FOUR FEET AND THE AIR GAP BETWEEN THE LIQUID LEVEL AND INTERNAL SURFACE OF THE TOP OF THE TANK SHALL BE AT LEAST ONE INCH.
 11. SEPTIC TANK ACCESS OPENINGS SHALL BE LOCATED ABOVE THE INLET AND THE OUTLET OF THE TANK, ALLOWING AN ADEQUATE SPACE FOR PUMPING, INSPECTION, OR MAINTENANCE. THE COVER OF THE ACCESS RISER SHALL WEIGH A MINIMUM OF 65 POUNDS OR BE SECURED AGAINST UNAUTHORIZED ACCESS.
 12. THE TANK SHALL BE INSTALLED WITH A MINIMUM OF TWO WATER-TIGHT RISERS EXTENDING TO GRADE OR ABOVE TO PROVIDE ACCESS TO THE INLET AND THE OUTLET OF THE TANK. THE CONNECTION OF THE RISER TO THE TANK SHALL INCORPORATE JOINT GROOVES OR ADAPTORS TO PREVENT LATERAL MOVEMENT OF THE RISERS. RISER LIDS SHALL PREVENT INFILTRATION OF WATER AND HAVE SECURED COVERS.
 13. THE SEPTIC TANK SHALL BE INSTALLED, BEDDED, AND BACKFILLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS TO ASSURE THE STRUCTURAL INTEGRITY OF THE TANK. THE TANK SHALL BE LEVEL, TO ALLOW FOR EASE OF ACCESS. THE TANK SHALL BE INSTALLED NO DEEPER THAN TWO FEET BELOW GRADE UNLESS THE TERMS OF THE INSTALLATION PERMIT ALLOW FOR GREATER SEPTIC TANK DEPTH AND THE TANK IS DESIGNED TO WITHSTAND THE ADDITIONAL LOAD.



STORM & EROSION DETAILS/SILT FENCE DETAIL

Temporary Seeding Specifications

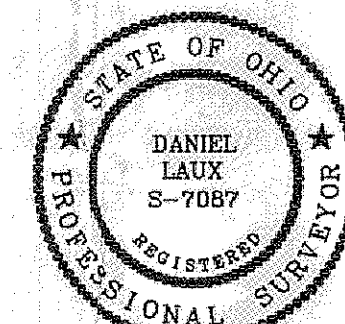
Seeding Dates	Species	Lb. / 1000sqft	Per Acre
March 1 to August 15	Oats	3	4 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
August 16 to November 1	Rye	1	2 bushel
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Wheat	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
	Perennial Ryegrass	1	40 lb.
	Tall Fescue	1	40 lb.
	Annual Ryegrass	1	40 lb.
November 1 to Spring Seeding	Use mulch only, seeding practices or dormant seeding		

Note: other approved seed species may be substituted.

APPROVED
 20110047 4-24-2011
 PERMIT #
 Painesville Township
 Zoning Inspector

I, THE UNDERSIGNED, HEREBY STATES THAT THIS TOPOGRAPHY, INDICATED BY 6", 1", OR 2" CONTOURS, AND ELEVATIONS SHOWN HEREON, REPRESENT AN ACTUAL FIELD SURVEY MADE BY ME ON THE 6th DAY OF March, 2007, AND THAT THE ELEVATIONS WERE TAKEN AT APPROPRIATE INTERVALS AND THAT AS OF THAT DATE, THEY EXISTED AS INDICATED HEREON.

DANIEL LAUX, P.S. 7087



EROSION AND SEDIMENT CONTROL SCHEDULE

INGRESS-EGRESS ✓
 A STONE ACCESS DRIVE COMPLETE WITH UNDER LYING GEO-TEXTILE FABRIC (20 FEET WIDE AND 50 FEET LONG) FOR INGRESS AND EGRESS AT THE SITE SHALL BE INSTALLED. THIS DRIVE SHALL BE THE ONLY ENTRANCE AND EXIT TO THE SITE.

SILT FENCE ✓
 ALL SILT FENCE SHALL BE INSTALLED PRIOR TO ANY EARTHWORK ACTIVITIES AT THE SITE IN THE LOCATIONS SHOWN ON THE SITE PLAN AS WELL AS ALONG THE FRONT OF ANY LOT THAT SLOPES TOWARDS THE STREET.

TEMPORARY SEEDING ✓
 DISTURBED AREAS ON THE SITE THAT ARE TO REMAIN IDLE FOR MORE THAN TWENTY-ONE(21) DAYS SHALL BE PROPERLY SEEDING AND STRAW MULCHED WITHIN SEVEN (7) DAYS OF COMPLETION OF INITIAL GRADING. TEMPORARY SEEDING AND MULCHING OF A THIRTY (30) FOOT STRIP OF THE ENTIRE FRONT OF THE LOT SHALL BE MAINTAINED ON THE SITE ONCE INITIAL GRADING IS COMPLETE.

STABILIZATION OF CRITICAL AREAS ✓
 WITHIN FIFTY (50) FEET OF ANY STREAM OR WETLAND SHALL BE COMPLETE WITHIN TWO (2) DAYS OF THE DISTURBANCE IF THE SITE IS TO REMAIN INACTIVE FOR LONGER THAN FOURTEEN (14) DAYS.

MULCHING ✓
 STRAW-MULCH SHALL BE APPLIED AT A RATE OF 1 BALE PER EVERY TEN (10) FEET OF CURB, AT A WIDTH OF TWENTY-ONE(21) FEET OF THE ENTIRE LENGTH OF THE LOT. WOOD CHIPS MAY BE USED BUT MUST BE SPREAD AT A MINIMUM DEPTH OF FOUR INCHES OVER THE THIRTY-FOOT WIDTH AND MUST BE ACCOMPANIED BY A PROPERLY INSTALLED SILT FENCE.

MAINTENANCE ✓
 EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED EVERY SEVEN (7) DAYS OR WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL EVENT. NECESSARY REPAIRS SHALL BE MADE AT THIS TIME.

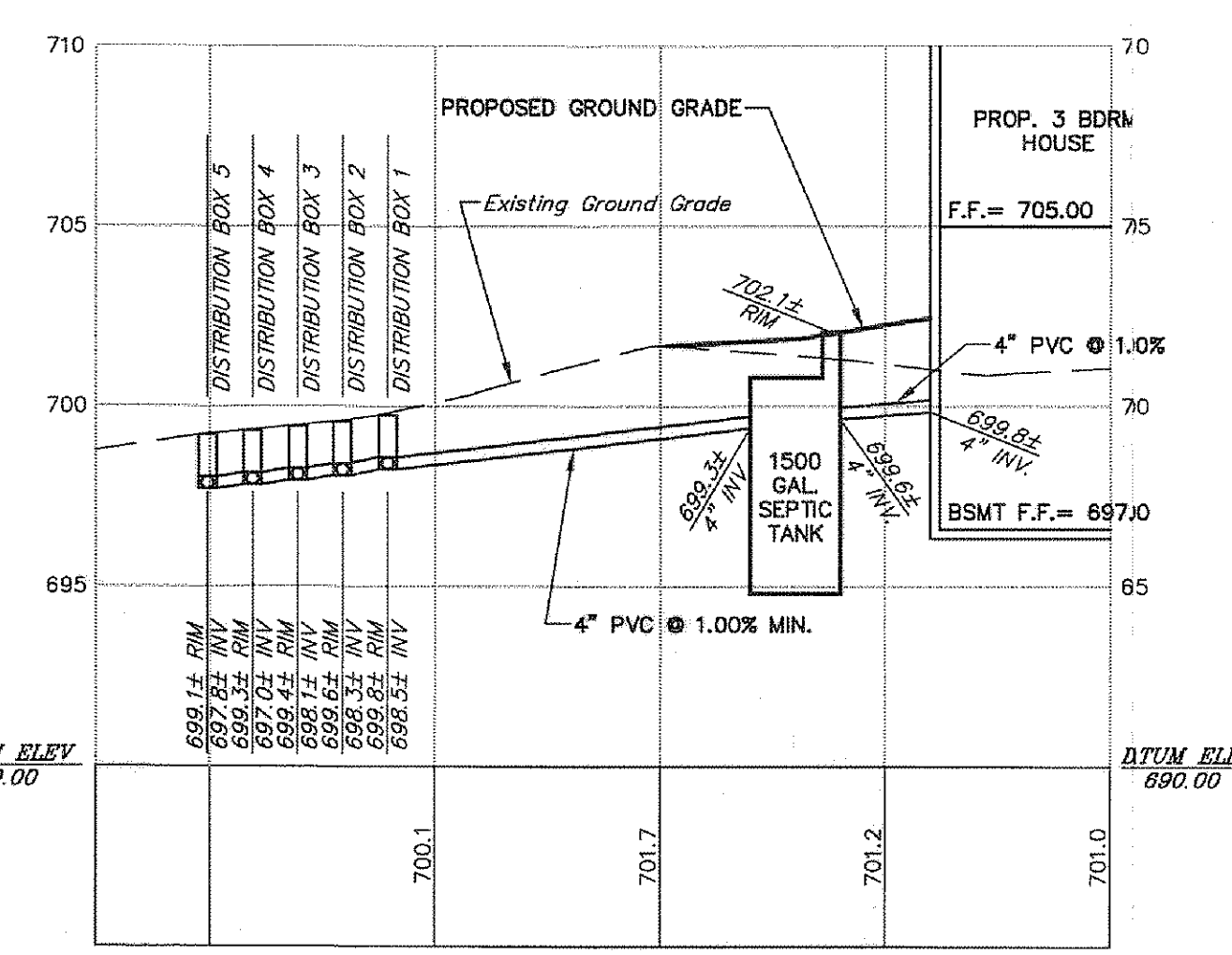
NOTE: ALL EROSION AND SEDIMENT CONTROL SPECIFICATIONS, APPLICATIONS, AND DETAILABLES ARE BASED ON THE DESCRIPTIONS AND STANDARDS OF THE OHIO DEPARTMENT OF NATURAL RESOURCES' "RAINWATER AND LAND DEVELOPMENT MANUAL" AND CAN BE FOUND IN THE LAKE COUNTY EROSION AND SEDIMENT CONTROL RULES AS ADOPTED DECEMBER 21, 1999.

THE SPECIFIED EROSION AND SEDIMENT CONTROL STANDARDS ARE GENERAL GUIDELINES AND SHALL NOT LIMIT THE RIGHT OF THE COUNTY TO IMPOSE, AT ANY TIME, ADDITIONAL, MORE STRINGENT REQUIREMENTS. NOR SHALL THE STANDARDS LIMIT THE RIGHT OF THE COUNTY TO ADOPT, IN WRITING, INDIVIDUAL REQUIREMENTS.

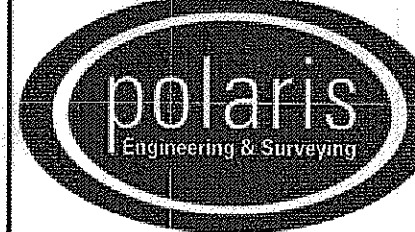
Section Used For House Elevations:
 Fin.Cor. + 12" = Top/Block
 Top/Block + 12" = Fin.Fir.
 Top/Block - 7'-4" = Top/Footer
 (11 Course Basement)
 Top/Footer + 4"(0.33") = Bsmt.Fir.

NOTE: THIS SURVEY SUBJECT TO CHANGE UPON RECEIPT OF ANY ADDITIONAL AVAILABLE UNDERGROUND UTILITY INFORMATION.

SEPTIC DESIGN DATA:
 -Linear Loading Rate = 5.5 Gal/Day/Ft
 -Infiltration Loading Rate = 0.6 Gal/Day/Flt.s/d
 -Field Area Required = 600 Sq.Ft.
 -Field Area Shown = 700 Sq.Ft. (Requisition)
 -System Length = 360/5.5 = 65 Ft. Use 70 Ft.
 -System Width = 5.5/0.6 = 9.2' Use 10'(5'-2" Wide Trenches)
 -Perched Seasonal Water Table >4'
 -Bedrock >46'
 -3 Bedroom House = 380 Gal/Day



HYDRAULIC PROFILE
 HORIZ. SCALE: 1"= 40'
 VERT. SCALE: 1"= 5'



POLARIS ENGINEERING & SURVEYING, INC.
 34600 CHARDON ROAD - SUITE D
 WILLOUGHBY HILLS, OHIO 44094
 (440) 944-4433 (440) 944-3722 (Fax)
 www.polaris-es.com

DESIGN CERTIFICATION
 THIS PLAN WAS PREPARED BY ME, AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

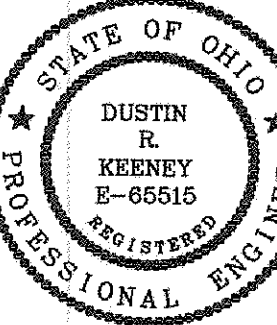
NAME: *Walter L. Zeng* DATE: 4/26/11

BENCHMARK:
 B.M. = T.B.M Set On Top Of Hydrant
 Located As Noted On Country Lane Drive
 Elevation 702.67

"AS-BUILT" CERTIFICATION
 I HEREBY CERTIFY THAT THE CIRCLED INFORMATION IS EXISTING AS OBTAINED ON THE SITE AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NAME: _____ DATE: _____

SITE PLAN - LOT D
COUNTRY LANE DR.
 PAINESVILLE TOWNSHIP - LAKE COUNTY - OHIO



Stormwater Management Plan
 Approved as shown and/or noted
 JAMES R. GILLS, P.E.
 County Drainage Engineer
 By *LS* Date *5/23/11*