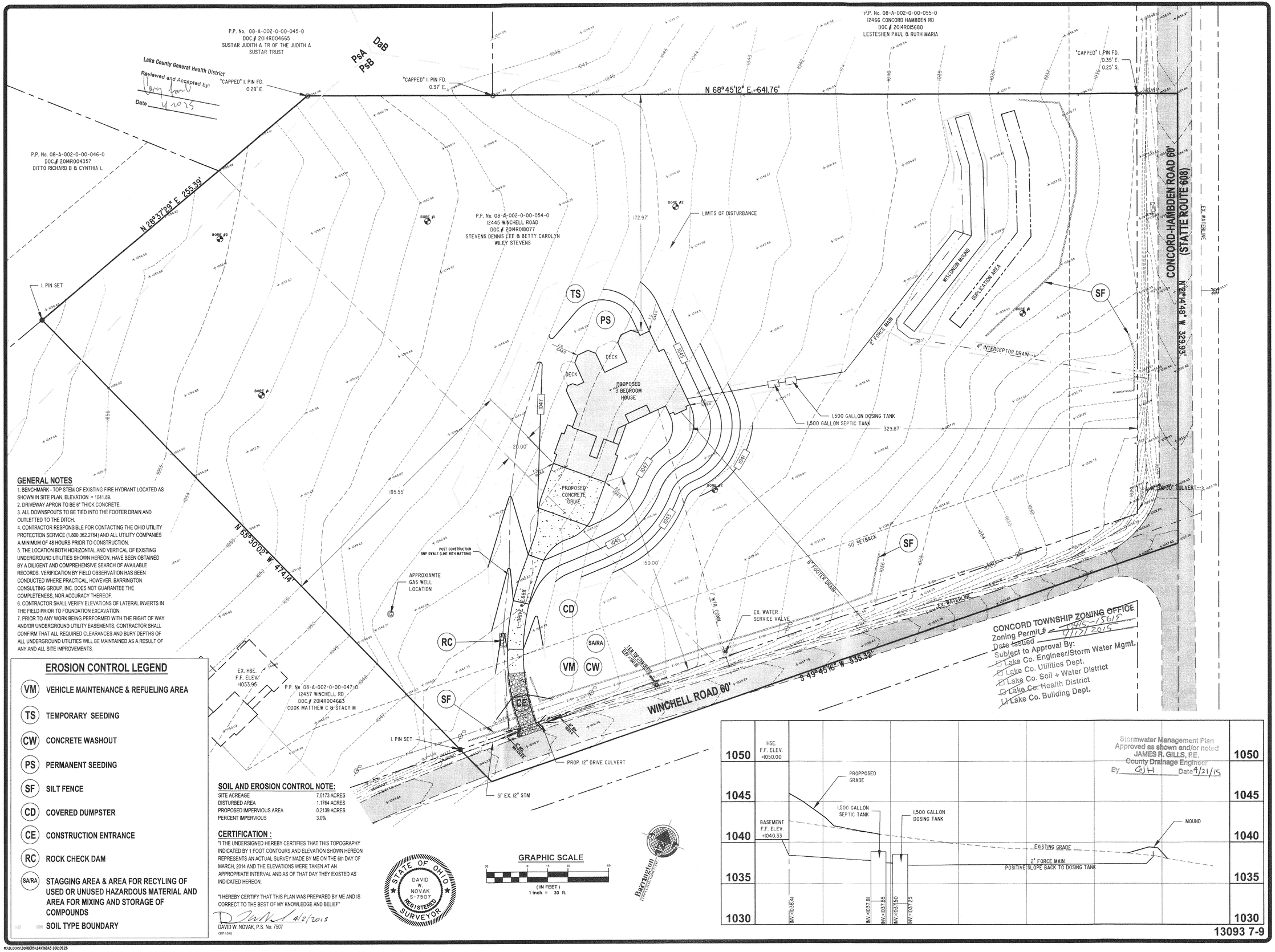


GENERAL NOTES

1. BENCHMARK - TOP STEM OF EXISTING FIRE HYDRANT LOCATED AS SHOWN IN SITE PLAN. ELEVATION = 1041.89.
2. DRIVEWAY APRON TO BE 6" THICK CONCRETE.
3. ALL DOWNSPOUTS TO BE TIED INTO THE FOOTER DRAIN AND OUTLETTED TO THE DITCH.
4. CONTRACTOR RESPONSIBLE FOR CONTACTING THE OHIO UTILITY PROTECTION SERVICE (1.800.362.2764) AND ALL UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION.
5. THE LOCATION BOTH HORIZONTAL AND VERTICAL OF EXISTING UNDERGROUND UTILITIES SHOWN HEREON, HAVE BEEN OBTAINED BY A DILIGENT AND COMPREHENSIVE SEARCH OF AVAILABLE RECORDS. VERIFICATION BY FIELD OBSERVATION HAS BEEN CONDUCTED WHERE PRACTICAL, HOWEVER, BARRINGTON CONSULTING GROUP, INC. DOES NOT GUARANTEE THE COMPLETENESS, NOR ACCURACY THEREOF.
6. CONTRACTOR SHALL VERIFY ELEVATIONS OF LATERAL INVERTS IN THE FIELD PRIOR TO FOUNDATION EXCAVATION.
7. PRIOR TO ANY WORK BEING PERFORMED WITH THE RIGHT OF WAY AND/OR UNDERGROUND UTILITY EASEMENTS, CONTRACTOR SHALL CONFIRM THAT ALL REQUIRED CLEARANCES AND BURY DEPTHS OF ALL UNDERGROUND UTILITIES WILL BE MAINTAINED AS A RESULT OF ANY AND ALL SITE IMPROVEMENTS.

EROSION CONTROL LEGEND

- (VM) VEHICLE MAINTENANCE & REFUELING AREA
- (TS) TEMPORARY SEEDING
- (CW) CONCRETE WASHOUT
- (PS) PERMANENT SEEDING
- (SF) SILT FENCE
- (CD) COVERED DUMPSTER
- (CE) CONSTRUCTION ENTRANCE
- (RC) ROCK CHECK DAM
- (SA/RA) STAGGING AREA & AREA FOR RECYLING OF USED OR UNUSED HAZARDOUS MATERIAL AND AREA FOR MIXING AND STORAGE OF COMPOUNDS
- SOIL TYPE BOUNDARY

SOIL AND EROSION CONTROL NOTE:

SITE ACREAGE	7.0173 ACRES
DISTURBED AREA	1.1764 ACRES
PROPOSED IMPERVIOUS AREA	0.2139 ACRES
PERCENT IMPERVIOUS	3.0%

CERTIFICATION :

"I THE UNDERSIGNED HEREBY CERTIFIES THAT THIS TOPOGRAPHY INDICATED BY 1 FOOT CONTOURS AND ELEVATION SHOWN HEREON REPRESENTS AN ACTUAL SURVEY MADE BY ME ON THE 6th DAY OF MARCH, 2014 AND THE ELEVATIONS WERE TAKEN AT AN APPROPRIATE INTERVAL AND AS OF THAT DAY THEY EXISTED AS INDICATED HEREON.

"I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF"

4/2/2015
DAVID W. NOVAK, P.S. No. 7507

STATE OF OHIO · DAVID W. NOVAK · S-7507 · REGISTERED SURVEYOR

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

Stormwater Management Plan
Approved as shown and/or noted
JAMES R. GILLS, P.E.
County Drainage Engineer
By GJH Date 4/21/15

13093 7-9

REVISIONS	BY
REVISED PER LCHD APR. 2, 2015	WSO

Barrington
CONSULTING GROUP, INC.
9114 TYLER BLVD., MENTOR, OHIO 44060
PHONE 440.205.1260 FAX 440.205.1262
www.BarringtonCGI.com

PROBUILT HOMES, INC.
GEORGE DAVIS
P.O. BOX 384
MENTOR, OHIO 44060
PH:440.255.6535/FAX:440.974.8360

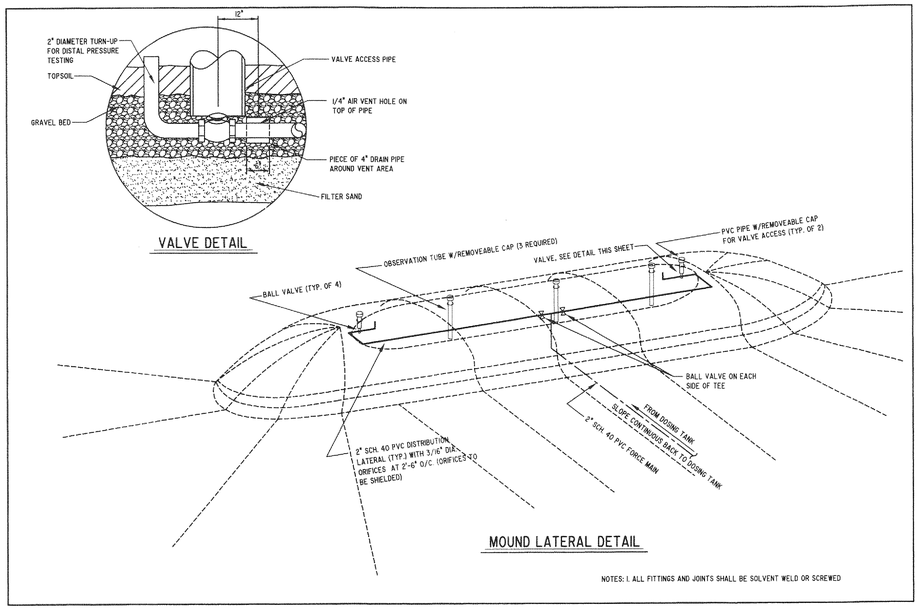
SITE / SWP3 PLAN

12445 WINCHELL ROAD
CONCORD TWP., OHIO 44077

STEVENS RESIDENCE

DRAWN	WSO
CHECKED	DWN
DATE	MAR. 13, 2015
SCALE	H:1"=30'/V:1"=5'
JOB NO.	13093 7-9
SHEET	1/4
OF	SHEETS

W:\BLOCKS\BORDERS\24X36BAS 2SE.09.26

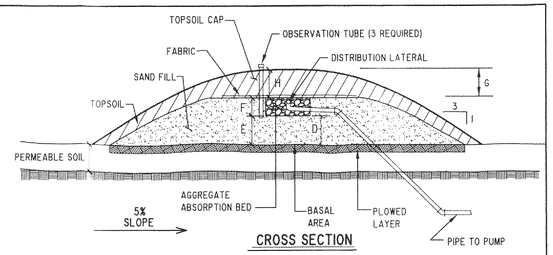


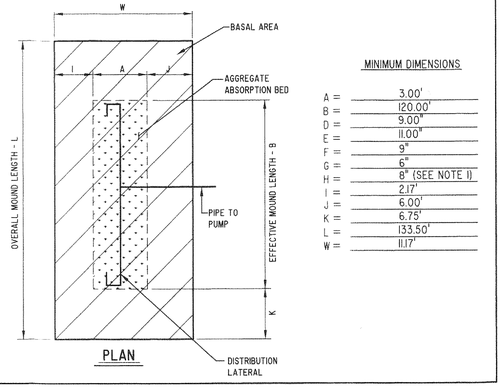
MOUND SAND FILL MUST MEET THE REQUIREMENTS OF FIGURE 5 (WISCONSIN MOUND SOIL ABSORPTION SYSTEM: SITTING, DESIGN AND CONSTRUCTION MANUAL) WHICH IS INCLUDED IN THE DESIGN PACKET. MOUND SAND LOADING RATE SHALL NOT EXCEED 1.0 GAL/DAY/SF. (PER MANUAL RECOMMENDATIONS)

MOUND CALCULATIONS	
NIMBER OF BEDROOMS	3
BASE FLOW RATE (GPD)	360
DIVERSITY FACTOR	-
DESIGN FLOW RATE (GPD)	360
EFFECTIVE MOUND LENGTH	120.00'
OVERALL MOUND LENGTH	133.50'
DESIGN LINEAR LOADING RATE (GPD/LF)	3.00
DESIGN SAND LOADING RATE (GPD/SF)	1.00
MAXIMUM ALLOWABLE BASAL LOADING RATE (GPD/SF)	0.60
ABSORPTION BED AREA (SF)	360

NOTE: 1. THE ENTIRE MOUND SHALL HAVE A MIMIMUM OF 6" OF SETTLED TOPSOIL, BUT THE CENTER SHALL BE CROWNED TO 8" MINIMUM TO PROMOTE RUNOFF.

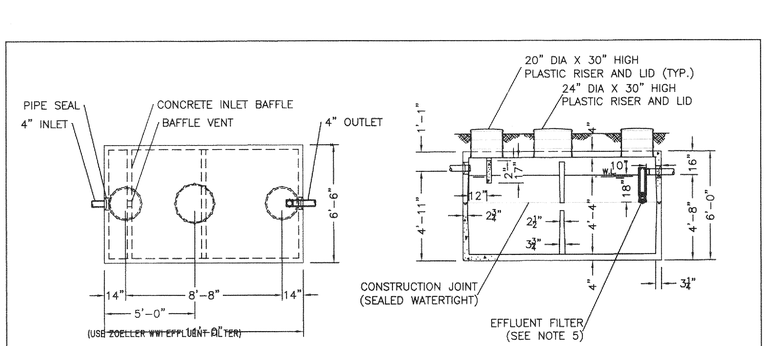
2. ORIFICES SHALL BE PLACED UPWARD EXCEPT FOR THE FIRST AND LAST ONE IN EACH LATERAL. EACH LATERAL SHALL BE PLACED INSIDE A 4" PERFORATED PIPE IN ORDER TO PROVIDE ORIFICE SHIELDING. OTHER SHIELDING METHODS MAY BE USED IF APPROVED BY THE LAKE COUNTY HEALTH DEPARTMENT.





MINIMUM DIMENSIONS

A =	3.00'
B =	120.00'
D =	9.00"
E =	11.00"
F =	9"
G =	6"
H =	8" (SEE NOTE 1)
I =	2.17'
J =	6.00'
K =	6.75'
L =	133.50'
W =	11.17'



(1500 GALLON VERSION TO BE MODIFIED & USED AS DOSING TANK)

NOTES:

1. REINFORCED PRECAST CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 5000 PSI @ 28 DAYS.
2. PRECAST CONCRETE TANK SHALL MEET OR EXCEED SPECIFICATIONS AS SET BY O.A.C. RULE 3701-293-11.
3. CONCRETE JOINT SEALANT CONFORMS TO ASTM C-990.
4. TANK SEALS CONFORM TO ASTM C-923.
5. EFFLUENT FILTER RETAINS SOLIDS GREATER THAN 1/16" AND CONFORMS TO ASTM C-1227.
6. STAMP OR LABEL TOP OF TANK AS FOLLOWS:
   MACK INDUSTRIES LOGO
   2000 GAL. TANK CAPACITY
   DATE OF MANUFACTURE

STATE APPROVAL PENDING

DUAL COMPARTMENT 2000 GALLON SEPTIC TANK			
O.D.H. 2007 COMPLIANCE, OAC RULE 3701-29-11			
DRAWN BY: CJ	SCALE: 1/4"=1'-0"	DRAWING NO.:	
DATE: 4/5/07	REV:	D 1000 GAL	

MACK INDUSTRIES, INC.
201 COLUMBIA ROAD, VALLEY CITY, OHIO 44280 (330) 483-3111

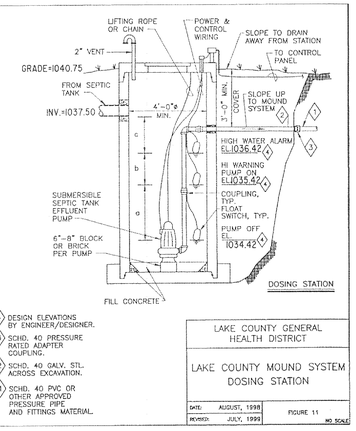
NOTES:

1. DESIGN STATION AND BASE TO PREVENT FLOTATION IN AREAS OF HIGH GROUND WATER.
2. ALL JOINTS AND PENETRATIONS SHALL BE WATERTIGHT TO PREVENT INFILTRATION OF GROUND/SURFACE WATER.
3. STATION PUMP SHALL BE DESIGNED TO DOSE THE MOUND BETWEEN 4-8 CYCLES.
4. FORCE MAIN, DISTRIBUTION LATERAL DESIGN AND DETAILED STATION INCLUDING DIMENSIONS, AND ELEVATIONS SHALL BE SUPPORTED BY CALCULATIONS AND OTHER APPROPRIATE DOCUMENTATION IN PLAN SUBMITTALS.
5. INSTALLATION SHALL MEET ALL APPLICABLE CODES/CRITERIA.
6. CONTROL PANEL WITH VISUAL AND AUDIBLE HIGH LEVEL ALARM SHALL BE LOCATED IN THE GARAGE, BASEMENT OR OTHER SUITABLE INDOOR LOCATION.
7. SPECIAL CONSIDERATION SHALL BE GIVEN WHEN DESIGNING A DOWNHILL PUMPING APPLICATION TO PREVENT SIPHONING. PROVIDE A BLEEDER HOLE TO PREVENT SIPHONING.
8. WET WELL CAPACITY TO ACCOUNT FOR PIPING DRAINING BACK TO DOSING STATION.
9. THE FOLLOWING TABLE INDICATES THE NECESSARY VOLUME CAPACITY BETWEEN FLOATS:

LOCATION	RECOMMENDED MINIMUM VOLUME CAPACITY
BETWEEN PUMP OFF FLOAT & WARNING PUMP	.75*DDF+DPV (a)
BETWEEN WARNING PUMP FLOAT & HIGH WATER ALARM FLOAT	.25*DDF+DPV (b)
ALARM FLOAT TO THE DOSING CHAMBER INLET	DDF (c)

DDF - DAILY DESIGN FLOW
DPV - DISCHARGE PIPE VOLUME

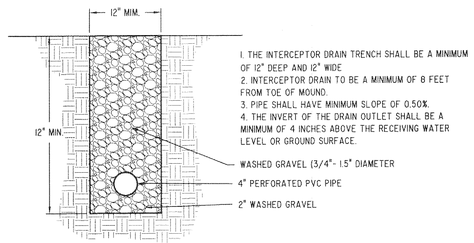
2000 GALLON SEPTIC TANK TO BE MODIFIED FOR USE AS DOSING TANK



LAKE COUNTY GENERAL HEALTH DISTRICT

LAKE COUNTY MOUND SYSTEM DOSING STATION

DATE: AUGUST, 1998 | FIGURE 11
REVISED: JULY, 1999 | NO SCALE



1. THE INTERCEPTOR DRAIN TRENCH SHALL BE A MINIMUM OF 12" DEEP AND 12" WIDE.
2. INTERCEPTOR DRAIN TO BE A MINIMUM OF 8 FEET FROM TOE OF MOUND.
3. PIPE SHALL HAVE MINIMUM SLOPE OF 0.50%.
4. THE INVERT OF THE DRAIN OUTLET SHALL BE A MINIMUM OF 4 INCHES ABOVE THE RECEIVING WATER LEVEL OR GROUND SURFACE.

TYPICAL INTERCEPTOR DRAIN CROSS SECTION

SEPTIC SYSTEM NOTES:

1. ALL ASPECTS OF THE SEPTIC SYSTEM SHALL ADHERE TO THE REGULATIONS OF THE BOARD OF HEALTH OF THE LAKE COUNTY GENERAL HEALTH DISTRICT PART (CHAPTER) 29 "SEWAGE TREATMENT RULES"
2. THE FULL 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.
3. THE SYSTEM MUST BE INSTALLED WHEN THE SOILS ARE DRY. THE INSTALLATION OF A SYSTEM IN WET CONDITIONS CAN CAUSE SOIL COMPACTION AND SMEARING WHICH LEADS TO SYSTEM FAILURE.
4. PRIOR TO EXCAVATION, THE REGISTERED INSTALLER SHALL CHECK ALL ELEVATIONS IN THE LAYOUT PLAN RELATIVE TO THE ESTABLISHED BENCHMARK.
5. THE INSTALLER MUST BE REGISTERED AND APPROVED PER O.A.C. 3701-29-04.1.
6. THE SYSTEM INSTALLER SHALL CONSULT WITH THE DESIGNER PRIOR TO ANY INTENDED CHANGES TO THE SYSTEM .
7. THE SYSTEM INSTALLER SHALL COORDINATE WITH THE DESIGNER IN ORDER TO PROVIDE AN ACCURATE AS-BUILT.
8. THE PROPOSED SEPTIC FIELD AREA AND DUPLICATION AREA SHALL BE ROPED OFF PRIOR TO THE START OF ANY CONSTRUCTION TO PREVENT DISTURBANCE TO THE AREAS.
9. THE MOUNDS SHALL NOT BE INSTALLED WHERE GROUND SLOPES EXCEED 15%.
10. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE.
11. BASEMENT SERVICE BY GRAVITY NOT ATTAINABLE. PUMP REQUIRED TO SERVICE BASEMENT.

SEPTIC SYSTEM DESIGN NOTES

THIS PARTICULAR PROJECT WAS DESIGNED FOR A THREE BEDROOM HOUSE PRODUCING AN AVERAGE FLOW OF 216 GALLONS PER DAY AND HAVING RESIDENTIAL STRENGTH WASTEWATER OF 140 MG/L OF BOD(5). THE SYSTEM DESIGN IS CAPABLE OF ACCOMMODATING PEAK FLOW OF UP TO 360 GALLONS PER DAY AND WASTEWATER STRENGTHS NOT TO EXCEED 250 MG/L OF BOD(5) FOR SHORT PERIODS OF TIME.

THE SEPTIC SYSTEM DESIGN IS BASED UPON A SOIL REPORT PREPARED BY JIM FINCHAM DATED NOVEMBER 19, 2013.

REVISIONS	BY
REVISED PER LCHD APR. 2, 2015	WSO

Barrington
CONSULTING GROUP, INC.
9114 TYLER BLVD., MENTOR, OHIO 44060
PHONE 440.205.1260 FAX 440.205.1262
www.BarringtonCGI.com

PROBUILT HOMES, INC.
GEORGE DAVIS
P.O. BOX 384
MENTOR, OHIO 44060
PH:440.255.6535/FAX:440.974.8360

SEPTIC DETAILS
12445 WINCHELL ROAD
CONCORD TWP., OHIO 44077

STEVENS RESIDENCE

DRAWN	WSO
CHECKED	DWN
DATE	MAR. 18, 2015
SCALE	NONE
JOB NO.	13093 7-9
SHEET	2/4
OF	SHEETS

13093 7-9

W:\BLOCKS\BORDERS\24X36BAS 2012.09.26

GENERAL EROSION AND SEDIMENT CONTROL NOTES:
EROSION CONTROL SHALL CONSIST OF TEMPORARY CONTROL MEASURES AS DETAILED ON THE PLANS OR ORDERED BY THE GOVERNING AGENCY DURING THE LIFE OF THE CONTRACT TO CONTROL SOIL EROSION AND SEDIMENTATION THROUGH USE OF EROSION CONTROL BEST MANAGEMENT PRACTICES (BMP'S).

TEMPORARY EROSION AND SEDIMENT CONTROL ITEMS, THE LOCATION AND SIZE OF WHICH ARE DETAILED ON THE PLANS, SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORK OPERATIONS. CONDITIONS THAT DEVELOP DURING CONSTRUCTION THAT WERE NOT FORESEEN DURING DESIGN STAGE; THAT REQUIRE ADDITIONAL OR MODIFIED TEMPORARY OR PERMANENT BMP'S SHALL BE APPROVED BY THE DESIGN ENGINEER AND REFLECTED ON THE REVISED SWP3.

SEDIMENT PONDS, SEDIMENT TRAPS, AND PERIMETER SEDIMENT CONTROLS, SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN 7 DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL DISTURBED AREAS ARE REESTABLISHED WITH TEMPORARY VEGETATION. NO SEDIMENT CONTROLS SHALL BE PLACED IN A STREAM.

SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED FOR OVER 14 DAYS.

TRENCH DEWATERING OR GROUND WATER, WHICH CONTAINS SEDIMENT SHALL PASS THROUGH A SEDIMENT SETTLING POND OR EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE. ALTERNATIVES MAY INCLUDE DEWATERING INTO SUMP PIT, FILTER BAG OR EXISTING VEGETATED UPSLOPE AREA. SEDIMENT LADEN WATER SHALL NOT BE DISCHARGED TO STREAMS OR THE STORM SEWER SYSTEM.

THE SWP3, NOTES AND DETAILED DRAWINGS ARE INTENDED TO SERVE AS BASIC GUIDELINES. ALL EROSION CONTROL PRACTICES SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL.

ADDITIONAL EROSION CONTROL BMP'S MAY BE MANDATED BY THE GOVERNING AGENCY AT ANY TIME DURING THIS PROJECT AS UNFORESEEN SITUATIONS MAY ARISE THAT WARRANT FURTHER EROSION AND SEDIMENT CONTROL PRACTICES.

GOOD HOUSEKEEPING MEASURES SHALL BE IMPLEMENTED AND FOLLOWED THROUGHOUT CONSTRUCTION.

CLEARING AND GRUBBING
LIMITS OF CLEARING AND GRADING SHALL BE CLEARLY MARKED ON THE SITE WITH SIGNAGE, FLAGGING AND/OR CONSTRUCTION FENCING.

THE CONTRACTOR SHALL LIMIT THE SURFACE AREA OF ERODABLE EARTH MATERIAL EXPOSED BY EXCAVATION, BORROW, AND FILL OPERATIONS AND PROVIDE IMMEDIATE PERMANENT OR TEMPORARY CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT STREAMS OR OTHER WATER COURSES, LAKES, PONDS, WETLANDS OR OTHER AREAS OF WATER IMPOUNDMENT.

CONSTRUCTION ENTRANCE
A STONED CONSTRUCTION ENTRANCE SHALL BE INSTALLED FOR ALL INGRESS & EGRESS TO THE SITE. THE MINIMUM DIMENSIONS OF THE DRIVE SHALL BE AS SPECIFIED PER DETAIL. THE DRIVE SHALL BE INSTALLED PRIOR TO ANY CLEARING AND GRUBBING. SEDIMENTS SHALL BE REMOVED FROM ROADWAYS DAILY.

STABILIZATION

PERMANENT AND TEMPORARY STABILIZATION ARE DEFINED IN PART VII OF THE OEPA AUTHORIZATION FOR FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM.
OHIO EPA PERMIT NO. OHC000004 EFFECTIVE DATE 4/21/13 – EXPIRATION DATE 4/20/18
DISTURBED AREAS MUST BE STABILIZED AS SPECIFIED IN THE FOLLOWING TABLES BELOW:

TABLE 1: PERMANENT STABILIZATION

AREA REQUIRING PERMANENT STABILIZATION	*TIME FRAME TO APPLY EROSION CONTROL*
ANY AREA THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	*WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE*
ANY AREA WITHIN 50 FT. OF A STREAM AND AT FINAL GRADE	*WITHIN TWO DAYS OF REACHING FINAL GRADE*
ANY OTHER AREAS AT FINAL GRADE	*WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA*

TEMPORARY SEEDING
SEEDING AREAS SHALL BE INSPECTED AND WHERE THE SEED HAS NOT PRODUCED 80% COVER SHALL BE RESEEDED AS NECESSARY BY THE CONTRACTOR. AREAS SHALL BE STABILIZED WITH MULCH WHEN CONDITIONS PROHIBIT SEEDING.

STRAW MULCHING SHALL BE APPLIED AT A RATE 2–3 STANDARD 45 LB. BALES PER 1000 SQ.FT. OF DISTURBED AREA OR 2 TONS PER ACRE. ALL HYDROSEEDING MUST BE STRAW MULCHED ACCORDING TO THE ABOVE SPECIFICATIONS UNLESS IT IS WATERED WEEKLY.

ALL DETENTION PONDS, RETENTION PONDS, WATER QUALITY STRUCTURES, SEDIMENT PONDS, SEDIMENT TRAPS, EARTHEN DIVERSIONS OR EMBANKMENTS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF COMPLETED CONSTRUCTION.

TABLE 2: TEMPORARY STABILIZATION

AREA REQUIRING TEMPORARY STABILIZATION	*TIME FRAME TO APPLY EROSION CONTROL*
ANY DISTURBED AREAS WITHIN 50 FT. OF A STREAM AND NOT AT FINAL GRADE	*WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS*
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FT. OF STREAM	*WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA* *FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S)*
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	*PRIOR TO ONSET OF WINTER WEATHER (NOV.1) STRAW MULCH 2 TO 3 BALES PER 1000 SQ.FT. AND OR 2 TONS PER ACRE.*

PERMANENT STABILIZATION OF CONVEYANCE CHANNELS
OPERATORS SHALL UNDERTAKE SPECIAL MEASURES TO STABILIZE CHANNELS AND OUTFALLS AND PREVENT EROSIVE FLOWS. MEASURES MAY INCLUDE SEEDING, DORMANT SEEDING (AS DEFINED IN THE LATEST EDITION OF ODNR RAINWATER AND LAND DEVELOPMENT MANUAL), MULCHING, EROSION CONTROL MATTING, SODDING, RIPRAP NATURAL CHANNEL DESIGN WITH BIO ENGINEERING TECHNIQUES OR ROCK CHECK DAMS.

TIMING
SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT THE COURSE OF EARTH DISTURBING ACTIVITY. SEDIMENT BASINS AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED PRIOR TO GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE SLOPE DEVELOPMENT AREA IS PERMANENTLY RESTABILIZED. AS CONSTRUCTION PROGRESSES AND THE TOPOGRAPHY IS ALTERED, APPROPRIATE CONTROLS MUST BE CONSTRUCTED TO ADDRESS THE CHANGING DRAINAGE PATTERNS.

SILT FENCE & DIVERSIONS
SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SILT FENCE OR DIVERSIONS TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED VIA SHEET FLOW. WHERE INTENDED TO PROVIDE SEDIMENT CONTROL, SILT FENCES SHALL BE PLACED ON A LEVEL CONTOUR. THE EPA PERMIT No. OHC000004 DOES NOT PRECLUDE THE USE OF OTHER SEDIMENT BARRIERS DESIGNED TO CONTROL SHEET FLOW RUNOFF. SILT FENCE IS NOT PERMITTED TO BE USED FOR CONTROLLING CONCENTRATED SURFACEWATER FLOW (ONLY SHEET FLOW).

STORMWATER DIVERSION PRACTICES SHALL BE USED TO KEEP RUNOFF AWAY FROM DISTURBED AREAS AND STEEP SLOPES WHERE PRACTICAL. SUCH DEVICES, WHICH INCLUDE SWALES, DIKES OR BERMS, MAY RECEIVE FROM AREAS UP TO 10 ACRES.

INLET PROTECTION
OTHER EROSION AND SEDIMENT CONTROL PRACTICES SHALL MINIMIZE SEDIMENT LADEN WATER ENTERING ACTIVE STORM DRAIN SYSTEMS, UNLESS THE STORM DRAIN SYSTEM DRAINS TO A SEDIMENT POND. INLET PROTECTION IS MANDATORY WHERE SEDIMENT SETTLING PONDS WILL NOT BE IMPLEMENTED.

NON–SEDIMENT POLLUTANTS CONTROLS
NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORMWATER RUNOFF. ALL NECESSARY BMP'S MUST BE IMPLEMENTED TO PREVENT THE DISCHARGE OF NON–SEDIMENT POLLUTANTS TO THE DRAINAGE SYSTEM OF THE SITE OR SURFACE WATERS OF THE STATE. UNDER NO CIRCUMSTANCE SHALL CONCRETE TRUCKS WASH OUT DIRECTLY INTO A DRAINAGE CHANNEL, STORM SEWER OR SURFACE WATERS OF THE STATE. NO EXPOSURE OF STORMWATER TO WASTE MATERIALS IS RECOMMENDED.

OFF–SITE TRAFFIC
OFF–SITE VEHICLE TRACKING OF SEDIMENTS AND DUST GENERATION SHALL BE MINIMIZED.

TRENCH AND GROUND WATER CONTROL
THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS OF THE STATE RESULTING FROM DEWATERING ACTIVITIES. IF TRENCH OR GROUND WATERS CONTAIN SEDIMENT, IT MUST PASS THROUGH A SEDIMENT SETTLING POND OR OTHER EQUALLY EFFECTIVE SEDIMENT CONTROL DEVICE, PRIOR TO BEING DISCHARGED FROM THE CONSTRUCTION SITE. ALTERNATIVELY, SEDIMENT MAY BE REMOVED BY SETTLING IN PLACE OR DEWATERING INTO INTO A SUMP PIT, FILTER BAG OR COMPARABLE PRACTICE. GROUND WATER DEWATERING WHICH DOES NOT CONTAIN SEDIMENT OR OTHER POLLUTANTS ARE NOT REQUIRED TO BE TREATED PRIOR TO DISCHARGE, HOWEVER, CARE MUST BE TAKEN WHEN DISCHARGING GROUND WATER TO ENSURE THAT IT DOES NOT BECOME POLLUTANT–LADEN BY TRAVERSING OVER DISTURBED SOILS OR OTHER POLLUTANT SOURCES.

MAINTENANCE
ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN A FUNCTIONAL CONDITION UNTIL ALL UP SLOPE AREAS THEY CONTROL ARE PERMANENTLY STABILIZED. THE CONTRACTOR SHALL COMPLY WITH THE MAINTENANCE SCHEDULE INCLUDED IN THE APPROVED PLANS FOR THE PROPOSED EROSION CONTROLS. A WRITTEN DOCUMENT CONTAINING THE SIGNATURES OF ALL CONTRACTORS AND SUB–CONTRACTORS INVOLVED IN THE IMPLEMENTATION OF THE BMPS MUST BE MAINTAINED AS PROOF ACKNOWLEDGING THAT THEY REVIEWED AND UNDERSTAND THE CONDITIONS AND RESPONSIBILITIES OF THE SWP3.

INSPECTION
ALL STORMWATER CONTROLS ON THE SITE ARE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN ONE–HALF INCH OF RAIN PER 24 HOUR PERIOD BY QUALIFIED INSPECTION PERSONNEL. A WRITTEN RECORD DOCUMENTING THE RESULTS OF THESE INSPECTIONS MUST BE SIGNED BY THE INSPECTOR AND MAINTAINED WITH THE SWP3. INSPECTION RECORDS SHALL BE KEPT FOR 3 YEARS AFTER TERMINATION OR CONSTRUCTION ACTIVITIES. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWP3 SHALL BE OBSERVED TO ENSURE THAT THOSE ARE OPERATING CORRECTLY. DISCHARGE LOCATIONS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF–SITE VEHICLE TRACKING.

I. WHEN PRACTICES REQUIRE REPAIR OR MAINTENANCE.
IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE IS IN NEED OF REPAIR OR MAINTENANCE, WITH EXCEPTION OF A SEDIMENT SETTLING POND, IT MUST BE REPAIRED OR MAINTAINED WITHIN THREE DAYS OF INSPECTION. SEDIMENT SETTLING PONDS MUST BE REPAIRED OR MAINTAINED WITHIN 10 DAYS OF THE INSPECTION.

II. WHEN PRACTICES FAIL TO PROVIDE THEIR INTENDED FUNCTION.
IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE FAILS TO PERFORM ITS INTENDED FUNCTION AND THAT ANOTHER, MORE APPROPRIATE CONTROL PRACTICE IS REQUIRED, THE SWP3, MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF INSPECTION.

III. WHEN PRACTICES DEPICTED ON THE SWP3 ARE NOT INSTALLED.
IF THE INSPECTION REVEALS THAT A CONTROL PRACTICE HAS NOT BEEN IMPLEMENTED IN ACCORDANCE WITH THE SWP3. THE SWP3 MUST BE AMENDED AND THE NEW CONTROL PRACTICE MUST BE INSTALLED WITHIN 10 DAYS OF THE INSPECTION. IF THE INSPECTION REVEALS THAT THE PLANNED CONTROL PRACTICE IS NOT NEEDED, THE RECORD MUST CONTAIN A STATEMENT OF EXPLANATION AS TO WHY THE CONTROL PRACTICE IS NOT NEEDED.

HANDLING OF TOXIC OR HAZARDOUS MATERIALS
NO TOXIC OR HAZARDOUS WASTE SHALL BE DISPOSED INTO STORM DRAINS, SEPTIC TANKS, OR BY BURYING, BURNING, OR MIXING THE WASTE.
RECYCLING OF USED OR UNUSED HAZARDOUS MATERIALS SHALL BE DONE IN THE DESIGNATED AREAS.

WASTE DISPOSAL
CONTAINERS (e.g., DUMPSTERS, DRUMS) SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK–PROOF.
ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL.

CLEAN HARD FILL
BRICKS, HARDENING CONCRETE, AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF THE STATE.

CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY, SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.

CONSTRUCTION & DEMOLITION DEBRIS
ALL CONSTRUCTION & DEMOLITION DEBRIS (C&DD) WASTE SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714.
CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON–SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED IN A OHIO EPA APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE (OAC) 3745–20).

CONSTRUCTION CHEMICAL COMPOUNDS
AREA SHALL BE DESIGNATED FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME ASPHALT, OR CONCRETE. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREA.

PROTECTED STORAGE AREAS FOR INDUSTRIAL OR CONSTRUCTION MATERIALS SHALL BE PROVIDED TO MINIMIZE THE CONTACT BETWEEN THE MATERIALS AND STORM WATER. ALL SUCH MATERIALS SHALL BE COVERED WITH AN IMPERVIOUS COVER IN ORDER TO MINIMIZE CONTACT WITH STORM WATER.

EQUIPMENT FUELING & MAINTENANCE
EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.

A SPILL PREVENTION CONTROL AND COUNTERMEASURES
A SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVEGROUND STORAGE TANK OF 660 GALLONS OR MORE, TOTAL ABOVEGROUND STORAGE OF 1,330 GALLONS, OR BELOW–GROUND STORAGE OF 4,200 GALLONS OF FUEL.

CONCRETE WASH WATER
ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREAS.

CONTAMINATED SOILS
ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES (TSDFs).

SPILL REPORTING REQUIREMENTS
THE CONTRACTOR SHALL CONTACT THE LOCAL FIRE DEPARTMENT IN THE EVENT OF A PETROLEUM SPILL (<25 GALLONS) OR THE PRESENCE OF SHEEN.

THE CONTRACTOR SHALL CONTACT THE OHIO EPA AT 800–282–9378, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE (440–951–5252) IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF SHEEN. ON PROJECTS NORTH OF ROUTE 2 THE COAST GUARD MUST BE NOTIFIED.

OPEN BURNING
OPEN BURNING IS NOT PERMITTED.

DUST CONTROLS/SUPPRESSANTS
USED OIL MAY NOT BE USED AS A DUST SUPPRESSANT. NO DUST SUPPRESSANT SHALL BE APPLIED NEAR CATCH BASINS, STORM SEWERS OR OTHER DRAINAGE WAYS.

STREAM CROSSINGS
STREAM CROSSINGS SHALL BE CONSTRUCTED ENTIRELY OF STONE, ROCK, OR CLEAN RECYCLED CONCRETE. SOIL OR EARTHEN MATERIAL MAY NOT BE USED. A 20 FT. STONE APRON ON EITHER SIDE OF THE STREAM SHALL BE CONSTRUCTED TO PREVENT LOCALIZED SEDIMENTATION. ALL DISTURBED AREAS OF THE BANK WITHIN 50 FT. OF THE STREAM SHALL BE STABILIZED WITH SEED AND MULCH WITHIN 2 DAYS OF THE DISTURBANCE.

PROCESS WASTEWATER/LEACHATE MANAGEMENT
THE NPDES CONSTRUCTION STORM WATER GENERAL PERMIT ONLY AUTHORIZES THE DISCHARGE OF STORM WATER AND CERTAIN UNCONTAMINATED NON–STORM WATERS. THE DISCHARGE OF NON–STORM WATERS OF THE STATE MAY BE IN VIOLATION OF LOCAL, STATE, AND FEDERAL LAWS OR REGULATIONS.

SITE DESCRIPTION

TYPE	SINGLE RESIDENTIAL LOT
TOTAL DISTURBANCE	1.1764 ACRES
RUNOFF COEFFICIENTS	PRE–CONSTRUCTION – 74 POST CONSTRUCTION – 77 DRAINAGE WATERSHED APPROX. 2.2 ACRES
IMPERVIOUS AREA	0.2139 ACRES – 3%
SOIL TYPE	PsA – PLATEA SILT LOAM 0–2% PsB – PLATEA SILT LOAM 2–6%
PRIOR LAND USE	VACANT WOODED

STORMWATER DISCHARGE TO WINCHELL ROAD DITCH, OUTLETS TO AN UNNAMED TRIBUTARY TO BIG CREEK. NO WETLANDS/STREAMS WITHIN 200 FEET OF SITE.

POST CONSTRUCTION BMP – GRASSED SWALE
10 YEAR STORM FLOW 2.2cfs.
CHANNEL TO BE STABILIZED WITH SEED AND MATTING. 2' WIDE BOTTOM DIMENSION WITH 5:1 SIDE SLOPES, MINIMUM OF 9" DEEP.

13093 7-9

REVISIONS	BY
REVISED PER LCHD APR. 2, 2015	WSO

Barrington
CONSULTING GROUP, INC.
9114 TYLER BLVD., MENTOR, OHIO 44060
PHONE 440.205.1260 FAX 440.205.1262
www.BarringtonCGI.com

PROBUILT HOMES, INC.
GEORGE DAVIS
P.O. BOX 384
MENTOR, OHIO 44060
PH:440.255.6535/FAX:440.974.8360

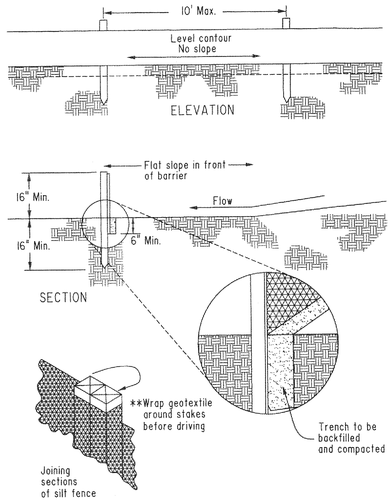
SWP3 NOTES

12445 WINCHELL ROAD
CONCORD TWP., OHIO 44077

STEVENS RESIDENCE

DRAWN WSO
CHECKED DWN
DATE MAR. 18, 2015
SCALE NONE
JOB NO. 13093 7-9
SHEET 3/4 OF SHEETS

W:\BLOCKS\BORDERS\24X36BAS 2012.09.26



SILT FENCE

1. Silt fence shall be constructed before upslope land disturbance begins.

2. All silt fence shall be placed as close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are dissipated along its length.

3. Ends of the silt fences shall be brought upslope slightly so that water ponded by the silt fence will be prevented from flowing around the ends.

4. Silt fence shall be placed on the flattest are available.

5. Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upslope from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.

6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.

7. The silt fence shall be placed in an excavated or sliced trench cut to a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, slicing machine, or other suitable device that will ensure an adequately uniform trench depth.

8. The silt fence shall be placed with the stakes on the downslope side of the geotextile. A minimum of 8 inches of geotextile must be below the ground surface. Excess material shall be lay on the bottom of the 6-inch deep trench. The trench shall be backfilled and compacted on both sides of the fabric.

9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground, (see details).

10. Maintenance-Silt fence shall allow runoff to pass only as diffuse flow through the geotextile. If runoff over-tops the silt fence, flows under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed, 2) accumulated sediment shall be removed , or 3) other practices shall be installed.

Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.

Silt fences shall be inspected after each rainfall and at least daily during prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.

Criteria for silt fence materials

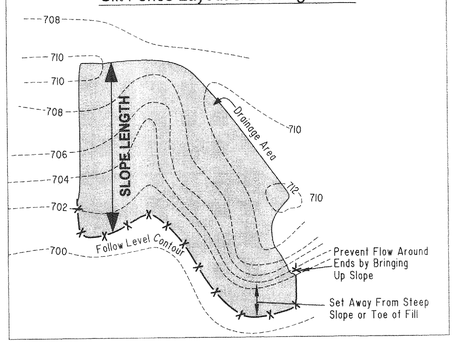
1. Fence post - The length shall be a minimum of 32 inches. Wood posts will be 2-by-2-in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 16 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to sediment/water loading.

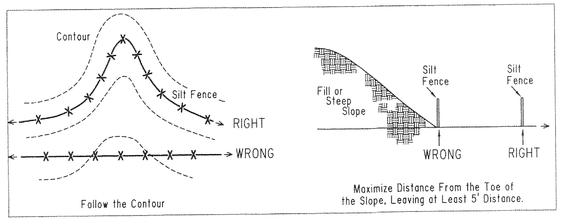
2. Silt fence fabric - See chart below.

Table 6.3.2 Minimum criteria for Silt Fence Fabric (ODOT, 2002)

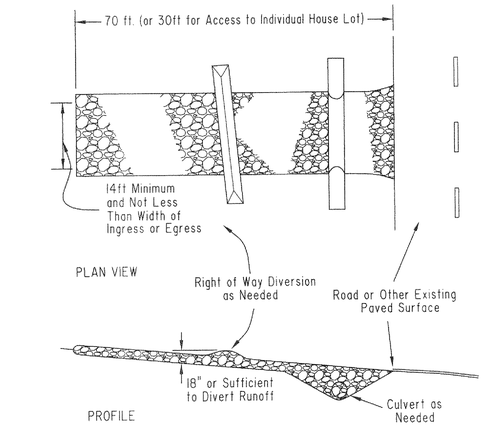
FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (535 N)	ASTM D 4632
Maximum Elongation at 60 lbs	50%	ASTM D 4632
Minimum Puncture Strength	50 lbs. (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs. (180 N)	ASTM D 4533
Apparent Opening Size	≤ 0.84 mm	ASTM D 4751
Minimum Permittivity	1 x 10^{-2} sec^{-1}	ASTM D 4491
UV Exposure Strength Retention	70%	ASTM G 4355

Silt Fence Layout & Drainage Area





Specifications for Construction Entrance



1. Stone Size-ODOT #2 (1.5-2.5 inch) stone shall be used, or recycled concrete equivalent.

2. Length-The Construction Entrance shall be as long as required to stabilize high traffic areas but not less than 70 ft. (exception: apply 30 ft. minimum to single residence lots).

3. Thickness-The stone layer shall be at least 6 inches thick for light duty entrances or at least 10 inches for heavy duty use.

4. Width-The entrance shall be at least 14 feet wide, but not less than the full width at points where ingress or egress occurs.

5. Geotextile-A geotextile shall be laid over the entire area prior to placing stone. It shall be composed of strong rot-proof polymeric fibers and meet the following specifications:

Figure 7.4.1

Geotextile Specification for Construction Entrance	
Minimum Tensile Strength	200 lbs.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	50 lbs.
Minimum Burst Strength	320 psi.
Minimum Elongation	20%
Equivalent Opening Size	EOS < 0.6 mm
Minimum Permittivity	1 x 10^{-3}cm/sec.

6. Timing-The construction entrance shall be installed as soon as practical before major grading activities.

7. Culvert-A pipe or culvert shall be constructed under the entrance if needed to prevent surface water from flowing across the entrance or to prevent runoff from being directed out onto paved surfaces.

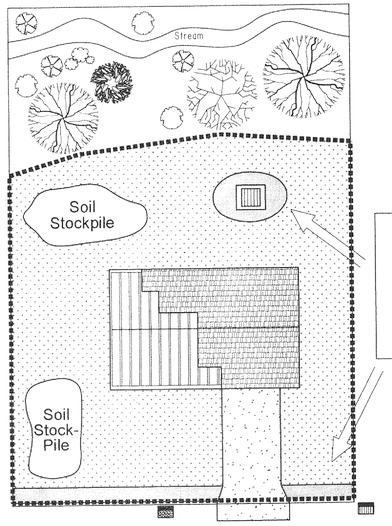
8. Water Bar-A water bar shall be constructed as part of the construction entrance if needed to prevent surface runoff from flowing the length of the construction entrance and out onto paved surfaces.

9. Maintenance-Top dressing of additional stone shall be applied as conditions demand. Mud spilled, dropped, washed or tracked onto public roads, or any other surface where runoff is not checked by sediment controls, shall be removed immediately. Removal shall be accomplished by scraping or sweeping.

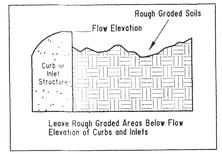
10. Construction entrances shall not be relied upon to remove mud from vehicles and prevent off-site tracking. Vehicles that enter and leave the construction-site shall be restricted from muddy areas.

11. Removal-The entrance shall remain in place until the disturbed area is stabilized or replaced with a permanent roadway or entrance.

Small Construction Site Controls



PLAN VIEW



- Temporary seeding and/or mulch applied to rough graded areas
- Construction Entrance gravel
- Rough grade areas to allow settling below grade elevation
- Storm Drain w/inlet protection
- Storm Drain without inlet protection
- Yard Drain w/inlet protection
- Silt Fence
- Curb

Small Construction Site Controls

1. Preexisting vegetation shall be retained on idle portions of the building lot for as long as construction operations allow. Clearing shall be done so only active work areas are bare.

2. Temporary seed and/or mulch shall be applied to areas, such as stockpiles and rough graded areas, that are bare and not actively being worked. This shall apply to areas that will not be reworked for 21 days or more.

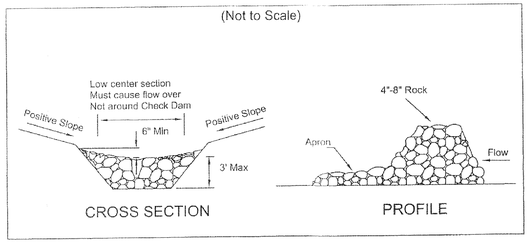
3. Stockpiles created from basement excavation and grading shall be situated away from streets, swales, or other waterways and shall be seeded and/or mulched immediately.

4. Silt fence or their sediment barriers shall control sheet flow runoff from the building lot. These shall not be constructed in channels or areas of concentrated flow. Other sediment controls such as sediment traps and inlet protection shall also be used as needed to control sediment runoff. Sediment control practices shall be inspected weekly after storm events, and maintained in good working condition.

5. Construction vehicle access shall be limited to one route, to the greatest extent practical. The access shall be gravel or crushed rock underlain with geotextile.

6. Mud tracked onto streets or sediment settled around curb inlet protection shall be removed daily or as needed to prevent it from accumulating. It shall be removed by shoveling and scraping and it shall NOT be washed off paved surfaces or into storm drains. Sediment removed shall be placed where it will not be subject to erosion or concentrated runoff.

Specifications for Rock Check Dam



1. The check dam shall be constructed of 4-8 inch diameter stone, placed so that it completely covers the width of the channel. ODOT Type D stone is acceptable, but should be underlain with a gravel filter consisting of ODOT No. 3 or 4 or suitable filter fabric.
2. Maximum height of check dam shall not exceed 3.0 feet.
3. The midpoint of the rock check dam shall be a minimum of 6 inches lower than the sides in order to direct across the center and away from the channel sides.
4. The base of the check dam shall be entrenched approximately 6 inches.
5. Spacing of check dams shall be in a manner such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.
6. A Splash Apron shall be constructed where check dams are expected to be in use for an extended period of time, a stone apron shall be constructed immediately downstream of the check dam to prevent flows from undercutting the structure. The apron should be 6 in. thick and its length two times the height of the dam.
7. Stone placement shall be performed either by hand or mechanically as long as the center of check dam is lower than the sides and extends across entire channel.
8. Side slopes shall be a minimum of 2:1.

Seed Mix	Seeding Rate Lbs./acre	Seeding Rate Lbs./1,000 Sq. Feet	Notes:
General Use			
Creeping Red Fescue Domestic Ryegrass Kentucky Bluegrass	20-40 10-20 20-40	1/2-1 1/4-1/2 1/2-1	For close mowing & for waterways with <2.0 ft/sec velocity
Tall Fescue	40-50	1-1 1/4	
Turf-type (dwart) Fescue	90	2 1/4	
Steep Banks or Cut Slopes			
Tall Fescue	40-50	1-1/4	
Crown Vetch Tall Fescue	10-20 20-30	1/4-1/2 1/2-3/4	Do not seed later than August
Flat Pea Tall Fescue	20-25 20-30	1/2-3/4 1/2-3/4	Do not seed later than August
Road Ditches and Swales			
Tall Fescue	40-50	1-1 1/4	
Turf-type (Dwarf) Fescue Kentucky Bluegrass	90 5	2 1/4 0.1	
Lawns			
Kentucky Bluegrass Perennial Ryegrass	100-120	2 2	
Kentucky Bluegrass Creeping Red Fescue	100-120	2 1-1/2	For shaded areas

Permanent Seeding

Seeding Date	Species	Lb./1000 ft2	Lb./Acre
March 1 to August 15	Oats Tall Fescue Annual Ryegrass	3 1 1	128 (4 Bushel) 40 40
	Perennial Ryegrass Tall Fescue Annual Ryegrass	1 1 1	40 40 40
	Annual Ryegrass Perennial Ryegrass Creeping Red Fescue Kentucky Bluegrass	1.25 3.25 0.4 0.4	55 142 17 17
	Oats Tall Fescue Annual Ryegrass	3 1 1	128 (3 bushel) 40 40
August 16th to November	Rye Tall Fescue Annual Ryegrass	3 1 1	112 (2 bushel) 40 40
	Wheat Tall Fescue Annual Ryegrass	3 1 1	120 (2 bushel) 40 40
	Perennial Rye Tall Fescue Annual Ryegrass	1 1 1	40 40 40
	Annual Ryegrass Perennial Ryegrass Creeping Red Fescue Kentucky Bluegrass	1.25 3.25 0.4 0.4	40 40 40
November 1 to Feb. 29	Use mulch only or dormant seeding		

Temporary Seeding

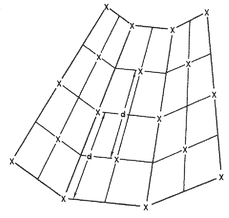
Blankets to be Excelsior Erosion Control Blankets or equal.

The blanket should be rolled out along the channel bottom and side slopes in the direction of the water flow. Adjacent blankets should be closely butted or slightly overlapped so that one row of staples will fasten both edges along the seam. A row of staples should be centered down the blanket located in between the staples at the blanket edge.

When coming to the end or a row, overlap the beginning of the next roll by at least six (6) inches.

STAPLE SPACING (d) = 3 feet

STAPLE SIZE 8" x 1" x 8" – 9 gage



TEMPORARY EROSION CONTROL MATTING

NO SCALE March 1, 1994

REVISIONS	BY
REVISED PER LOID APR. 2, 2015	WSO

Barrington
CONSULTING GROUP, INC.
9114 TYLER BLVD., MENTOR, OHIO 44060
PHONE 440.205.1260 FAX 440.205.1262
www.BarringtonCGI.com

PROBUILT HOMES, INC.
GEORGE DAVIS
P.O. BOX 384
MENTOR, OHIO 44060
PH:440.255.6535/FAX:440.974.8360

SWP3 DETAILS

12445 WINCHELL ROAD
CONCORD TWP., OHIO 44077

STEVENS RESIDENCE

DRAWN WSO
CHECKED DWN
DATE MAR. 18, 2015
SCALE NONE
JOB NO. 13093 7-9
SHEET 4/4
OF SHEETS

13093 7-9