

**FORM INDEX
 FOR
 DELAWARE ENGINEERING
 PRACTICE DOCUMENTATION MANUAL**

FORM	TITLE	USE
DE-ENG-2 (9/02)	Certification Statement – Practice Component	For certification of compliance for components of a practice which cannot be directly measured or checked after construction, such as core trench, etc. Form to be completed with designed dimensions, cuts, etc. entered by NRCS before presenting to owner or contractor, who enters “As Built” data before signing. (REF.: GM, 480, Part 407.11)
DE-ENG-3 (9/02)	Grassed Waterway	Use for waterway design data, layout, construction plan and construction check for small waterways (Class I or II).
DE-ENG-4 (9/02)	Terrace	Use for terrace design data, layout, construction plan and construction check for terraces. (Class I or II). Design data sizing manure sheds. Design data dead bird composters.
DE-ENG-5 (10/03)	Poultry Litter Quantity Estimate	
DE-ENG-7 (9/02)	Basic Data Sheet for Dead Bird Composter	

FORM	TITLE	USE
DE-ENG-9 (9/02)	Basic Data Sheet for Sprinkler Irrigation Systems	Basic data sheet for sprinkler irrigation system design.
DE-ENG-9a (9/02)	Sprinkler Irrigation Design	Sprinkler irrigation design computations for set-type sprinkler systems.
DE-ENG-10 (9/02)	Earth Borings Documentation	Worksheet for recording detailed logs of earth borings.

DE-ENG-11 (9/02)	Participant Responsibilities	Used to inform operators of their responsibilities when installing conservation practices for permitting, easements, cultural resources, inspections, and O&M.
DE-ENG-12 (9/02)	Table of Quantities and Cost Estimate	For use by owner or operator. Cost estimates are not a part of construction plans.
DE-ENG-29 (9/02)	Hydrologic Data Sheet	General worksheet for computation of peak flows, storm volume, and annual yield. Reverse is worksheet for hydraulic computations for any spillway, ditch, diversion, waterway, principal spillway, or culvert.
DE-ENG-45 (9/02)	Log Sheet for Soil Borings	Worksheet for recording logs of earth borings and description of material. Can be used by well drillers for logging if desired.
DE-ENG-49 (9/02)	Concrete Batch Certificate	Data to be furnished by ready mix plant for concrete mix supplied to job site.
DE-ENG-52 (9/02)	Excavated Pond (Dugout) Installation and Check Data	Excavated pond layout by contractors and hand level construction check.

The following forms are available, but not included in index:

FORM	DESCRIPTION
SCS-ENG-522 & -522A	Computation Sheet 4x4 to 1"
SCS-ENG-523 & -523A	Computation Sheet 5x5 to 1"

The following "E" sized (21" x 30") forms are available, but not included in index:

FORM	DESCRIPTION
SCS-ENG-313	Plan Sheet - fade out blue cross section 8 x 8
SCS-ENG-313B	Plan Sheet - fade out blue cross section 10 x 10
SCS-ENG-313-C	Plan Sheet - plain

SCS-ENG-314	Plan Sheet - plain linen
SCS-ENG-315	Cross Section - 10 x 10
SCS-ENG-316	Profile
SCS-ENG-317	Plan one-half - Profile one-half
SCS-ENG-318	Plan two-thirds - Profile one-third

The following “N” sized (10 ½ x 15”) forms are available, in addition to form DE-ENG-42, but not included in the index:

FORM	DESCRIPTION
SCS-ENG-349	Cross section 10 x 10
SCS-ENG-351	Profile

CONSTRUCTION CHECK CROSS SECTION

Waterway Number:				Station			
Rod							
Distance				Centerline			
Waterway Number:				Station			
Rod							
Distance				Centerline			
Waterway Number:				Station			
Rod							
Distance				Centerline			

CERTIFICATION

I certify that this waterway was constructed to minimum dimensions shown on this form.

Contractor Signature _____

Date _____

NRCS Reviewer _____

Date _____

GRASSED WATERWAY

Operator & Address _____

Designer _____ Date _____ Checker _____ Date _____

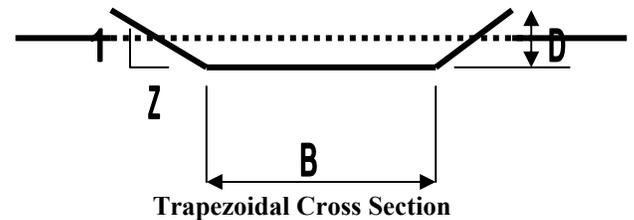
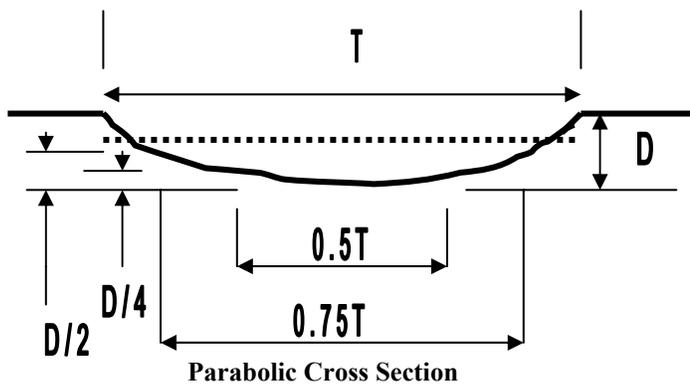
Job Approval _____ Date _____ Layout _____ Date _____

Construction Specifications: _____

Notes: _____

N

Location Map



TERRACE

Owner/Operator _____

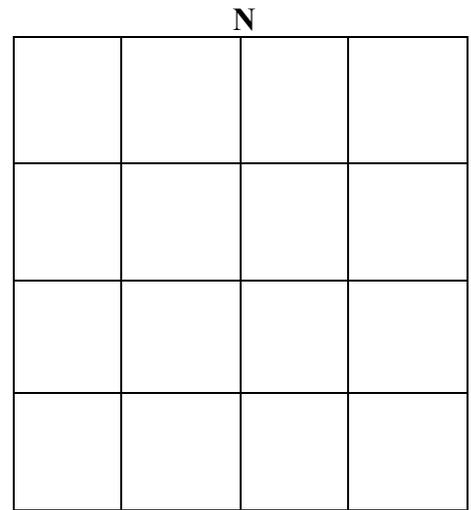
Address/Phone/Email _____

Designer _____ Date _____ Checker _____ Date _____

Job Approval _____ Date _____ Layout _____ Date _____

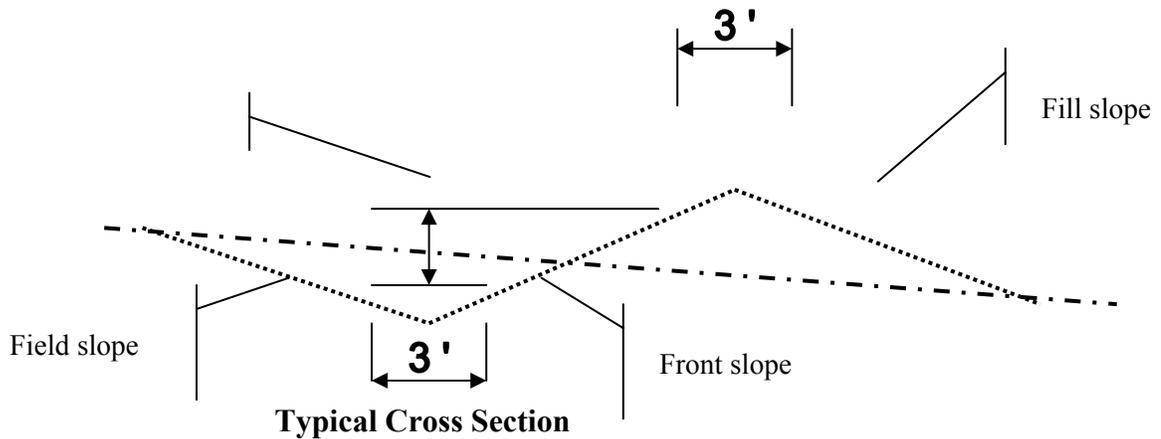
Construction Specifications:

Notes:



Location Map (X location in sec.)

Ter. No.	Kind	Field Slope %	Vert. Int., feet	Horiz. Int., feet	Grade %	Runoff Q inch	Mach. Width, feet	Length, feet	Design Height (Ht.) feet	Const. Height feet	Req'd Cap. sq. ft.



**CONSTRUCTION CHECK DATA
 Terrace Profiles**

Sta.	Terrace No.										
	R	C		R	C		R	C		R	C
"C" Total	_____		"C" Total	_____		"C" Total	_____		"C" Total	_____	
"C" Ave.	_____		"C" Ave.	_____		"C" Ave.	_____		"C" Ave.	_____	
Low "R"	_____		Low "R"	_____		Low "R"	_____		Low "R"	_____	
"H"	_____		"H"	_____		"H"	_____		"H"	_____	

Terrace Cross Sections

Terrace No.	Station										
Distance											
Rod											
Difference											
Terrace No.	Station										
Distance											
Rod											
Difference											
Terrace No.	Station										
Distance											
Rod											
Difference											
Terrace No.	Station										
Distance											
Rod											
Difference											

Construction Notes:

I certify these terraces have been constructed in accordance with the plans, specifications and these checkout notes.

Contractor Signature _____

Date _____

POULTRY LITTER QUANTITY ESTIMATE

Name:
 Address:
 City, State, Zip:

County:
 Watershed:
 Phone:

Date:
 Tract/Farm:
 Houses Included:

Bird Type: Broiler

A.	Years between total cleanouts:	Year next total cleanout:	
		- Year last total cleanout:	-
		= Years in cleanout cycle:	
B.	Total # of birds per flock (for all houses on this cleanout cycle):		
C.	Flocks per year		
D.	Number of flocks per cleanout cycle (A x C):		
E.	Estimated tons of cake per 1000 birds per flock:*		0.2
F.	Estimated tons of litter per 1000 birds per flock:*		1.1
G.	Tons cake production per flock (B x E/1000):		
H.	Tons cake removal per cycle (G x (D-1))		
I.	Tons litter production per cycle (B x D x F/1000):		
J.	Tons of non-cake litter per cycle (I - H):		
K.	Tons of non-cake litter produced per year (J/A):		

Quantity of Poultry Litter Available – Broiler

Year	Tons Available Litter							S Tons used in NMP	T Tons Surplus (R - S)
	L Tons of non-cake litter remaining in the house from last year (M-O), prev. year	M Total tons of non-cake litter that is present in the house this year (K) + (L, this year)	N % of non-cake litter present in the house this year to be removed this year (enter % of M removed)	O Tons of non- cake litter removed this year (M x N)/100	P Cakeouts this year	Q Tons Cake Removed (G x P)	R Tons litter + Cake removed this year (O + Q)		

*2000 Delmarva Poultry Litter Production Estimates, George W. Malone, University of Delaware, Georgetown, Delaware. Univ. of MD Coop. Ext., Ag. Nutrient Management Program.

POULTRY LITTER QUANTITY ESTIMATE

Name:
 Address:
 City, State, Zip:

County:
 Watershed:
 Phone:

Date:
 Tract/Farm:
 Houses Included:

Bird Type: Roaster

A.	Years between total cleanouts: _____ Year next total cleanout: - Year last total cleanout: _____ - = Years in cleanout cycle: _____	
B.	Total # of birds per flock (for all houses on this cleanout cycle): _____	
C.	Flocks per year _____	
D.	Number of flocks per cleanout cycle (A x C): _____	
E.	Estimated tons of cake per 1000 birds per flock.* _____	0.2
F.	Estimated tons of litter per 1000 birds per flock.* _____	1.55
G.	Tons cake production per flock (B x E/1000): _____	
H.	Tons cake removal per cycle (G x (D-1)) _____	
I.	Tons litter production per cycle (B x D x F/1000): _____	
J.	Tons of non-cake litter per cycle (I - H): _____	
K.	Tons of non-cake litter produced per year (J/A): _____	

Quantity of Poultry Litter Available – Roaster

Year	Tons Available Litter							S Tons used in NMP	T Tons Surplus (R - S)
	L Tons of non-cake litter remaining in the house from last year (M-O), prev. year	M Total tons of non-cake litter that is present in the house this year (K)+(L, this year)	N % of non-cake litter present in the house this year to be removed this year (enter % of M removed)	O Tons of non- cake litter removed this year (M x N)/100	P Cakeouts this year	Q Tons Cake Removed (G x P)	R Tons litter + Cake removed this year (O + Q)		

**BASIC DATA SHEET FOR
DEAD BIRD COMPOSTERS**

Name _____ Date _____

Address _____

County/CD _____

Designer _____ Date _____ Checker _____ Date _____

Number of Birds N _____ Type of Bird _____ Average Weight W _____

Composting Volume Calculation

$$V = (0.001 \times 3 \times N \times W) / 0.75$$

Required Volume (cubic feet)

broilers

FREE STANDING

weight lbs	maximum number birds	required capacity cu. Ft.	number of bins	wall ft	depth ft	width ft	design capacity cu. Ft.
3.65	59800	873	2	5	6	7.29	875
3.65	89800	1311	4	5	6	7.29	1312
3.65	119800	1749	6	5	6	7.29	1750
3.65	149800	2187	8	5	6	7.29	2187
3.65	179700	2624	10	5	6	7.29	2624
3.65	209700	3062	12	5	6	7.29	3062
3.65	239600	3498	14	5	6	7.29	3499

roasters

weight lbs	maximum number birds	required capacity cu. Ft.	number of bins	wall ft	depth ft	width ft	design capacity cu. Ft.
5.22	41900	875	2	5	6	7.29	875
5.22	62800	1311	4	5	6	7.29	1312
5.22	83600	1746	6	5	6	7.29	1750
5.22	104700	2186	8	5	6	7.29	2187
5.22	125700	2624	10	5	6	7.29	2624
5.22	146600	3061	12	5	6	7.29	3062
5.22	167600	3499	14	5	6	7.29	3499
5.22	188500	3936	16	5	6	7.29	3937
5.22	209500	4374	18	5	6	7.29	4374
5.22	230400	4811	20	5	6	7.29	4811

broilers

ATTACHED

weight lbs	maximum number birds	required capacity cu. Ft.	number of bins	wall height ft	depth ft	width ft	design capacity cu. Ft.
3.65	22900	334	1	4	6	7.29	335
3.65	56800	829	2	4	6	7.29	829
3.65	90700	1324	3	4	6	7.29	1324
3.65	124500	1818	4	4	6	7.29	1818
3.65	158400	2313	5	4	6	7.29	2313
3.65	192200	2806	6	4	6	7.29	2807
3.65	226100	3301	7	4	6	7.29	3302
3.65	260000	3796	8	4	6	7.29	3796

roasters

weight lbs	maximum number birds	required capacity cu. Ft.	required number of bins	wall ft	depth ft	width ft	design capacity cu. Ft.
5.22	16000	334	1	4	6	7.29	335
5.22	39700	829	2	4	6	7.29	829
5.22	63400	1324	3	4	6	7.29	1324
5.22	87000	1817	4	4	6	7.29	1818
5.22	110700	2311	5	4	6	7.29	2313
5.22	134400	2806	6	4	6	7.29	2807
5.22	158100	3301	7	4	6	7.29	3302
5.22	181800	3796	8	4	6	7.29	3796
5.22	205500	4291	9	4	6	7.29	4291
5.22	229200	4786	10	4	6	7.29	4786
5.22	252800	5278	11	4	6	7.29	5280

**BASIC DATA SHEET FOR
 SPRINKLER IRRIGATION SYSTEMS**

Name _____ Date _____

Address _____

County/CD _____

GPS _____

Designer _____ Date _____ Checker _____ Date _____

Attach/Note if available: Topographic Map _____ Soils Map _____

Soil Design Information (Irrigation Guide)

Field No.	Design Soil Series ¹	Crops	Root Zone Depth, feet	Total Available Moisture, inch	Maximum Net Replacement, Inch	Max. Application Rate (inch/hour) for Net Irrigation Rate of:			
						1"	2"	3"	4"

Consumptive Use of Water by Crops (base on 80% chance of effective rainfall)

Field No.	Design Soil Series ¹	Crop	Seasonal Water Use, inch		Design Consumptive Use Rate, inch/day for Net Irrigation of:				
			Gross	Net	1"	2"	3"	4"	

Other Factors Affecting Design:

¹ Most restrictive soil series which governs irrigation recommendations.

SPRINKLER IRRIGATION DESIGN

Name _____ Location _____

Field _____

Designer _____ Date _____ Checker _____ Date _____

Soil										
Intake Family										
Crop										
Irr. Depth, feet										
Net Irr., inch										
Use Rate, inch/day										
Irr. Frequency, days										
Max. Rate, in./hr.										
Efficiency, %										
Gross Depth, inch										
Set Time, hours										
Spacing, (S _l)x(S _m)										
GPM per Nozzle										
Nozzle Size, inch										
Pressure, psi										
Wetted Dia., feet										
Nozzle Model No.										
Sprinklers/Lateral										
Lateral Size										
GPM/Lateral										
H _L / Lateral, psi										
No. Laterals										
Total GPM										

Notes:

EARTH BORINGS DOCUMENTATION

Cooperator _____ Practice _____ CD _____ County _____ Date _____

Driller/Logger _____ Latitude _____ Longitude _____ Surface _____ Hole _____
 Eng./Technician _____ Elev. _____ Location _____

Hole Number _____ Parent Material _____ Soil Name _____ Depth to Present Water Table _____ Depth of Seasonal High Water Table _____ Landform Position _____

Remarks on site:

Horizon	Depth, Feet	Unified Class	USDA Texture	Munsell Color	Moisture Content	Moist Consistence	% Mottles and Color	Field Estimate of Permeability	pH	Concentrations (color, kind, %)	Other Features
A, E, B+, C, etc.		Chart (see next page)	C, SC, SiC, SiCL, CL, SCL, L, SiL, Si, SL, LS, S, etc.	Dominant Matrix Color Notation	Dry, Moist, Saturated	Loose, V. friable, Friable, Firm, V. firm, Ex. firm		Chart (see next page)		Fe & Mn etc.	Clay Films Gravel, Stones, Cracks, Organics, etc.

Notes:

MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS	PERMEABILITY		
Coarse Grained Soils More than 50% of materials are larger than #200 sieve	Gravel and Gravely Soils More than 50% of coarse fraction retained on # 4 sieve.	Clean Gravels (little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines	Inches per Hour	Class	
			GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines			
	Sand and Sandy Soils More than 50% of coarse fraction passing # 4 sieve.	Gravels with Fines (appreciable amount of fines)	GM	Silty gravels, Gravel-sand-silt mixtures	0.01 to 0.06	Very slow Slow	
			GC	Clayey gravels, gravel-sand-clay Mixtures	0.06 to 0.2		
	Fine Grained Soils More than 50% of materials are smaller than #200 sieve	Silts and Clays - Liquid limit less than 50	Clean Sand (little or no fines)	SW	Well-graded sands, gravely sands little or no fines	0.2 to 0.6	Moderately slow Moderate
				SP	Poorly-graded sands, gravely sands, little or no fines	0.6 to 2.0	
			Sands with Fines (appreciable amount of fines)	SM	Silty-sands, sand-silt mixtures	2.0 to 6.0	Moderately rapid Rapid
				SC	Clayey sands, sand-clay mixtures	6.0 to 20.	
	Organic Soils	Silts and Clays - Liquid limit greater than 50	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity	20. to 60.	Very Rapid	
			CL	Inorganic clays of low to medium plasticity, gravely clays, sandy clays, silty clays, lean clays			
OL			Organic silts and organic silty clays of low plasticity				
		MH	Inorganic silts, micaceous or dutomaceous fine sand or silty soils				
		CH	Inorganic clays of high plasticity, fat clays				
		OH	Organic clays of medium to high plasticity, organic silts				
		PT	Highly organic soils				

PARTICIPANT RESPONSIBILITIES

PARTICIPANT	CONSERVATION DISTRICT		
ADDRESS			
PRACTICE			

GENERAL: Policies and regulations of USDA assistance programs place responsibility on the participant for obtaining adequate real property rights and interests, and necessary approvals, easements, licenses and permits. The participant must also meet requirements for installation, inspection, and operation and maintenance.

1. CULTURAL/HISTORICAL RESOURCES

An NRCS approved cultural/historical evaluation **must** be made of the contracted and/or technically assisted practices **prior** to construction. If construction activities expose cultural/historical resources, human remains (bones), or similar objects, the participant and/or contractor **must** immediately stop construction and notify NRCS. Any further construction without clearance **could jeopardize assistance** (cost-share/technical) and may be a **violation of state or federal law**.

2. PROPERTY RIGHTS (INCLUDING WETLAND EASEMENTS)

The participant is responsible, financially and otherwise, for any costs incurred by the failure to obtain adequate and necessary real property rights and interests, easements and subordination agreements. Participants are cautioned to be sure the area to be affected is either not covered by a **wetland easement** or a written agreement is reached with the easement owner. Property rights documents should be recorded for your future protection.

3. PERMITS

The participant is responsible, financially and otherwise, for applying for and obtaining the necessary permits, and/or licenses required for the installation.

4. CLEAN WATER ACT

Clean Water Act Section 10 or 404 permits from the **US Army Corps of Engineers** are required where proposed construction will involve dredging or filling a wetland, or stream. Information may be obtained by contacting : **US Army Corps of Engineers, Delaware Regulatory Office, 1203 College Park Drive, Suite 102, Dover, DE, 19904 (Phone 302 736 9763)**. Forms are available on the internet at: <http://www.usace.army.mil/inet/usace-docs/forms/formlib-all/e4345.pdf>.

National Pollutant Discharge Elimination System (NPDES) permits or approval from the **Delaware Department of Natural Resources and Environmental Control (DNREC)** may be needed where discharge of polluted water or wastewater (ag waste etc.) to waters of the state (including wetlands) may occur or have occurred.

5. PARTICIPANT RESPONSIBILITIES IN CONSTRUCTION SUPERVISION AND INSPECTION

(A) Delaware Codified Law requires that no **excavator** may **begin** any excavation without first notifying the One-Call Notification Center, (also know as **Miss Utility**) of the proposed excavation (**Phone 1 800 282 8555**).

NRCS makes no representation as to the existence or non-existence of any utility or buried object, and assumes no liability for damage to utilities or buried objects caused by construction of this or other conservation practices.

(B) All conservation practices require on-site supervision and inspection during construction. The NRCS cannot provide all of the assistance or inspection that may be needed to assure the practice is installed correctly. **Participants must actively lead construction supervision and inspection efforts.** Items requiring **inspection by you** are as follows:

NRCS must be notified and given the opportunity to inspect the following items **prior to installation**:

(C) If you employ a contractor to do your construction work, it is your responsibility to clearly inform the contractor, **prior** to start of construction, that materials and construction must be in accordance with the plans and specifications.

(D) If necessary, the plans can be modified during construction. However, changes to sizes, grades, elevations, etc., **must be approved by NRCS** for permits, certifications, and cost-share to be assured. **Get approvals before construction!**

(E) The completed practice must be checked by NRCS. NRCS will ask for written certification from you and/or the contractor for those items not inspected by NRCS and for those items you agreed to inspect. **Certification for cost-share** will be made by NRCS when it has been determined that the NRCS approved design has been completed. Otherwise, NRCS will either require construction changes before certification or the practice will not be certified.

(F) **NRCS designed practices as well as cost-shared practices designed by contractors (or others) must meet NRCS Practice Standards and must be approved by an NRCS employee with appropriate Job Approval Authority prior to construction.**

6. OPERATION AND MAINTENANCE (O&M)

The participant is responsible for the safe operation and maintenance of the improvements for the life of the practice. O&M requirements or special O&M plans are listed below and/or attached.

7. PARTICIPANT RESPONSIBILITIES AND CERTIFICATION

I have reviewed the plans and specifications provided to me. I understand my responsibility to follow the plans and specifications for proper installation of the conservation practice. I understand the cultural/historical resources requirements and certify that I will obtain the necessary landrights, easements, permits, and other authorizations necessary to complete the planned conservation improvements.

Participant signature: _____ Date: _____

I have reviewed the requirements as set forth in this document with the participant.

NRCS Employee: _____ Date: _____

HYDROLOGIC DATA SHEET

Operator: _____ Farm No.: _____

Structure/Practice: _____

Location: _____ County: _____

Comps. By: _____ Date: _____ Checker: _____ Date: _____

Note:

PEAK RATE OF RUNOFF
 (Chapter 2, Engineering Field Manual)

Soil Group	Land Use and Condition	Curve No. (CN)	Acres	(CN)(Acres)
Totals:				

Weighted CN = Total (CN)(Acres)/Total Acres = _____

Average Watershed Slope: _____ Slope Factor: _____

Weighted CN	Design Storm (Years)	Inches Rain (P)	Inches Runoff (Q)	Feet ³ /S. Peak Flow (q _p)	Acre-Inches Storm Volume

SEDIMENT YIELD

Erodibility Area	Gross Rate (Ac.Ft./Ac./Yr.)	Drainage Area (Acres)	Delivery Rate (%)	Design Life (Years)	Req'd. Sediment Volume (Ac.Ft.)

HYDRAULIC DATA

SPILLWAYS - EARTH OR VEGETATED

Crest Elevation	Crest Length, Ft.	Allowable Velocity	Hp (Feet)	Qx (Ft. ³ /S./Ft.)	Width (Feet)	Control Section Velocity (Ft./Sec.)	Q (Ft. ³ /S.)

CHANNELS (DITCHES, DIVERSIONS, WATERWAYS, ETC.)

Reach	b (Ft.)	d (Ft.)	Side Slope	X-Sec. Area A (Ft. ²)	Wet.Per. WP (Ft.)	R (A/WP)	Retard. or n	Chan. Grade	Velocity (Ft./S.)	Q (Ft. ³ /S.)

PRINCIPAL SPILLWAYS

Riser Dia. (inch)	Barrel Dia. (inch)	Barrel Length (Feet)	Weir		Orifice		Barrel		Design Q (Ft. ³ /S.)
			h ₁ (Ft.)	Q (Ft. ³ /S.)	h ₂ (Ft.)	Q (Ft. ³ /S.)	h ₃ (Ft.)	Q (Ft. ³ /S.)	

CULVERTS

Type	Diameter (Inch)	Length (Feet)	Inlet Control		Outlet Control		Q (Ft. ³ /S.)
			Head (Feet)	Q (Ft. ³ /S.)	Head (Feet)	Q (Ft. ³ /S.)	

WATERWAYS, DIVERSIONS (From Tables)

No.	Reach	Type	Slope (%)	Width (Feet)	Depth (Feet)	Side Slope	Retard. or n	Velocity		Q (Ft. ³ /S.)
								V ₁ (Ft./S.)	V ₂ (Ft./S.)	

Legend
 (See NRCS EFM Chapter 4, Table 4-7 For a Complete Listing)

Unified Soil Classification System Symbol	Description
GW	Well graded gravels with less than 5% fines
GP	Poorly graded gravels with less than 5% fines
GM	Gravels with 12 to 50% non-plastic to slightly plastic fines
GC	Gravels with 12 to 50% moderately plastic fines
SW	Well graded sands with less than 5% fines
SP	Poorly graded sands with less than 5% fines
SM	Sands with 12 to 50% non-plastic to slightly plastic fines
SC	Sands with 12 to 50% moderately plastic to very plastic fines
ML	Non-plastic to slightly plastic fines with low liquid limit
CL	Slightly to moderately plastic fines with low liquid limit
MH	None to slightly plastic fines with high liquid limit
CH	Highly plastic to very highly plastic fines with high liquid limit
OH	Non or low plastic fines with significant organics.
PT	Peat

Abbreviations	Hole Number	Location
TD - Total Depth	1-99	Centerline of Dam
WT - Water Table	100-199	Borrow
DS - Disturbed Sample	200-299	Auxiliary or Emergency Spillway
US - Undisturbed Sample	300-399	Principal Spillway
SpT - Split Spoon Sample	400-499	Creek Channel
	500-599	Relief Wells
	600-699	Other Exploration

Notes and Site Conditions:

CONCRETE BATCH CERTIFICATE

Load Number: _____

Date: _____ Batch Size, cubic yards _____

The above concrete was furnished to (Contractor): _____

Contractor's Address:

Construction Project: _____

This concrete contained the following amounts of materials per cubic yard of mix:

Pounds Coarse Aggregate (include moisture) _____ Moisture Content (%) _____

Pounds Fine Aggregate (including moisture) _____ Moisture Content (%) _____

Pounds (or bags) of Portland Cement _____ Cement Type _____

Pounds Water _____ Ounces Air Entrainment Admixture _____

Brand Name of Air Entrainment Admixture _____

Brand Name of Cement _____

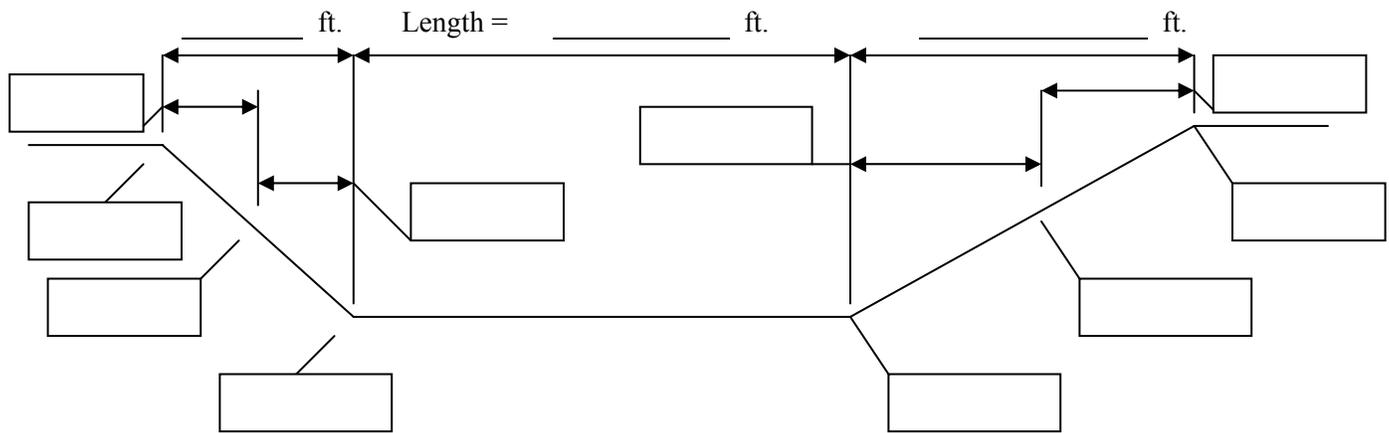
Time cement was added to the mix: _____ AM _____ PM

Notes:

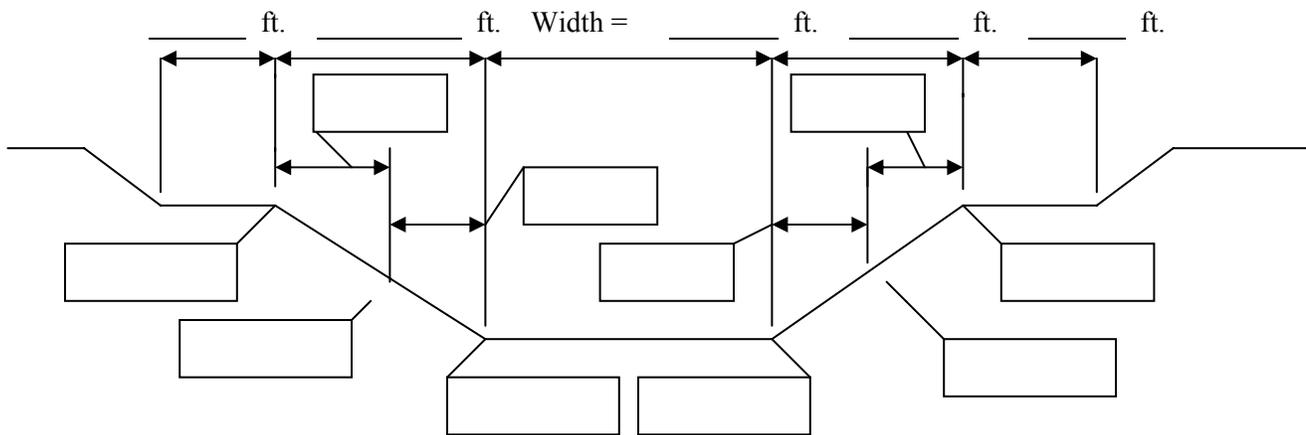
Concrete supplier: _____

By (signature & title) _____

EXCAVATED POND (DUGOUT) CONSTRUCTION CHECK



Length Section C - C



Width Section D - D

Notes:

1. The depth reading must equal or exceed design depths for the horizontal distance.
2. Complete all blanks on this form.

Certification:

I certify that this dugout was constructed to the minimum dimensions shown on this form and the spoil placement and berms are as designed.

Contractor signature _____ Date _____

NRCS Reviewer _____ Date _____

Notes:
