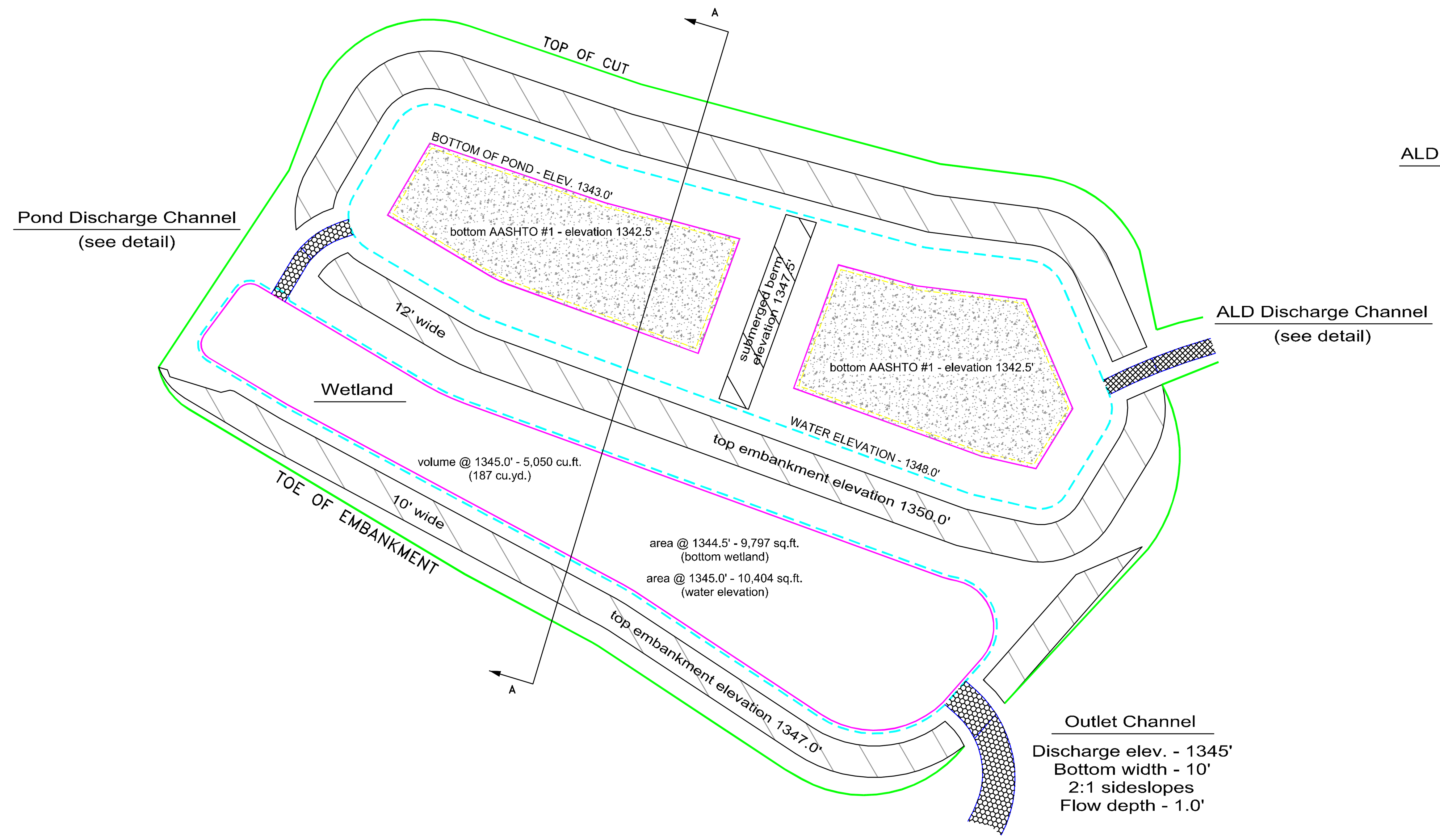
SITE
Location Map
Tylersburg, PA
Scale is 1 inch = 2,000 feet
USGS 7 1/2' topo quadrangle
Note:
No Abstract of Title, nor title commitment, nor results of a Title Search were furnished to the surveyor. There may exist other documents of record that would affect this surveyed parcel. Parcel may be subject to: easements, servitudes, R-O-W, leases, exceptions, reservations, restrictions, etc., if any that may appear, either of record or unrecorded.
proposed site boundary - 1.93 acres (limits of construction & NPDES boundary)
see Notes
Legend:
existing surface contours
existing tree line or edge of woods
proposed top of embankment
approximate proposed final grade coutours
18" filter fabric fence or straw bale barrier
set wooden lath for reference
survey reference point
existing site boundary tree (with blue paint slashes)
test site (associated with wetland delineation)
wetland perimeter (1,398 sq.ft. total)
Wetland locations shown hereon are according to a survey of existing markings installed during a delineation by Kyle T. Schwabenbauer of C.E.C. (Civil & Environmental Consultants, Inc.). (Test Sites per C.E.C. wetland delineation.)
N/F Commonwealth of Pennsylvania State Game Lands No. 24
Pond
area @ 1348.0' - 15,434 sq.ft. (water elevation)
volume @ 1348.0' - 54,864 cu.ft. - 2,032 cu.yd.
area @ 1342.5' - 3,279 sq.ft. (bottom AASHTO #1)
area @ 1343.0' - 3,621 sq.ft. (top AASHTO #1)
submerged berm elevation 1347.5'
area @ 1342.5' - 3,362 sq.ft. (bottom AASHTO #1)
area @ 1343.0' - 3,662 sq.ft. (top AASHTO #1)
Pond Discharge Channel (see detail)
ALD Discharge Channel (see detail)
12' wide
10' wide
Wetland
volume @ 1345.0' - 5,050 cu.ft. (187 cu.yd.)
area @ 1344.5' - 9,797 sq.ft. (bottom wetland)
area @ 1345.0' - 10,404 sq.ft. (water elevation)
top embankment elevation 1350.0'
top embankment elevation 1347.0'
limestone volume 1,467 cu.yd. @ elevation 1350.0'
ALD
Bottom of limestone - 1346'
Top of limestone - 1350'
Top of fill over limestone - 1352' (min.)
Impervious liner on bottom
50' stream barrier
Discharge Collection (see detail)
clay seals
IRON DEPOSIT
IRON DEPOSIT
"IVAN" ELEV.=1348.0'
SNAG
Outlet Channel
Discharge elev. - 1345'
Bottom width - 10'
2:1 sideslopes
Flow depth - 1.0'
"ISLAND"
"DRY" CHANNEL
LITTLE COON RUN
LITTLE COON RUN
DITCH
TRENCH/DITCH
LATH-1
LATH-2
LATH-3
LATH-4
LATH-5
LATH-6
STA 33
STA 2
STA 1
STA 96
STA 130
STA 197
STA 222
STA 364
TS-1
TS-2
TS-4
N/F Commonwealth of Pennsylvania State Game Lands No. 24
CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE--STOP CALL
PA1
1-800-242-1776
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.
Title:
Farmington Site
Topographic Survey
for
Hedin Environmental, Inc.
195 Castle Shannon Blvd. - Pittsburgh, PA
Municipality: Farmington Township
County: Clarion County, PA
Date: July 2005
Drawn By: dem
Drawing No.: he-farm4.dwg
Scale: As Shown
(SEAL)
Daniel E. Moore, PLS (PLS No. SU-039402-E)
2 04-04-06 misc. plan revisions dem
1 03-06-06 prelim. plan designs dem
No. Date Description By
Notes:
Orientation to North is approximate.
Basis of elevations is according to a GPS
D.E.M. Surveying, P.C.
Professional Land Surveying
42 Progress Street, Suite "C" Brookville, PA 15825
www.demsurveying.com
dem

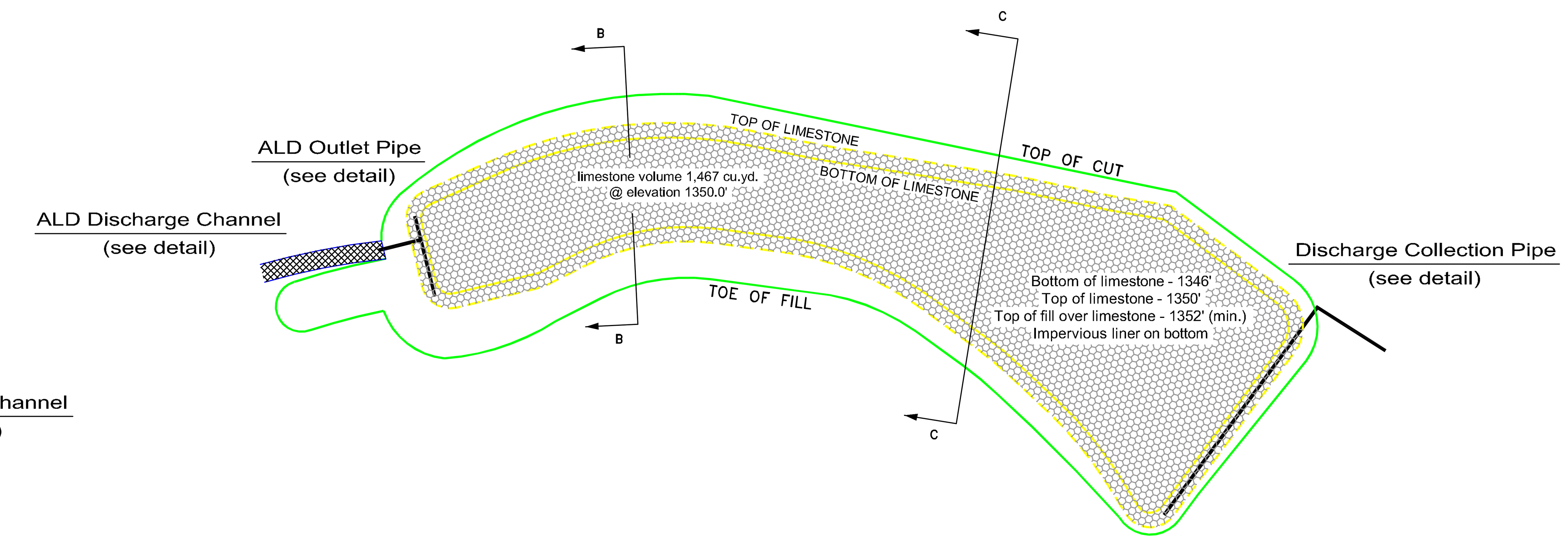
POND & WETLAND DETAIL

NOT TO SCALE



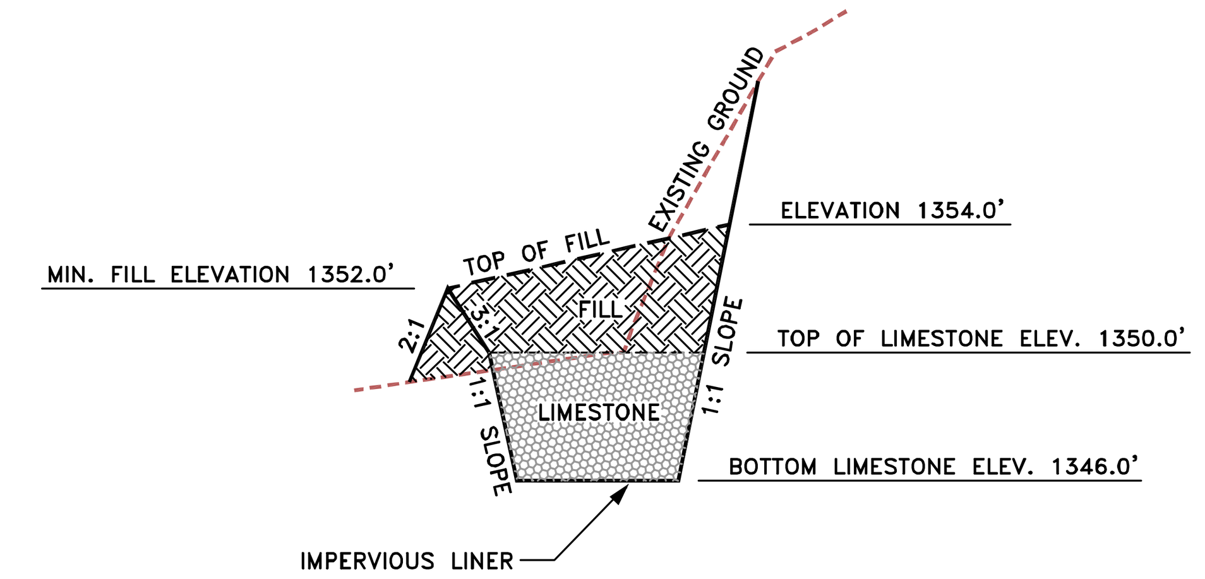
ALD DETAIL

NOT TO SCALE



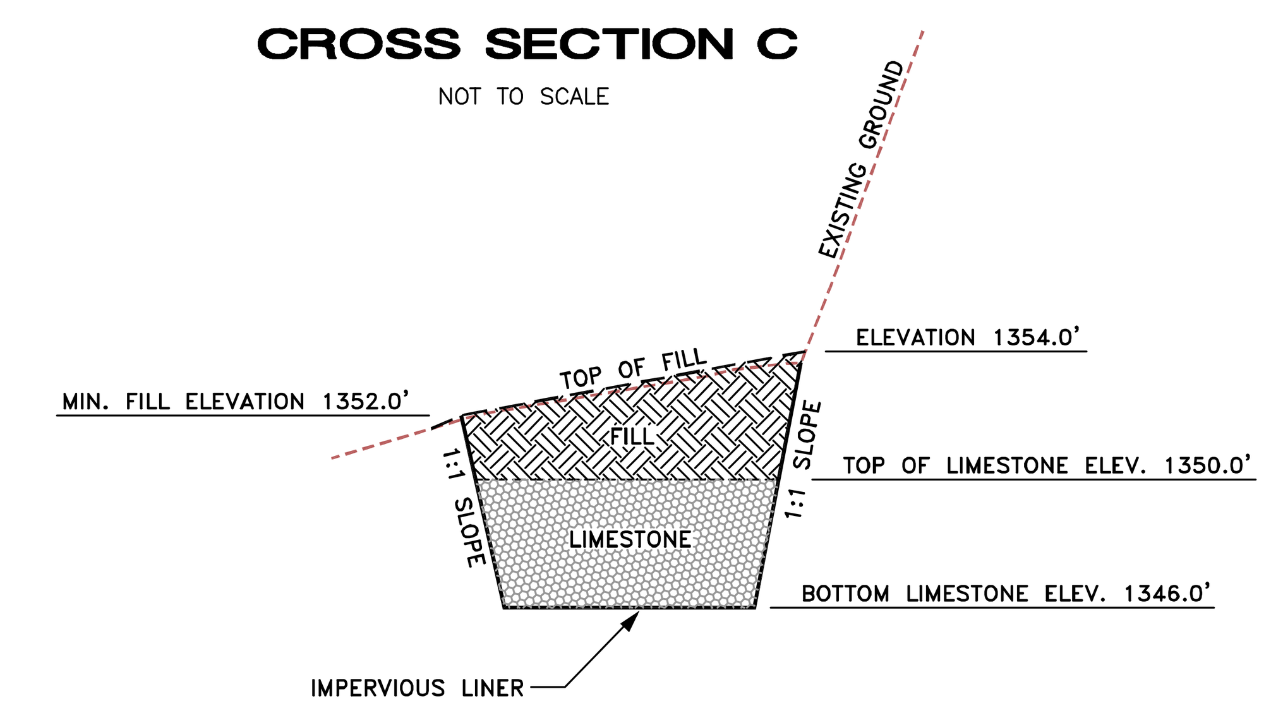
CROSS SECTION B

NOT TO SCALE



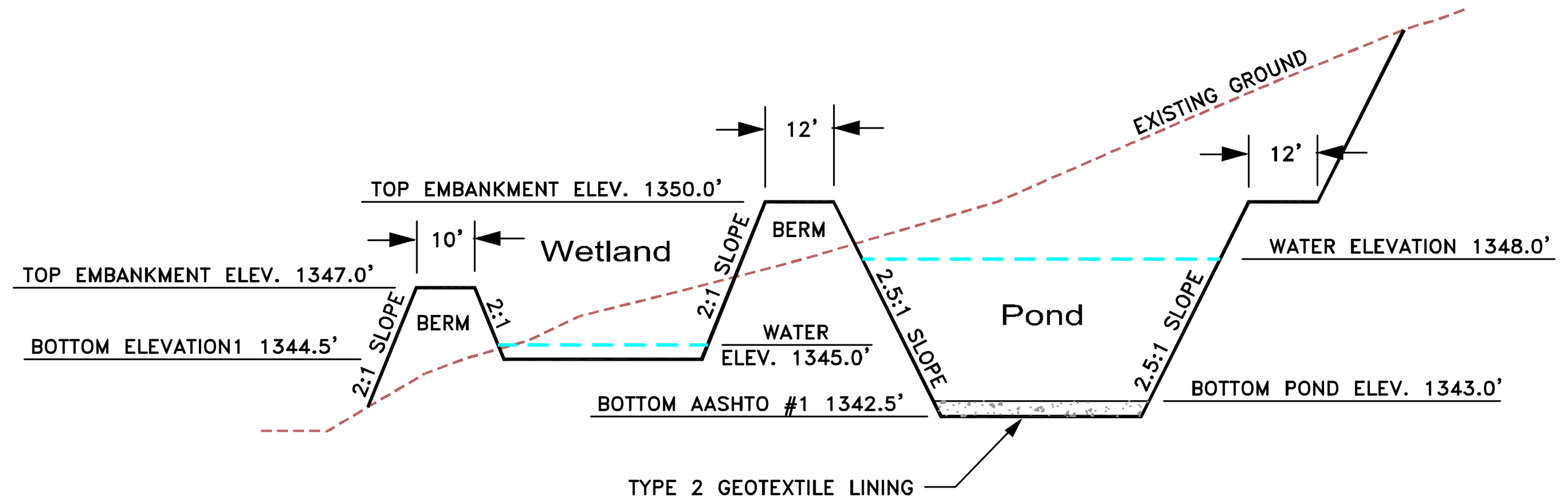
CROSS SECTION C

NOT TO SCALE



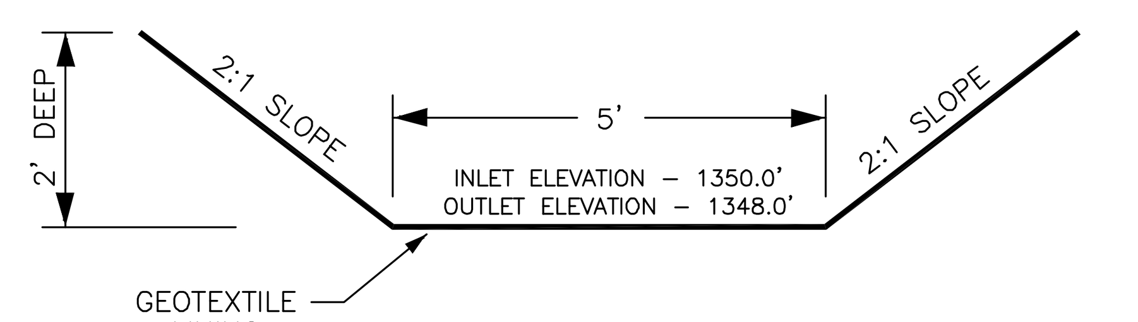
CROSS SECTION A

NOT TO SCALE



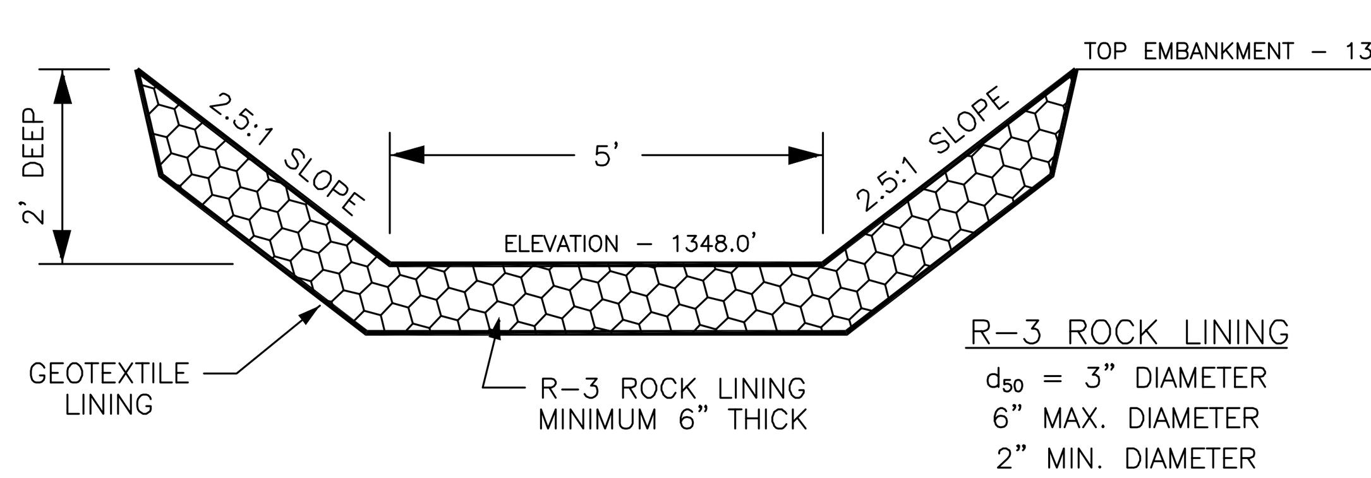
ALD DISCHARGE CHANNEL DETAIL

NOT TO SCALE



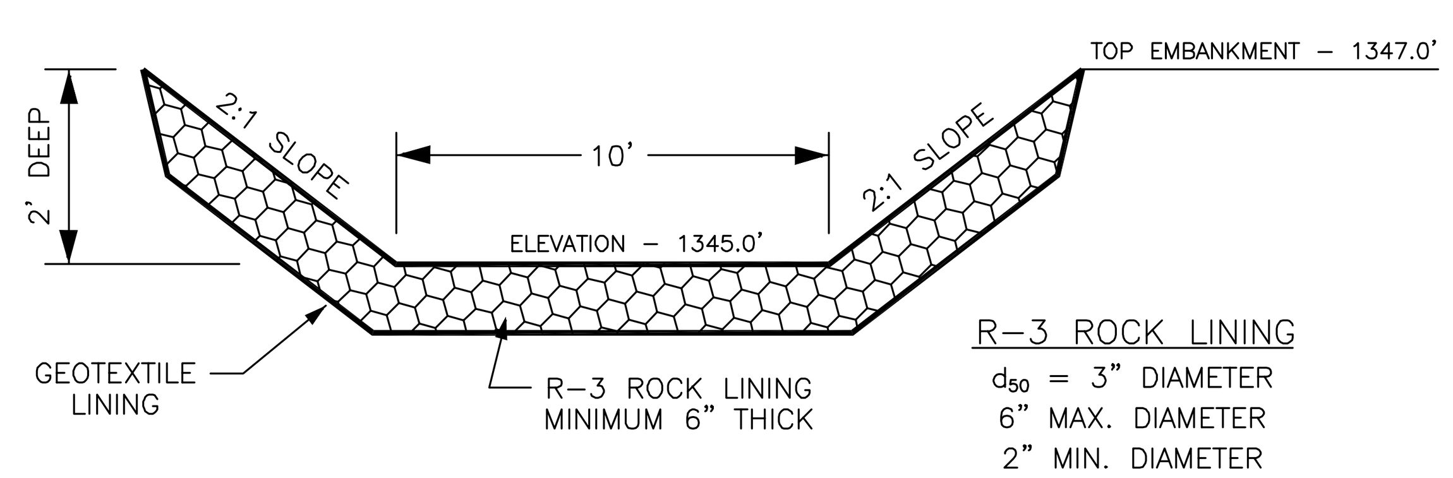
POND DISCHARGE CHANNEL DETAIL

NOT TO SCALE



WETLAND OUTLET CHANNEL DETAIL

NOT TO SCALE



Construction Narrative

The purpose of this project is to improve the existing discharge that currently flows directly to Little Coon Run located in Farmington Township, Clarion County, Pennsylvania.

Hedin Environmental, 195 Castle Shannon Boulevard, Pittsburgh, PA 15228, phone: (412) 571-2204 will oversee construction of all phases of the project.

It should be noted that the construction sequence can be adjusted and/or varied depending on weather conditions, equipment availability, operator preference, etc. Variations to this plan will be discussed with and approved by the appropriate personnel before being implemented.

Access to the site will be from an existing logging roadway. This roadway should be able to be utilized with only minor improvements; therefore no controls have been proposed on the road.

Construction Sequence

The following construction sequence for the project has been proposed. The actual construction sequence may vary based on site conditions and weather.

1. Install Erosion and Sediment Control measures, such as silt fence.
2. Begin installing the discharge collection system. Excavate the area around the discharge. Install the perforated pipe, allowing the water to continue discharging to the stream. Install aggregate around the pipe up to the level of the Pipe T.
3. Clear and grub work area.
4. Excavate ALD area. Separate soil and rocks from iron deposits during excavation.
5. Install impervious liner in ALD excavation, including sealed liner jackets around the influent and effluent pipes.
6. Install influent and effluent headers in the ALD excavation. Place 6" of ALD limestone under each pipe to prevent it from resting directly on the liner.
7. Install the limestone in ALD. Clean, washed AASHTO #3 limestone should be used. Carefully place the limestone around the manifolds and directly on the liner.
8. Close the liner on top of limestone.
9. Using excavated soil, place at least 2' of cover on top of the ALD. The final elevation should approximate the original contours of the site.
10. Excavate the area for the constructed wetland and build the wetland berms. The best available site material should be used in the bottom of the wetland.
11. Excavate the settling pond, install geotextile liner, and install aggregate lining in pond bottoms to a depth of six inches.
12. Excavate the channel from ALD to pond. This channel should be well-compacted, smoothed earth. Geotextile should be installed on top of the finished channel surface.
13. Apply seed and plants to the wetland.
14. Upon vegetative success, remove silt fence.

All disturbed areas will be limed, fertilized, seeded and mulched as soon as possible after disturbance has taken place.

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN:

No specific post construction storm water management BMP's are proposed as the site should not see a significant increase in runoff volume from a 2 year / 24 hour frequency storm when the project is complete.

MAINTENANCE:

The erosion and sedimentation control facilities discussed above will be inspected weekly and after each rainfall event to insure that they are functioning as intended. Repairs and/or replacements will be made as necessary. As soon as possible, and as weather conditions permit following each activity, revegetation will take place according to the following permanent vegetation rates:

Hay Mulch	2 1/2 tons/acre
Fertilizer (10-20-20)	1/2 ton/acre
Johnstone Fescue	30 pounds/acre
Birdsfoot Trefoil	6 pounds/acre
Red Top	3 pounds/acre
Oat Grain	2 bushels/acre
Lime	4 tons/acre

Title: Farmington Site Topographic Survey for Hedin Environmental, Inc.
195 Castle Shannon Blvd. - Pittsburgh, PA

Drawing No.: he-farm4.dwg
Date: July 2005
Scale: As Shown
Drawn By: dem
Municipality: Farmington Township
County: Clarion County, PA

(SEAL)

No.	Date	Description	By
2	04-04-06	misc. plan revisions	dem
1	03-06-06	prelim. plan designs	dem

D.E.M. Surveying, P.C.
Professional Land Surveying
42 Progress Street, Suite "C" Brookville, PA 15825
www.demsurveying.com

Pond and Wetland Area Cut/Fill

Cut yards	Fill yards	Net yards	Method
5,555	711	4,844 (c)	Grid
5,612	747	4,865 (c)	Composite
5,615	747	4,868 (c)	End area
5,612	746	4,866 (c)	Prismoidal

ALD Cut/Fill (without fill above limestone)

Cut yards	Fill yards	Net yards	Method
2,321	295	2,026 (c)	Grid
2,358	323	2,035 (c)	Composite
2,357	391	1,966 (c)	End area
2,354	388	1,966 (c)	Prismoidal

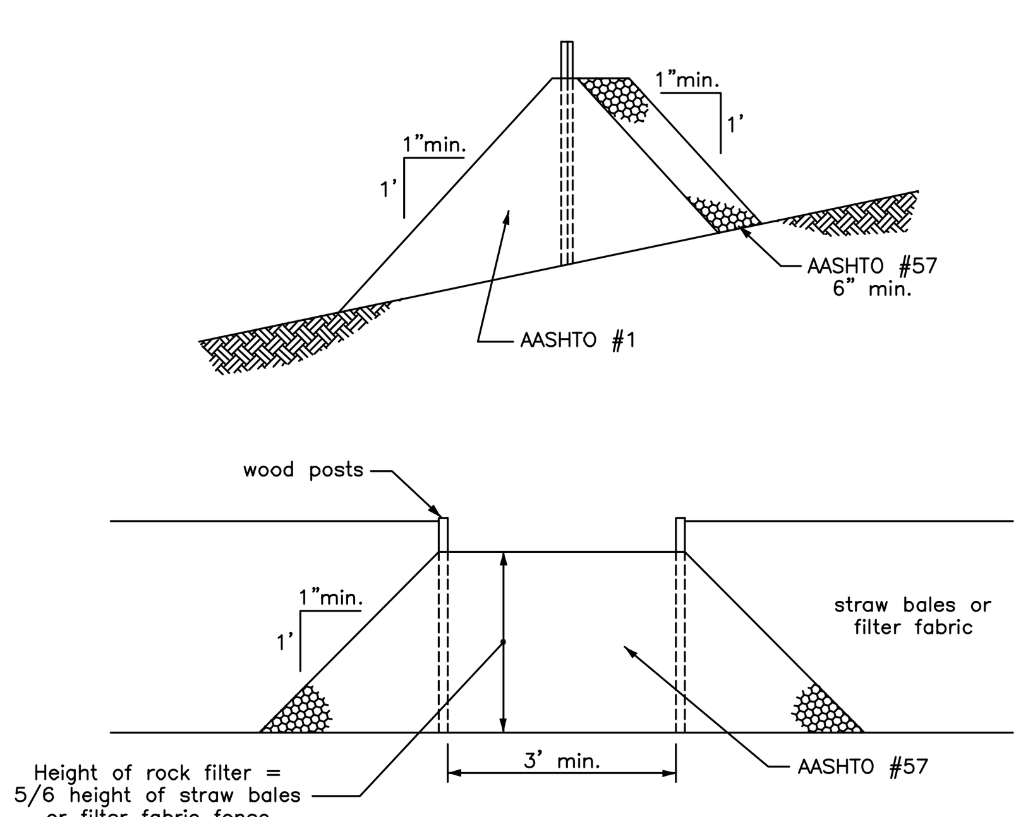
ALD Fill Above Limestone

Cut yards	Fill yards	Net yards	Method
0	1,330	1,330 (f)	Grid
0	1,377	1,377 (f)	Composite
0	1,376	1,376 (f)	End area
0	1,373	1,373 (f)	Prismoidal

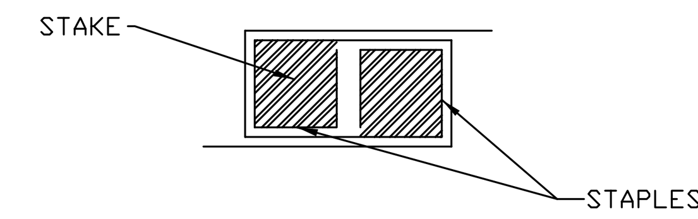
ALD Cut in Iron Deposit

Cut yards	Fill yards	Net yards	Method
1,683	0	1,683 (c)	Grid
1,738	0	1,738 (c)	Composite
1,788	0	1,788 (c)	End area
1,782	0	1,782 (c)	Prismoidal

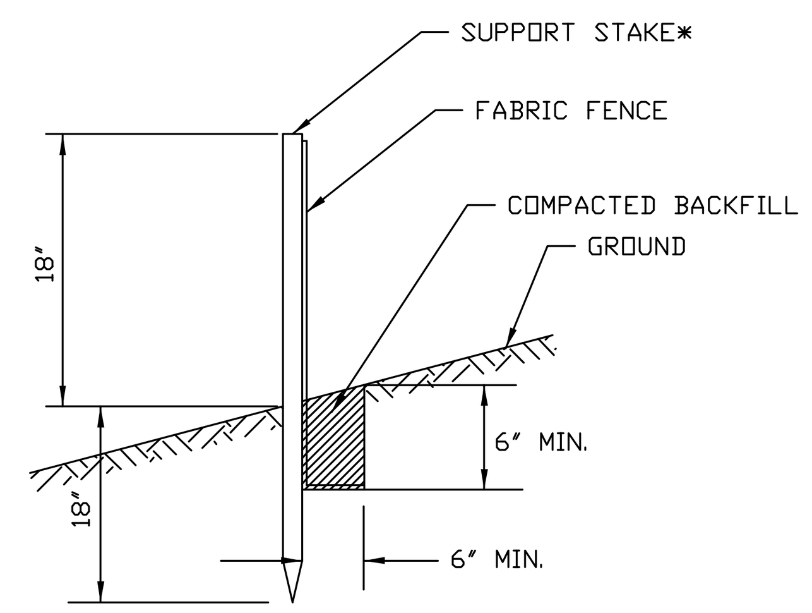
Rock Filter Outlet Construction Detail



STANDARD CONSTRUCTION DETAIL
Standard Filter Fabric Fence (18" High)



JOINING FENCE SECTIONS



* Stakes spaced @ 8' maximum. Use 2" x 2" wood or equivalent steel stakes.

Filter Fabric Fence must be placed at level existing grade. Both ends of the barrier must be extended at least 8 feet up slope at 45 degrees to the main barrier alignment.

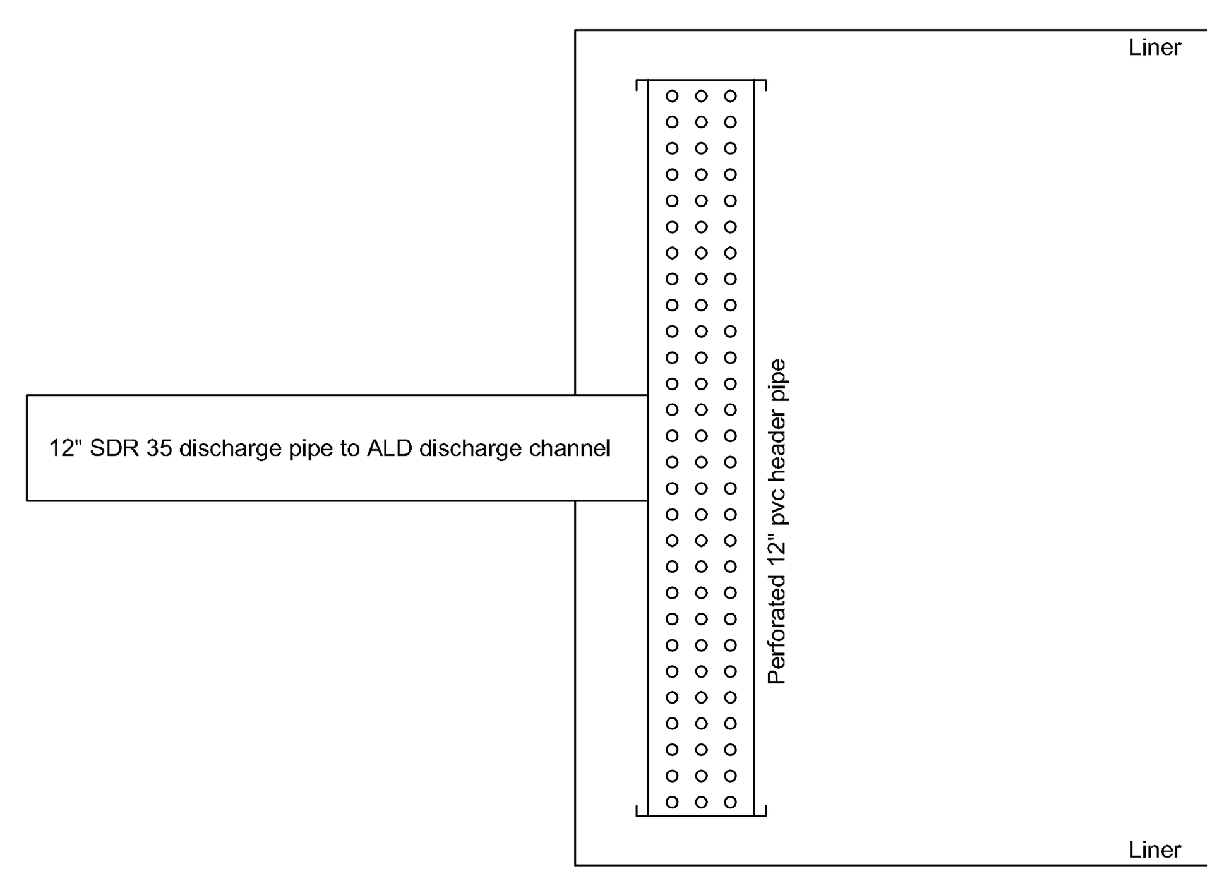
Sediment must be removed when accumulations reach 1/2 the above ground height of the fence.

Any section of Filter Fabric Fence which has been undermined or topped must be immediately replaced with a Rock Filter Outlet. See Standard Construction Detail.

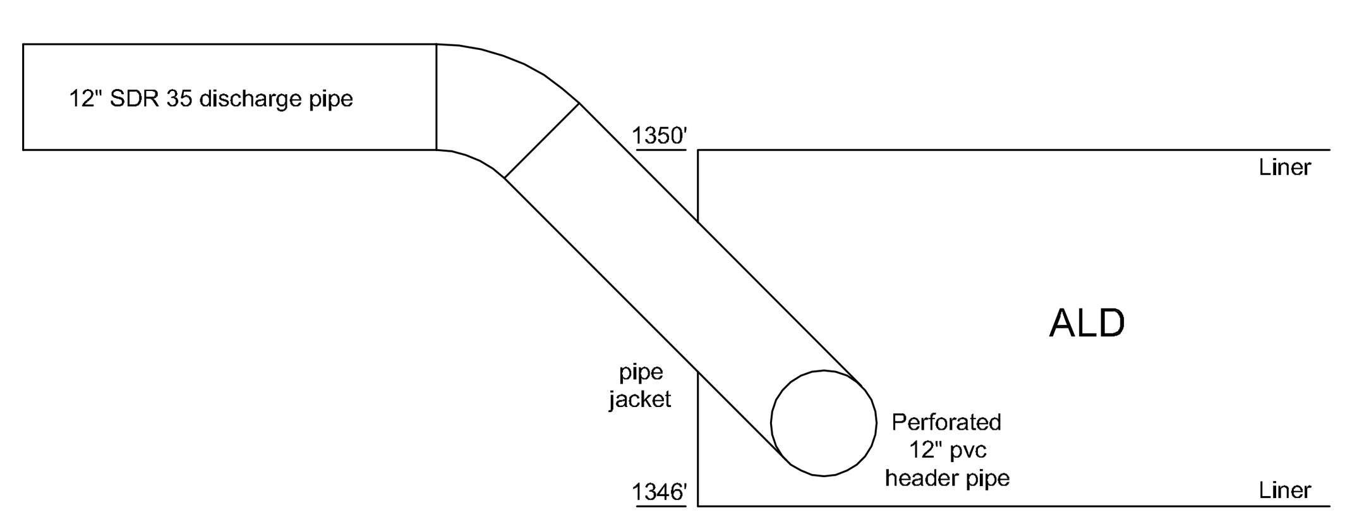
ALD OUTLET DETAIL

NOT TO SCALE

PLAN VIEW

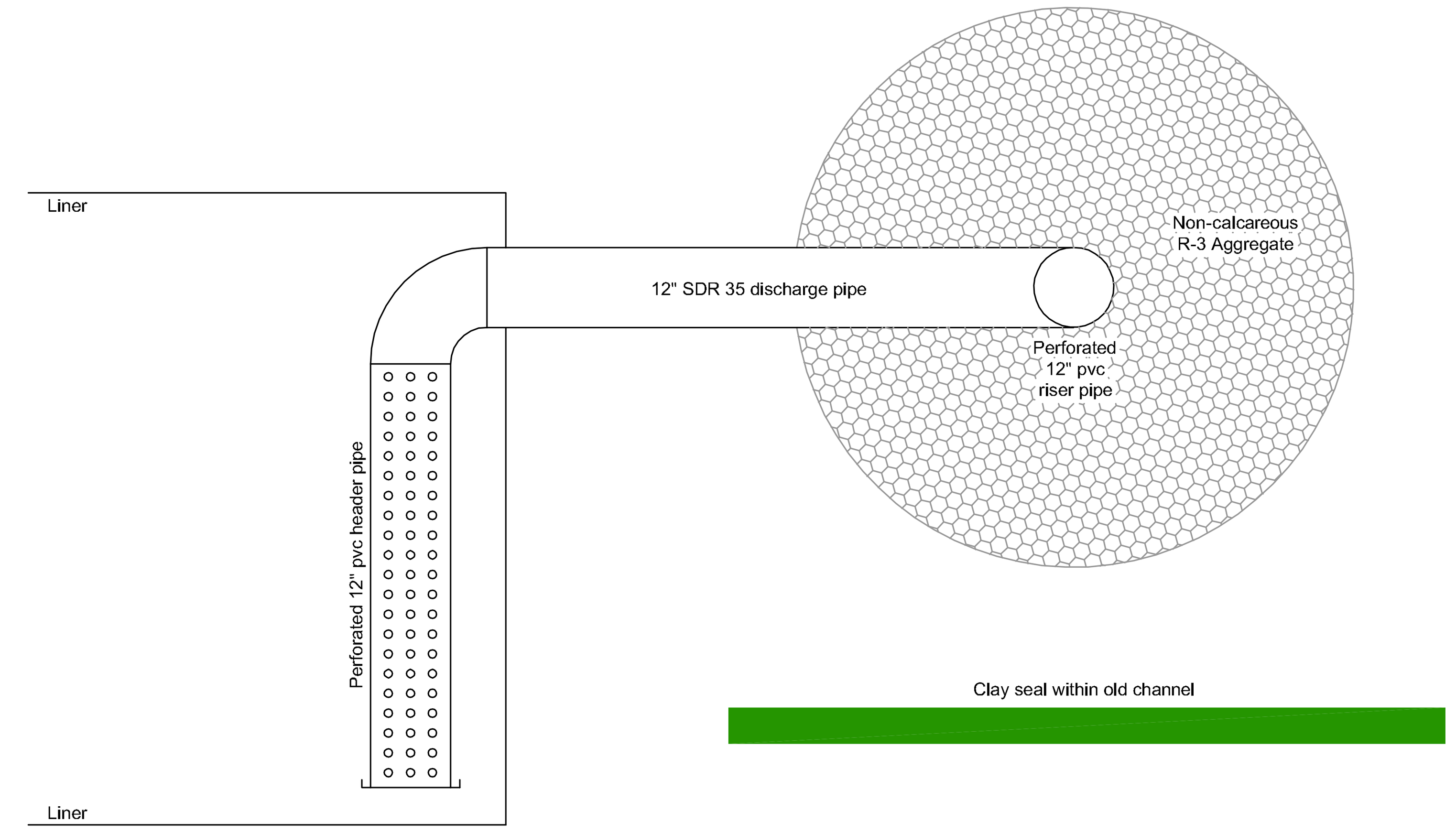


CROSS SECTION

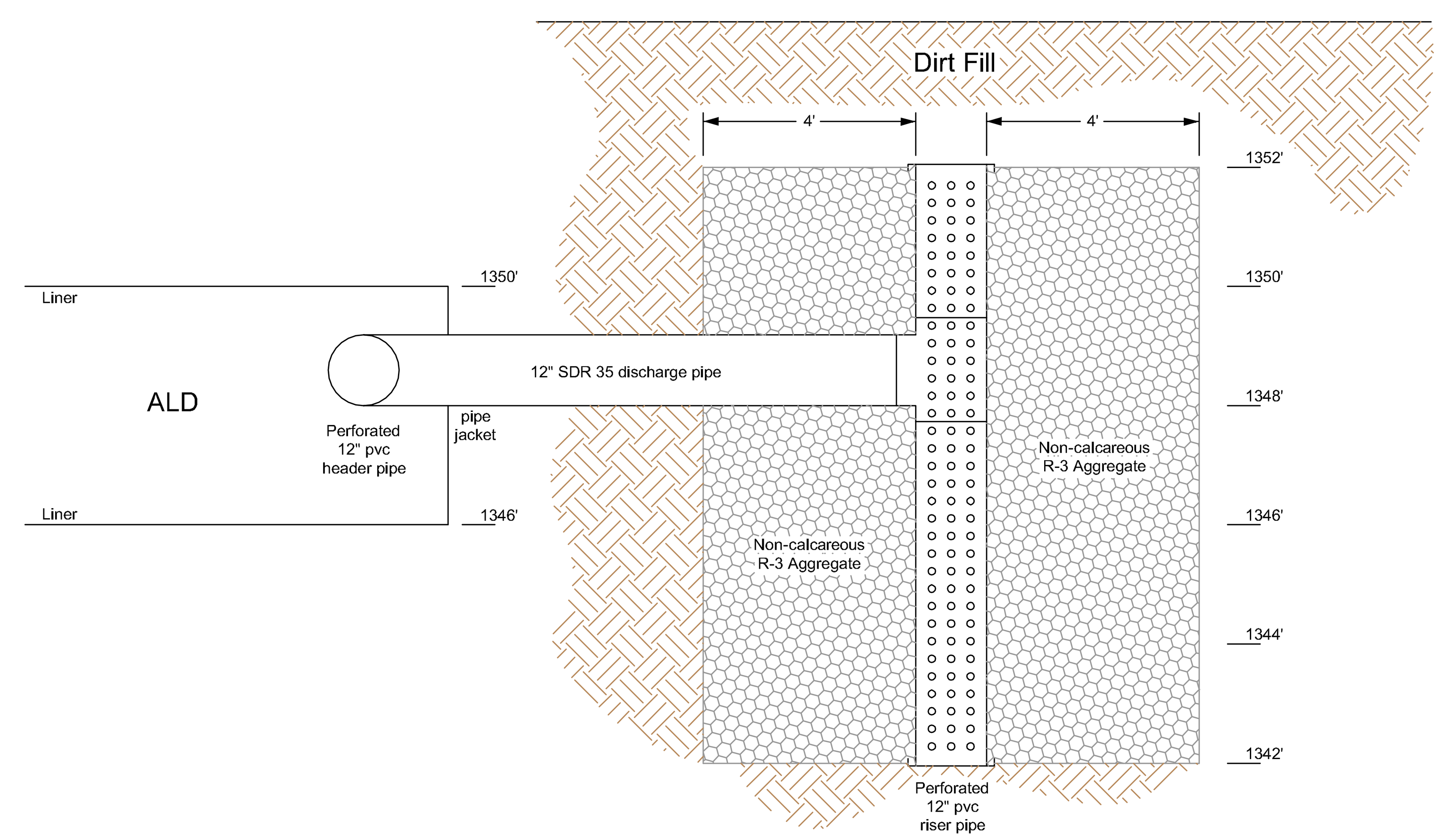


DISCHARGE COLLECTION DETAIL

NOT TO SCALE

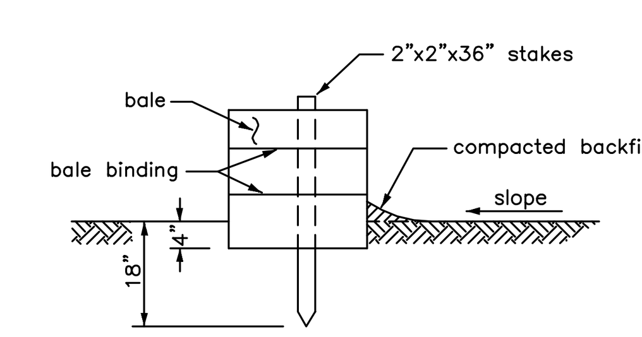


PLAN VIEW



CROSS SECTION

Straw Bale Barrier Construction Detail



Notes: Straw Bale Barriers should not be used for more than 3 months.

Straw Bale Barriers must be placed at level grades. Both ends of the barrier must be extended at least 8 feet upslope at 45 degrees to main barrier alignment.

Sediment must be removed where accumulations reach 1/3 the above ground height of the barrier.

Any section of straw bale barrier which has been undermined or topped must be immediately replaced with a rock filter outlet. See Rock Filter Outlet Detail.

Title:
Farmington Site
Topographic Survey
for
Hedin Environmental, Inc.
195 Castle Shannon Blvd. - Pittsburgh, PA

Municipality: Farmington Township
County: Clarion County, PA
Date: July 2005
Drawn By: dem
Drawing No.: he-farm4.dwg
Scale: As Shown

(SEAL)

Daniel E. Moore, PLS (PLS No. SU-039402-E)

Date

No.	Date	Description	By
2	04-04-06	misc. plan revisions	dem
1	03-06-06	prelim. plan designs	dem

Notes:
Orientation to North is approximate.

Basis of elevations is according to a GPS tie-in to an existing benchmark (N-89), Elev. = 1514.32' (NAVD88), per data published by National Geodetic Survey.

D.E.M. Surveying, P.C.
Professional Land Surveying
42 Progress Street, Suite "C" Brookville, PA 15825
www.demsurveying.com