CONDITIONAL USE / SITE PLA REVIEW APPLICATION	COM ITEM #4 Racine County, Wisconsin
Owner: Asphalt Contractors Inc	Applicant/Agent: Asphalt Contractors Inc
Town: Burlington	Zoning district(s):
TO THE RACINE COUNTY ECONOMIC DEVELOPMENT  The undersigned requests a conditional use / site plan review of the continue of non-metallic mining operations.	ew permit to (specify use, project, structure, size, etc.)
Moving, Crushing, Washing, Sorting,	Sizing, Stock Piling, transportation
and reclaimation.	
AT (site address): 7148 McHenry Street	Burlington
Subdivision:	Lot(s): Block:
Parcel # 002-02-19-07-010-000 + 18-015	-000 Section(s) 7,18 TZN R19 E
If served by municipal sewer, check here: Sa	anitary permit #:
Attached are:	-
zoning permit application  12 SETS: drawn-to-scale site plan that is based on a survey (10 of the 12 should be sized or folded to 8.5" x 11") letter of agent status	hearing/review fee (Fees are non-refundable, & re- publication/amendment fees will be charged where applicable.) 3 SETS: landscaping/lighting plan 12 SETS: report/cover letter & operations plan abutting property owners' names & mailing addresses other
print name: Asphalt Contrators Inc	e-mail address: tamon@asphattinc.com
address: 758 1701 Main St	telephone #: 262-717-8350
Union Grove Wi 53182	_ telephone #
	signed: <u>RKordus Pres</u>
STAFF USE ONLY: BASED ON CURRENT MAPPING, check applicable stater	ment(s) below & underline or circle the word "all" or "partially".
MA The property is all / partially located in the	N/A shoreland area.
<u>w∤A</u> The project is all / partially located in the	shoreland area.
The property is all (partially) located in the	Spring Valley Creek floodplain.  NA floodplain.
The property is all partially located in the wetland.  The project is all partially located in the wetland.	
The applicant is subject to the following Racine County Ord	dinance provisions (specify article/section):
Art. VI Div 30 M-4 Quarrying District; Sec. 20-1278 Min Non Metallic Mining Reclaimation.	eral Extraction, Ch. 20 Toning and Ch. 12.5
Shoreland contract: yes no _ <del></del> Public hearing date: <i>N</i> /A	
Public hearing date:	Site plan review meeting date: 10 - 17 - 2022  Date petition filed: 9-28-2022
cash of check#: 5 8391	amount received: \$ 7.00,00
05/14/2003/crh	L:\DS\FORMS\CU app

APPLICATION FOR ZONE RACINE COUNTY, WISCON		PERMIT NODATE PERMIT ISSUED		
OWNER Asphalt Cont	cactors To	APPLICANT Same		
Mailing Mailing	10/0/3 12/10	Mailing		
Mailing Address 1701 Main	Street	Address		
City State	Zip	City State	Zip	
Phone 262-717 - 8	7350	Phone		
FROME	, 550	rnone		
Email				
Parcel Id. # 002021907010	000 + 00202191801	5000 Site Address 7148 McHen	ry Street	***************************************
Municipality Burlington	n Sec	$\operatorname{stion}(s)$ 07/18 Town 02 Nor	th, Range <u>19</u> F	3ast
Lot Block Sub	division Name		_ CSM#	
		non-metallic Mining operation		
		, sorting Sizing, Stockpiling, +		
and reclaimation	•	, 3.		
New Principal	Bldg. Size (	Seve attached x	)( - x -	<del></del> )
Addition Accessor		(sqft) (Plan)		
Alteration Deck	Peak 1	Ht. (ft.) 100-Yr. F	loodplain Elev.	
Conversion Sign	Eave	Ht. (ft.) – Flood Pro	otection Elev. —	
Temporary Other		ing HtAvg. (ft.)		
· / /			11 L	/
		Value w/Labor \$ NA ZONING		
			<u>Proposed</u> <u>OK</u>	?
Structure in Shoreland? (per	~ .		<u> </u>	
Mitigation or Buffer Needed?		10	)el	
Structure in Floodplain? (per			Attached -	
*Structure's Fair Market Valu	ie \$ <u>N/A</u> Cum	.diative /0 51de-2	A110000	-
*>50% of Fair Market Value?	N/A Yes	No <u></u> Rear _	Plans -	
Structure in Wetland? (per r	nap) Yes	No + Shore _	PINNO	
Substandard Lot?	Yes		es	
BOA Variance Needed?	Yes	No 🔾 Date of Approval		
Conditional Use Site Plan Need	ded? Yes			
Shoreland Contract Needed?	Yes	<del></del>		
Additional Zoning Permit Stipu	-		(If "Yes," see back)	
		ce contained herein and certifies that su		ラ
		nowledge and belief of the signer, and t		9
use will be done in accordance	with the Zoning Oro	dinance, applicable stipulations, and Wi	isconsin laws.	070219
BOA/Conditional Use/Site Plan	Pd: \$ 200."°			0719
CC Date Check / Cash 58391		Signature of Owner /Applicant/Agent	Date	a a
Shoreland Contract Con	מ, לי			,
Shoreland Contract Fee	Pd: \$	D.:4 NT/->	And the state of t	0 -
CC Date/Check#/Cash	_	Print Name(s)		9 ~
Zoning Permit Fee	Pd: \$			1
CC Date/Check#/Cash	-	Notes (revisions, extensions, etc.)		0 0
	_	, , ,		0 5
Other:	Pd: \$			015000
✓ □ if shoreland erosion review for the property of the p	ee is included above	Zoning Administrator	(Staff Initials)	OO

Make checks payable to "Racine County Development Services" - <u>Note</u>: ALL FEES ARE NONREFUNDABLE (OVER)



To Racine County Development Services
14200 Washington Avenue
Sturtevant WI 53177

Asphalt Contractors Inc. is requesting that the committee at the October 17<sup>th</sup> meeting would consider the following changes to the Kordus Pit conditional use permit.

- 1. Allow soil berms to be placed a minimum of 50 feet away from property line.
- 2. That pit operations and trucking of aggregates may be allowed from 7:00am to noon on Saturdays. This is consistent with other pits in the area.



Sincerely,
Robert Kordus



Application for Conditional Use



#### **Project Description**

The proposal is to open and operate a sand and gravel operation on the former campground west of the Highway P and Fish Hatchery Road intersection. The existing paved driveway to the site will provide truck access to Highway P. The gravel mining will include removal of the soil overburden, crushing, screening and stockpiling of sand gravel, trucking and site reclamation. A portion of the products will be crushed to supply the company's asphalt plant operation in Burlington, WI.

#### **Operation Methods**

Refer to attached operation plan that shows the phased operations and final reclamation. Site work will begin with grading for driveways and equipment staging and stockpile areas.

During each phase topsoil and clay which averages two to three feet thick, will be placed in separate soil berms around the perimeter of the pit. The gravel varies on depth from 20 to 80 feet deep.

After the first phase is excavated and mining moves to the next phase, a portion of phase one will be reclaimed from soil excavated from phase two without putting more soil into berms.

Crushing and washing equipment will be portable and may leave the site from time to time depending on the sales of aggregate.

#### **Operations Equipment**

The equipment on site will include but not be limited to scrapers, haul trucks, excavators, dozers, primary and secondary crushing plants, screening plants, wash plants, conveyors, loaders, generators, water trucks, dump trucks and truck scale.

#### **Employees**

When there is a crushing and washing operation on site, there may be five or more employees. When there is only loading and scaling of dump trucks, there will be two employees. There will be a variable number of dump trucks.



#### **Operating Hours**

Normal operating hours for equipment, not including maintenance or repairs, will be between 6AM and 6PM, Monday through Friday. Saturdays will be from 7AM to 3PM. No Sundays or Holidays. Equipment maintenance and repairs may occur after normal hours of operation.

#### **Source and Use of Water**

There is an existing pond on the property. There are wetlands on the west side of the property next to the county line. When the pit is open, we will pump water from the pond to another clay lined pond built near the washing equipment. No water will be returned to the existing pond.

When the gravel is removed in the northwest corner of the pit, another freshwater pond will be dug that will be used instead of the existing pond for wash water.

#### **Haul Road**

The existing paved driveway will be the access to the pit. The driveway will be widened with asphalt as needed to carry truck traffic. Trucks will use Highway P which is already being used by dump trucks from other gravel pits.

#### **Environmental Regulations**

Asphalt Contractors, Inc. will comply with all relevant regulations to operate this site. The Wisconsin DNR along with the Federal Mine Safety and Health Administration, will have rules that must be followed. The rules will regulate the use of water and the control of storm water on the site.

There will be a trash dumpster onsite with a portable toilet.

#### **Permit Duration**

This site has a very large quantity of gravel that could last 20 years or more. Permits will be applied for when there may be renewals needed.

#### **Methods Proposed to Minimize Pollution**

EPA standards along with properly maintained equipment, will assure that noise levels will be below allowable levels for the operation of each machine. Trees and soil berms in the setbacks will minimize noise at the property line. The pit operation will begin at the northwest end of the



pit and dig down to roughly elevation 815. When the equipment digs out enough gravel, it will be roughly 60 to 70 feet below the ground level to the east and south. The noise levels on the high ground will be much lower with the gravel operation being in a deep hole. Trucks will be driving on an asphalt surface when they leave the truck scale and there are trees on the southside of the entrance road.

When trucks are driving on gravel to get loaded, there will be a water truck onsite to apply water if there are dusty conditions.

When gravel is being washed, water will be removed from ponds to washing ponds for the plant. Water will not be returned to any freshwater pond. The DNR will require a stormwater permit to control runoff in the pit. The pit will be internally drained with no water leaving the pit to flow to the wetlands to the west. The restoration plan shows that we will not disturb the slopes that are 15 feet above the wetlands. The trees and vegetation will remain intact.

### The Method of Recycling Water Use for Washing Gravel

Water used for processing operations will use a series of ponds. The ponds constructed onsite will include a freshwater pond and two deposit ponds. Water used for the washing operation is pumped from a freshwater pond that is the ground water. When the operation begins, that will be the existing pond at the south end of the property. After gravel has been excavated at the northwest corner of the pit, a new freshwater pond will be dug. That pond will be the new source of freshwater and will be permanent in the reclaimed land.

Water from the first of the two ponds used for washing will be kept full and replenished as needed from the freshwater pond. That first pond has water pumped to the wash plant where it washes the silt out of the crushed gravel. That muddy water then flows to another pond built for the purpose of having the silt settle to the bottom, and the clean water at the opposite end of the pond flows back into the first pond. This process recycles the water except for the water in the gravel when it is stockpiled.

#### Reclamation:

As the gravel excavation moves on the property and depletes a portion that is in the phasing plan, the areas will be graded and topsoil replaced. The land will be seeded with native grass



and the bottom of the pit will have either grass or hay field. The disturbed portion of the land will be suitable with the ponds for use as a rural piece of property.

A more detailed reclamation plan will be submitted if the rezone and conditional use permits are granted. The plan will follow the rules set by the DNR and have a bond posted for financial assurance to the County.

### Abutting property owners:

- Cretex Materials
   311 Lowell Ave
   Elk River, MN 55330
- TTT Real Estate LLC 30621 52<sup>nd</sup> St Salem, WI 53168
- B & A Trails Living Trust
   Marshall R Newholm
   7626 McHenry St
   Burlington, WI 53105
- Greg & Jean Ann Maerzke
   2421 Mealy Rd
   Waterford, WI 53185
- Ronald Volosko
   5107 N. Lincoln Ave
   Chicago, IL 60625
- Craig Severson
   W 970 Clayton Ct
   Burlington, WI 53105
- Paul Tackett
   7135 McHenry St
   Burlington, WI 53105
- Michael & Judith Warren
   7220 McHenry St
   Burlington, WI 53105

C.T.H. S13-31-20°W PP 99 (MCHENRY STREET) ALSO: THE SOUTH 33 FEET OF THE SOUTHEAST 1/4 OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 19 EAST OF THE 4TH PRINCIPAL MERIDIAN LYING WEST OF THE WEST LINE OF COUNTY TRUNK HIGHWAY "P". ALSO: THE NORTH 1/2 OF THE NORTHWEST 1/4 OF SECTION 18, TOWNSHIP 2 NORTH, RANGE 19 EAST OF THE 4TH PRINCIPAL MERIDIAN. THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 7, TOWNSHIP 2 NORTH, RANGE 19 EAST OF THE 4TH PRINCIPAL MERIDIAN. SAID LAND LYING AND BEING IN THE TOWNSHIP OF BURLINGTON, COUNTY OF RACINE AND STATE OF WISCONSIN. B.W. SURVEYING, INC. MAP AND LEGAL DESCRIPTION LAND SURVEYS
MAPPING AND PLANNING
412 N. PINE STREET
BURLINGTON, W 53105
(262)—767—0225 PROPOSED REZONE BEARINGS HEREON RELATE TO THE WEST LINE OF THE SOUTHWEST 1/4 OF SECTION 7-2-19, ASSUMED BEARING NORTH 00'47'57" WEST. GRAPHIC SCALE 2205.95 SCALE: 1" 400 200 6 PREPARED FOR: ROBERT KORDIS SOUTHWEST 1/4 S88'16'22"W N88"16"22"E Ę S01'10'06"E S00'56'31"E 1312.24 1284.46 SOUTHWEST 1/4 S01°10'06"E LINE SECTION 182-19 1317.46 LINE SOUTHWEST 1/4 SECTION 7-2-SECTION 18-2-19 PROPOSED ZONING: M-4 2689.08 EXISTING ZONING: P-2 SECTION 7-2-19 7,175,240 sq. ft. 164.72 acres NORTHWEST 1/4 TOTAL SOUTHWEST 1/4 SOUTH 1/2 LINE NORTH 1/2 N88.30,44"E S8815'51"W LINE N88"28"12"E NORTH SOUTH SOUTHWEST 1/4 SECTION 7-2-19 LINE NORTHWEST 1/4 SECTION 18-2-19 N00'47'57"W 1319.53 N01'02'20"W 1321.90



Tel (262)878-4678

# Fax (262)878-5411 www.asphaltinc.comRECEIVED SEP 2 8 2022 RACINE COUNTY

#### **Reclamation Plan**

This application and plan is being submitted to Racine County as a request for a nonmetallic mining reclamation permit as required by the State of Wisconsin Administrative Code NR 135. The application describes the operational procedure and proposed reclamation plan for a sand and gravel pit located in the Town of Burlington. The property is a former campground at 7148 McHenry Street, Tax Parcels 002-02-19-07-010-000 and 002-02-19-18-015-000. Refer to the survey map attached. The property is adjacent to two active gravel pits. There is a long, paved road to Highway P for access. The property to the east is a farm field and to the southeast and south there are two homes. The portion of land to the west is wetland.

#### **Geologic Composition and Depth of Deposit**

The glacial deposit below the topsoil and clay is sand and gravel down to groundwater and below groundwater. This is proven by the two active pits next to this property that have excavated to that depth. The top of the hills will be excavated roughly eighty feet deep to the final grade for reclamation.

#### Distribution and Thickness of Topsoil

Test holes on the property show roughly one foot of topsoil in the meadow on the eastside of the property. The rolling hills in the woods vary from six inches on the top of the hills to five feet deep in the valleys. Thickness of clay varies in a similar manner.

The wooded area will have roots in the topsoil but after being salvaged, they should rot in the stockpile so it can be spread out in the reclaimed areas.

#### **Elevation of Groundwater**

There is an existing pond at the south end of the property where the groundwater is roughly at elevation 804. There will be an annual report to Racine County describing changes to ground water elevation in the existing pond.

#### **Reclamation Measures**

Before an area has the soil removed, trees that have a value for harvesting logs will be removed. If the remaining trees are not cut for firewood they will be shredded into chips to be



Tel (262)878-4678 Fax (262)878-5411 www.asphaltinc.com

spread on reclaimed soils. If the excess wood becomes too large, we will burn piles occasionally. The Township does not have an ordinance or permits for burning. The gravel excavation will work to the western boundary of the pit and will bury stumps and burn piles in the slopes, where they will be covered with gravel to a shape ready for soil replacement.

Rather than cut down additional trees in the 200-foot setback, we will stockpile the first soil removed in phase one to build a berm around the farm buildings as shown on the operations plan. Topsoil will be placed in the berms on the north and southside of the lot. Clay will be piled in the berm on the west end of the lot. As the pit reaches its final depth in the northwest corner, soil will be piled in the bottom of the pit until it is placed on the restored portions of the pit. As the pit progresses through each phase, soil will be removed ahead of the excavation and be placed on an area that is ready to be reclaimed. If topsoil or clay needs to be put in temporary berms in the bottom of the pit, they will also be seeded. Refer to the Financial assurance worksheet where it shows approximately 36,000 C.Y. of topsoil or clay will be placed into the berms to begin Phase 1.

The maximum grade on the slopes will be 3H to 1V. When the pit reaches a point that it is in the field on the east half of the property, the soil will be placed into berms along the east and south boundaries of the pit. The topsoil will be placed in berms separate from berms with clay. All seeding will be done in conformance with the Racine County seeding requirements that are attached.

The soil piles or berms onsite will be shaped and have temporary seed and fertilizer placed within seven days. All other soil piles or berms will have slopes graded, seeded and have washouts repaired until grass holds the soil in place.

No topsoil will be removed from the property. The reclamation will be done in phases with soil removed ahead of the excavation placed on land that is shaped behind the excavation.

#### **Topography and Structures**

Refer to the map attached for the topography. There are two homes on the property that will remain in place. A new truck road will be built around the southside of the old farmhouse and will remain in place after reclamation. This will provide access to the reclaimed area and to the home at the south end of the property. That road will be paved to the bottom of the pit but



Tel (262)878-4678 Fax (262)878-5411 www.asphaltinc.com

then will be a gravel road on the remainder of the property. Two new ponds will be built and will have a safety ledge built around the edges.

#### **Revegetation Plan**

When slopes are ready to be reclaimed, the soil will be placed at a minimum of one-foot depth and planted with a seed mix with a fertilizer done in conformance with Racine County standards.

When the lower flat ground is ready, a temporary seed mix will be planted per Racine County standards. After large areas are completed, this will be replaced with alfalfa when it is feasible to farm it.

The work for planting seed will be done in the spring and fall of each year as much as is practical to insure the best chance of early growth.

The seeded areas that have reclamation completed will be inspected in the spring and fall for washouts that need to be repaired. Those washouts will have soil replaced and be seeded again until the soil is stabilized.

The vegetation that has grown will be called successful for acceptance when at least 80% of the portion of land inspected has a ground cover of grass.

#### **Biological Information and Wildlife**

The native vegetation includes various grasses, sumac, oaks, hickory and black cherry. The rural wildlife includes whitetail deer, turkey, racoon, rabbit, coyote, fox, sparrow, robin, squirrels, and chickadee.

#### **Erosion and Storm Water Management**

As the operation phasing plan shows, the mining is conducted in a manner that minimizes the acreage open before reclamation begins. This serves to control the amount of area subject to erosion in accordance with NR1354.06(2). Topsoil stockpiles shall be seeded per Racine County standards. Silt fence or waddles will be used in accordance with methods and procedures described in the "Wisconsin Construction Site Best Management Practices Handbook," where it is deemed necessary in the field. Silt fence will be placed at the bottom of the reclaimed slopes and maintained until grass has stabilized the slope. Except for soil piles that may face a



Tel (262)878-4678 Fax (262)878-5411 www.asphaltinc.com

property line, any erosion that may take place will happen in the confines of the pit. The pit is internally drained with no outlets. The reclaimed land will be inspected monthly except for winter, to repair washouts with soil and reseed.

A storm water management plan will be submitted to the DNR to obtain a permit. This will include controlling silt and sand runoff into the new ponds.

#### **Interim Reclamation**

It is the intent of the operations plan with phasing described, that portions of any phase can be reclaimed after excavation work is complete. The general idea is to crush towards the edges of the pit so slopes can be shaped with soil and seeded.

#### **Criteria for Successful Reclamation**

The grass will have to achieve a plant density of 80% measured in random locations. Maintenance of the grass may include mowing or reseeding where needed.

#### **Post Mining Land Use**

The two homes and the related structures will remain. It is anticipated that the land will be rezoned to an agricultural use. It is planned that the perimeter slopes will return to native grasses and find that new trees will naturally take root from the existing woods. The bottom of the pit would be suitable for pasture or growing hay.

I hereby certify that Asphalt Contractors, Inc. will comply with the provisions of this reclamation plan as submitted. This also includes compliance with the statewide nonmetallic mining reclamation standards established in NR135.05 through NR135.15 in the Wisconsin Administrative Code. I also further stipulate that if there is a change in company ownership or the ownership of the land, that Racine County will be given a minimum of 30-day notice and all documentation herein will be revised to reflect those changes.

Dated	Signed	
	Robert Kordus	
	President	



Office:

1701 Main Street Union Grove, WI 53182 Shop:

21750 Durand Ave Union Grove, WI 53182 Plant:

34215 W. Market St. Burlington, WI 53105

Financial Assurance for Reclamation of the Burlington Campground Pit

Average depth of soil is 1.5 feet

For 1 acre of ground that is 2,420 C.Y.

There is a short distance to move dirt and no compaction required for placement.

Shape subgrade: Dozer 10 hr x \$150/hr= \$1,500.00

Place Soil Excavation \$150/hr

3 haul trucks 450/hr

Dozer \$150/hr

Move 300 C.Y./hr \$750/hr x 8 hours= \$6,000

\$7,500/acre

Maximum of 15 acres open x \$7,500=

\$112,500

Mobilization

\$4,000

Prepare soil for seed 6 hours x \$75/hr x 15 acres=

<u>\$6,750</u>

\$112,500+\$4,000+\$6,750=

\$123,250

15 acres x 2,420 C.Y.=36,300 C.Y.=\$3.40/C.Y.

Seed 90 lbs/acre x \$6.00/lb=\$540

Fertilizer 50 lbs/acre x .75/ lb= \$37.50

\$577.50 /acre x 15 acres=

\$8,662.50

Remove truck scale

\$1,000.00

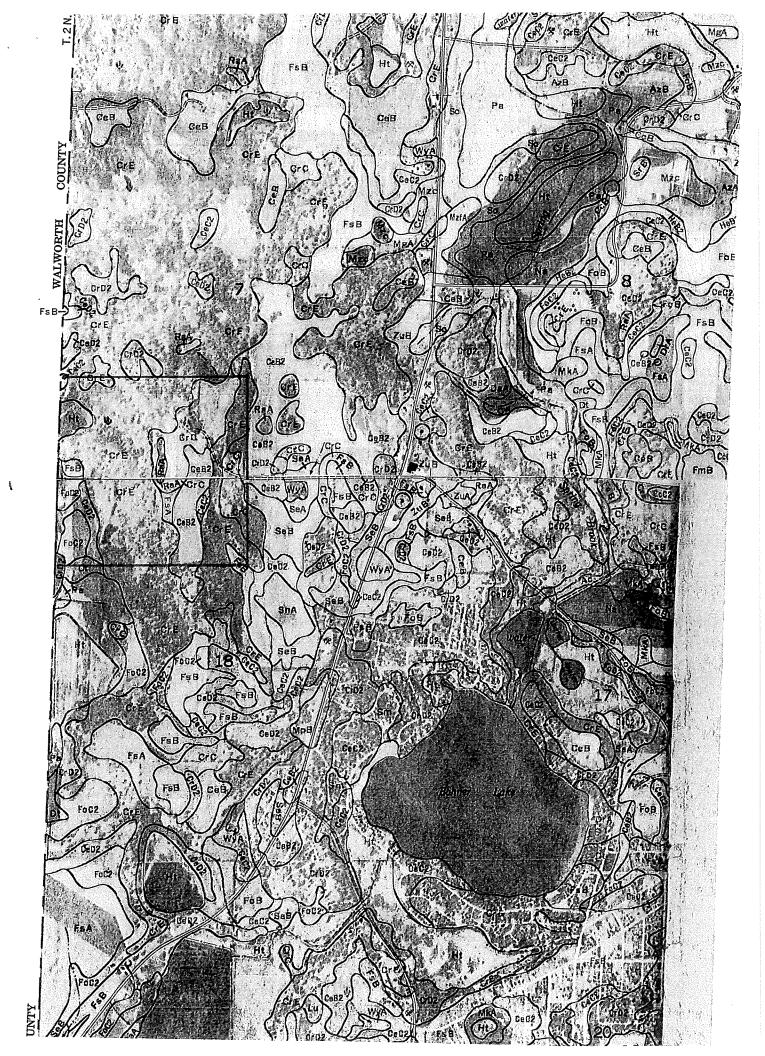
\$132,912.50

County Administration 10%

13,291.25

Total:\$146,203.75

Bond \$150,000



#### Silt Fence

### Design Criteria and Requirements (CPA-123)

Timing - Silt fence shall be installed prior to soll disturbance.

Placement - When installed as a stand-alone practice on a slope, slit fence shall be placed on the

contour. The parallel spacing shall not exceed the maximum slope lengths for the appropriate slope as specified in Table 1.

Silt fence shall not be placed perpendicular to the contour.

The ends of the fence shall be extended upslope to prevent water from flowing around the ends of the fence.

Height — Installed silt fence shall be a minimum 14 inches high and shall not exceed 28 inches in height measured from the installed ground elevation.

Table 1		
Slope Fence Spacing		
<2%	100 feet	
2 to 5%	75 feet	
5 to 10%	50 feet	
10 to 93%	25 feet	
> 33%	20 feet	

#### Support -

#### 1. Wood Supports:

- a. The full height of the silt fence shall be supported by 1 1/8 inches air or kiln dried posts of hickory or oak.
- b. The slit fence fabric shall be stapled, using at least 0.5-inch staples, to the upslope side of the posts in at least three places.
- c. The posts shall be a minimum of 3 feet long for 24-inch silt fence and a minimum of 4 feet for 36-inch silt fence fabric.

#### 2. Steel Supports:

a. The full height of the silt fence shall be supported by steel posts at least 5 feet long with a strength of 1.33 pounds per foot and have projections for the attachment of fasteners.

b. The silt fence fabric shall be attached in at least three places on the upslope side with 50 pound plastic tie straps or wire fasteners. To prevent damage to the fabric from fastener, the protruding ends shall be pointed away from the fabric.

- 3. The maximum spacing of posts for non-woven slit fence shall be 3 feet and for woven fabric \$ feet.
- 4. Silt fence shall have a support cord.
- 5. Where joints are necessary, each end of the fabric shall be securely fastened to a post. The posts shall then be wrapped around each other to produce a stable, secure joint or shall be overlapped the distance between two posts.
- 6. A minimum of 20 inches of the post shall extend into the ground after installation.

Anchoring — Silt fence shall be anchored by spreading at least 8 inches of the fabric in a 4 inch wide by 6 inch deep trench, or 6 inch deep V-trench on the upslope side of the fence. The trench shall be backilled and compacted. Trenches shall not be excavated wider and deeper than necessary for proper installation. On the terminal ends of silt fence the fabric shall be wrapped around the post such that the staples are not visible.

Geotextile Fabric Specifications - The geotextile fabric consists of either woven or non-woven polyester,

Table 2		
Test Requirement	Method	Value <sup>1</sup>
Minimum grab tensile strength in the machine direction	ASTM D 4632	120 lbs (550N)
Minimum grab tensile strength in the cross machine direction	ASTM D 4632	100 lbs (450N)
Maximum apparent opening size equivalent standard sieve	ASTM D 4751	No. 30 (600 µm)
Minimum permittivity	ASTM D 4491	0.05 sec <sup>1</sup>
Minimum ultraviolet stability percent of strength retained after 500 hours of exposure	ASTM D 4355	70%

(WisDOT Standard Specifications for Road and Bridge Construction, 2001) 1 All numerical values represent min/max average roll values.

1 All numerical values represent min/max average roll values. (For example, the average min, test results on any roll in a lot should meet or exceed the min, specified values.)

Silt fence shall have a maximum flow rate of 10gallons/minute/square foot at 50mm constant head as determined by multiplying permittivity in 1/second as determined by ASTM D-4491 by a conversion factor of 74.

polypropylene, stabilized nylon, polyethylene, or polyvinylidene chloride. Non-woven fabric may be needle. punched, heat bonded, resin bonded, or combinations thereof. All fabric shall meet the following requirements as specified in Table 2.

### Maintenance and Operation

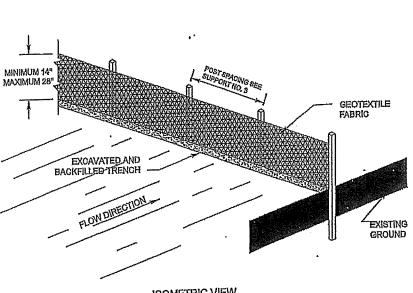
Silt fence shall at a minimum be inspected weekly and within 24 hours after every precipitation even that produces 0.5 inches of rain or more during a 24 hour period.

Damaged or decomposed fence, undercutting, or flow channels around the end of barriers shall be repaired or corrected.

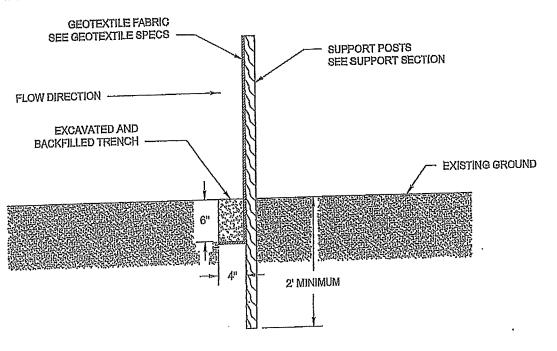
Sediment shall be properly disposed of once the deposits reach 1/2 the height of the fence.

Removal - Silt fence shall remain in-place and be maintained until the disturbed upslope area is stabilized by permanent vegetation and is no longer susceptible to erosion.

\*For more detailed information on silt fence review description "Silt Fence (1056) from the WDNR Conservation Practice Standard.



ISOMETRIC VIEW



TYPICAL SECTION

SILT FENCE

Racine County Land Conservation 14200 Washington Avenue Sturtevant, WI 53177



#### SEEDING DATES:

SEEDING TYPE DATES	
Permanent Seeding	April 1 <sup>st</sup> – September 15 <sup>th</sup>
Temporary Seeding	September 16 <sup>th</sup> – October 31 <sup>st</sup>
	November 1 <sup>st</sup> – Snow cover

If permanent seeding is not completed prior to winter, the site will need to be stabilized with straw, mulch or erosion control fabric and permanent seeding will need to be finished during the next acceptable time period following the temporary seeding. Reference instructions included with seed mixture for additional information. Consider watering to help establish the seeding when applicable. Water application rates shall be controlled to prevent runoff and erosion.

PERMANENT SEEDING: FROM APRIL 1<sup>ST</sup> THRU SEPT 15<sup>TH</sup>

# MINIMUM PURE LIVE SEED (PLS) 1 RATE PER ACRE AND TOTAL POUNDS OF SEED NEEDED

SEEDING MX	RATE/ACRES	POUNDS
Kentucky Bluegrass	4.5	0.5
Creeping Red Fescue	6,0	0.6
Perennial Ryegrass	15.0	1.5

<sup>1</sup> PLS = (% Germination x %Purity)

Seed mixture shall meet all requirements of the WI weed laws. Species identified as restricted or prohibited by law shall not be planted. Certified seed shall be used, and the seeding rates will be based on pure live seed.

Permanent seeding and mulching or sodding of all disturbed soil areas must be completed within seven days after final grading. Permanent seeding is completed to permanently stabilize areas of exposed soil. Permanent seeding shall be completed during the next acceptable time period following temporary seeding. Topsoil installation shall be completed prior to permanent seeding.

TEMPORARY SEEDING: FROM SEPTEMBER 16<sup>TH</sup> THRU OCTOBER 31<sup>ST</sup>

## SEED A TEMPORARY COVER CROP OF EITHER ONE OF THE FOLLOWING

Species	Pounds/Acre	Percent Purity
Winter Cereal Rye	131	97
Annual Ryegrass	80	97
Qats	131	. 98

Temporary seeding should be done from September 16<sup>th</sup> to October 31<sup>st</sup> to reduce runoff and erosion until permanent seeding or other erosion control practices can be established. This should be done when disturbed areas will not be brought to final grade for a period greater than 30 days.

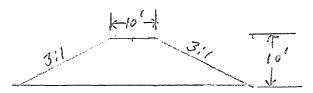
# DORMANT SEEDING: FROM NOVEMBER 1<sup>ST</sup> THRU SNOW COVER

Dormant seeding in the fall, between November and snow cover is another option. For dormant seeding, increase the seeds per square foot by 15%. Dormant seed is applied after climatic conditions prevent germination until the following spring (April 1<sup>st</sup>). Dormant seeding may be completed prior to snow cover at which time seeding is not allowed again until April 1<sup>st</sup> at which time permanent seeding may resume. Use permanent seeding mixture for dormant seeding. Seed is broadcast and incorporated, no-tilled, or drilled into the seedbed. Seedbed preparations and conditions are similar to conventional seeding.



For Reclamation Plan ACI Compground Pit

These borns will contain the soil from Phase 1. Soil berns
The width and height of each born will very to contain the soil removado



Typical section but could get largar in width to contain the site those become will be stated into and made with periodic mowing to control weeds.

It is expected that the horms running East-West will be typical.
The berm typing North - South will have the clay subsails

These beins will probably remain in place until phase 1+2 are reslammed