All Mail to: 1701 Main Street Union Grove, WI 53182



Grading-Paving-Sealing-Striping Asphaltinc.com Contact Info: Tel (262) 878-4678 Fax (262) 878-5411 aci@asphaltinc.com

- 1. RACINE COUNTY TECHNICAL MEMO
- **2.WDNR NR135**
- 3. FINANCIAL ASSURNACE
- 4. RACINE COUNTY SEEDING REQUIREMENTS
- 5. WDNR WELL LOGS
- **6. RECLAMATION**
- 7. CARDINAL ENGINEERING PLAN



Public Works & Development Services

> 14200 Washington Avenue Sturtevant, WI 53177 262-886-8440 fax: 262-886-8480

Technical Memo

Prepared: August 13, 2020

To: Brian Jensen, Racine County Superintendent of Development Services

From: Alex Valley, P.E., Civil Engineer

Re: Proposed Asphalt Contractors Burlington non-metallic mining site CTH P access

Racine County Engineering has had an opportunity to review the existing access point onto CTH P for the subject property (Tax ID 002021907010000) with regard to a change of use and resulting safety questions. Our review was completed by comparing existing conditions with established WisDOT (Wisconsin Department of Transportation) FDM (Facilities Development Manual) standards that are also used by Racine County. The design vehicle used for the entirety of this review was a SU (single unit) truck based on the proposed truck usage for this access point. Below is a synopsis of the conditions and findings of this review broken down by topic.

Conditions

Roadway Characteristics

- 1) CTH P is functionally classified as a Minor Arterial within the Burlington/Rochester/Waterford Urban Area
- 2) The speed limit on CTH P is 45 MPH at this location
- 3) The existing roadway features 12-foot lanes with varying width paved shoulders
- 4) Existing CTH P pavement condition is identified as "failed"
- 5) Paved turn lanes exist for this access point, further information on which can be found below
- 6) 2017 traffic count indicates 8,600 vehicles on CTH P per day near this location
- 7) CTH P (Racine County Line to STH 11) currently experiences a crash rate above the WisDOT UCL (Upper Control Limit)

Access Characteristics

- 1) Existing access point is the sole frontage location for access to a public road
- 2) Frontage width is 33-feet resulting in minimal opportunity for widening or relocation of the access point
- 3) The existing access point aligns directly across CTH P from Fish Hatchery Road
- 4) The existing access location falls on the inside of a horizontal curve

Review Findings

ISD (Intersection Sight Distance)

- 1) Existing ISD to the north does not meet the minimum standards established in WisDOT FDM 11-10 Table 5.2 for Case B1 with a SU Design Vehicle
- 2) Existing ISD to the south does not meet the minimum standards established in WisDOT FDM 11-10 Table 5.2 for Case B2 with a SU Design Vehicle

Geometric and Access Design

- 1) With a narrow driveway approach width limited by the property frontage dimensions, it should be noted that trucks may not be able to maneuver and enter the site while another vehicle is waiting to leave the site
 - a. This may cause trucks to make wider turns that encroach into the through/left-turn lane when turning into the site from the north or to stop completely to allow traffic to exit before pulling into the driveway, both of which are not acceptable operationally or with respect to safety of the traveling public
 - b. No plans for improvement of the access are included with this proposal
- 2) An auxiliary lane is present in the form of a southbound bypass lane for vehicles continuing straight on CTH P. Considering the proposed use with truck traffic entering and leaving the site, this lane should be changed to meet the standards for a dedicated southbound right-turn lane. The existing conditions do not meet minimum lengths outlined in WisDOT FDM 11-25.
 - a. No plans for improvement of the roadway are included with this proposal
- 3) Numerous other access points are located within the upstream and downstream functional areas of the CTH P/Fish Hatchery Road/Proposed Asphalt Contractors site intersection and within the bypass/acceleration and deceleration lanes. This condition creates driver confusion and contributes to crashes.
 - a. Consolidation or elimination of unnecessary access points should be coordinated with nearby property owners and included
 - b. No plans for access modifications are included with this proposal

While not comprehensive, hopefully this review provides insight into highway infrastructure and safety considerations that must be taken into account with any substantial change in use or development that occurs. Future proposal considerations would include review of these items as well as improvement plans developed by the applicant or their consultant. Improvements within County Highway right-of-way would require this review along with a permit which Engineering can assist with at such time.



Nonmetallic Mining Newsletter

Fall 2008 PUB WA-1280 2008



Revisions to NR 135 Now in Effect

Chapter NR 135, Wis. Adm. Code, has been in effect since December 2000. The code was revised in 2006 and the changes became effective December 1, 2006. You may obtain the new rule by going to http://www.legis.state.wi.us/rsb/code/nr/nr135.pdf or you may request a copy from your DNR regional contact.

The revised rule required changes in the dates for fee collection and reporting but could not become fully effective until Regulatory Authorities (RAs) amended their reclamation ordinances. Now that the amended ordinances are in place, it is possible to realize the benefits that come with the streamlining of routine administrative process. For example, the due date for fees and annual reports have been synchronized, and annual reports are now based on the same year during which fees were collected. In addition, the DNR has developed a new web-based application that further streamlines this process. This web-based reporting tool is discussed below.

Online Annual Reporting and Fee Transmittal Now Available

The administrative process for both annual fee transmittal to the DNR and annual reporting have been integrated and simplified, thanks to a new webbased reporting tool. This new reporting process takes the place of both the Excel template, previously used for electronic annual reporting, and the fee transmittal cover sheet.

Appropriate RA staff should have received an introductory email or letter informing them of this new approach and process. Each contact has been given an ID and password, a link to the reporting tool and directions for its use. Please save this information for future report years.

Once you have logged on to the reporting tool, you will be guided through two pages of mandatory questions and one page of optional questions. After

completing those questions, the report will be submitted electronically; however, you will still need to print and sign the last page of the report and mail it, along with appropriate fees, to the department.

Your NR 135 regional contact can provide a paper version of the new report upon request. If you lose your password or have questions regarding the new reporting tool, please contact Steve Drake (steve.drake@wisconsin.gov) or 608-267-7567.

Using Waste Fill Materials in Nonmetallic Mining Reclamation

Recently, we've received questions about the practice of using waste materials such as foundry sand and "clean fill" at nonmetallic mine reclamation sites.

Certain types of waste are considered "clean fill" under s. NR 500.08(2), Wis. Adm. Code and may be used without prior approval from the DNR. See the sidebar for a list of acceptable alternative fill materials.

Clean fill must be used in a nuisance-free and aesthetic manner and may not be placed in a floodplain. In accordance with s. NR 504.04(4)(a-f) Wis. Adm. Code, using clean fill for reclamation must not result in the taking of a threatened or endangered species, or negatively impact wetlands, surface or groundwater.

Industrial byproducts are another class of waste materials sometimes proposed for use in mine reclamation projects. Any project involving these wastes must be managed in accordance with ch. NR 538, Wis. Adm. Code, beneficial reuse rules. The wastes are assigned a category based on analytical test results and their potential to impact the environment. Their use is restricted based on these categories.

For Mine Operators:

Be aware of all sources of fill material being placed in your mine site and where material is placed. Make sure sediment running off the waste piles does not impact a natural wetland or surface water body. Place materials above the water table to avoid potential impacts to groundwater.

If you are approached by a waste broker or generator regarding the potential use of industrial byproducts as part of your mine reclamation, make sure the broker is reputable and has the financial resources available to implement the project. Most larger projects need DNR concurrence, so plan on making your site and reclamation plans available for the reviewers.

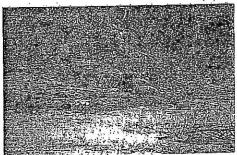
You should be aware that certain projects using more than 30,000 cubic yards of waste material will require public notice and a possible public information hearing in accordance with s. NR 538.18, Wis. Adm. Code.

Contact your local officials to determine if the reclamation plan needs to be modified and to see if any additional permits are required.

For RAs:

As the NR 135 RA you will have approved this in the reclamation plan (existing plans will need to be modified to include the use of these materials. Notify the DNR if any waste appears to be an unacceptable material or is being placed in an unacceptable manner.

Municipal solid waste- what most of us think of as household garbage- and unsorted residential construction and demolition waste cannot be used as fill material in mine reclamation. These wastes contain materials that can adversely impact the environment (i.e. lead paint, asbestos, plastics).



Illegal disposal of solid waste at abandoned mine. (Photo by Tom Portle, DNR)

Acceptable alternative materials

Materials defined as clean fill and exempt from ch. NR 500 solid waste rules:

- Mine spoils (crushed stone, sand and overburden soils)
- Clean soil
- Brick
- Building stone
- Unpainted concrete (even if reinforced)
- Unpainted/untreated wood
- Broken pavement (even if it contains asphalt)

Materials defined as industrial byproducts and regulated under ch. NR 538 (beneficial use rules):

- Coal combustion ash and slag
- Foundry system sand
- Lime kiln dust
- Flue gas desulfurization waste

Miscellaneous:

- Compost from municipal recycling programs
- Sediment from stormwater ponds
- Paper mill sludge

If the operator plans on achieving final grades by accepting off-site fill materials, those details must be included in the approved reclamation plan. Proposed uses of any waste materials need to conform to the approved plan; otherwise the plan will need to be modified in accordance with s. NR 135.24, Wis. Adm. Code.

Reclamation Opportunities with Alternative Materials

Another use of alternative materials is the mitigation of safety or stability hazards associated with vertical or other steep highwalls. Alternative materials may be used to construct a safety berm at the top of a potentially hazardous highwall to control access.



Materials used in backfilling a highwall can serve to mitigate safety hazards and improve slopes for reclamation. (DNR Photo)



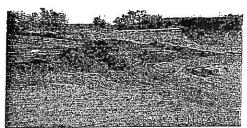
Proper highwall reclamation may provide scenic landscapes and recreational opportunities. (Above photos courtesy of Dr. Bruce Brown, WGNHS)

Substitute Soil may be in need in cases where topsoil and/or subsoil are in short supply; there may be an opportunity to use alternative materials to amend or supplement soil. Check with local municipal recycling programs regarding the availability of compost material and other organic materials.



Use of these organic materials can help provide a more optimum soil environment and rooting zone to support plant growth. Refer to NR 135.03 (24) for the definition of substitute soil.

The use of industrial byproducts in reclamation of the Foley Pit serves as an illustration of permitting considerations and coordination among agencies, the mine, and the generator. The project received a Grant of Exemption from the DNR to allow the use of industrial byproducts in mine reclamation. It also required cooperation between the DNR solid waste and reclamation staff, as well as the East Central Wisconsin Regional Planning Commission (ECWRPC), which administers the NR 135 program in that jurisdiction. The foundry sand proved to be a safe and cost effective fill material when used in achieving approximate original contours (AOC).



Foundry sand being incorporated as part of grading activities during reclamation of the Foley Pit (Photo by Dave Misterek, DNR)



Successful Reclamation Outcome at the Foley Pit. (DNR photo)

How Do Alternative Materials Fit into the Reclamation Plan?

The nature of the material itself, the proposed use, current reclamation plan language and permit conditions may need to be considered. Each case must be evaluated to ensure compliance with applicable state and local laws.

While some cases, like the Foley Pit reclamation, require direct DNR involvement, these are the exception rather than the rule. Typically, either the operator and/or the RA will review the reclamation plan to ensure that it covers the proposed material and its proposed use. When necessary, the reclamation plan may be amended or permit modified. Please keep in mind that both the reclamation plan and its corresponding financial assurance must be updated to reflect current conditions and costs.



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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=

\$6,750

\$123,250

15 acres x 2,420 C.Y.=36,300 C.Y.

\$123,250/\$36,300=\$3.40

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

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

Silt fence at bottom of slopes 1,200 L.F. x \$3.00/ L.F.=

\$3,600.00

\$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

SEEDING DATES:

SEEDING TYPE	DATES
Permanent Seeding	April 1 st – September 15 th
	September 16 th - October 31 st
	November 1 st – 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 1ST THRU SEPT 15TH

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

ः वस्यकारान्त्रभर्	RATE/ACRES	POUNDS
Kentucky Bluegrass	4.5	0.5
Creeping Red Fescue	6,0	0.6
Perennial Ryegrass	15,0	1.5

¹ 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 16TH THRU OCTOBER 31ST

SEED A TEMPORARY COVER CROP OF EITHER ONE OF THE FOLLOWING

Species (S	Pounds/Acre	Percent Rurity
Winter Cereal Rye	131	97
Annual Ryegrass	80	97
Qats	131	98

Temporary seeding should be done from September 16th to October 31st 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 1ST 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 1st). Dormant seeding may be completed prior to snow cover at which time seeding is not allowed again until April 1st 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.

MATERIALS

If no soil test is available, apply a minimum of 150 pounds of 20-10-10 fertilizer per acre. This is equivalent to 30 pounds nitrogen (N), 15 pounds phosphate (P_2O_5), and 15 pounds potash (K_2O) per acre.

SEEDBED PREPARATION:

Seedbed preparation shall immediately follow construction activities. Prepare a fine, firm seedbed to a minimum depth of three inches. A seedbed is considered firm when a footprint penetrates $\frac{1}{2}$ to $\frac{1}{2}$ inch deep.

SEEDING

Inoculate legumes with the specific inoculum for the species in accordance with the manufacturer's recommendations. When using a hydroseeder, five times the recommended rate of inoculant shall be added to the hydroseeder. Inoculant shall not be missed with liquid fertilizer.

Seed may be broadcast or drilled as appropriate to the site. Seed and fertilize as soon as possible after construction. Seeding perpendicular to direction of flow is required to limit erosion. Seed grasses and legumes no more than ¼ inch deep.

MAINTANENCE

During construction areas that have been seeded 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. Inspect weekly during the growing season until vegetation is densely established or permit expires. Repair and reseed areas that have erosion damage as necessary.

Art. VII, Div. 4. PERFORMANCE STANDARDS*

Sec. 20-1061. Compliance.

This chapter permits specific uses in specific districts; and these performance standards are designed to limit, restrict, and prohibit the effects of those uses outside their premises or district. All structures, lands, air, and waters shall hereafter, in addition to their use, site and sanitary, floodland and shoreland regulations, comply with the following performance standards. (Code 1975, § 7.091)

Sec. 20-1062. Water quality protection.

No residential, commercial, industrial, institutional, or recreational use shall locate, store, discharge, or permit the discharge of any treated, untreated, or inadequately treated liquid, gaseous, or solid materials of such nature, quantity, obnoxiousness, toxicity, or temperature that might run off, seep, percolate, or wash or be harmful to human, animal, plant, or aquatic life. This section shall not apply to uses other than those enumerated in it.

(Code 1975, § 7.092)

Sec. 20-1063. Noise.

All noise shall be so muffled or otherwise controlled as not to become objectionable due to intermittence, duration, beat frequency, impulse character, periodic character, or shrillness. (Code 1975, § 7.093)

Sec. 20-1064. Radioactivity and electrical disturbances.

No activity shall emit radioactivity or electrical disturbances so as to endanger the use of neighboring premises. (Code 1975, § 7.094)

Sec. 20-1065. Exterior lighting.

Any lighting source on any use, lot or parcel which is for the purpose of illuminating any structure exterior, sign, parking lot or outdoor area shall be established in a manner which satisfies the following conditions:

- (1) Such lighting shall be arranged, oriented, or shielded in such a manner that direct radiation or glare from such source does not penetrate adjacent or nearby parcels or the public right-of-way.
- (2) The source of such illumination shall be arranged, oriented, or shielded in a manner which will not endanger the safety of pedestrian or vehicular traffic.

(Ord. No. 86-86, § 7.095, 8-26-86)

Sec. 20-1066. Maintenance.

Any fence, wall, hedge, yard space or landscaped area required by this chapter or grant of variance or conditional use shall be kept free of an accumulation of refuse or debris. Plant materials must be well kept in a healthy, growing condition; and structures, such as walls and fences, shall be maintained in sound conditions, and good repair and appearance at all times.

(Ord. No. 86-86, § 7.096, 8-26-86)

Sec. 20-1067. Odors.

No residential, commercial, industrial, institutional, or recreational use shall emit an odor of such nature or quantity as to be offensive or unhealthful which is detectable at the lot line. The guide for determining odor measurement and control shall be Chapter NR 429 of the Wisconsin Administrative Code and amendments thereto. (Ord. No. 93-3, 5-11-93)

Cross reference-Outdoor burning, § 13-51 et seq.

*Cross reference-Schedule of deposits for violation of the provisions in this division, §5-3.

Well Construction Report WISCONSIN UNIQUE WELL NUMBER	HM052	Drinking Water and Groundwater - DG/5 Form 3300-077/ Department of Natural Resources, Box 7921 Madison Wi 53707
Property GAGGER, MARVIN	Phone #	1. Well Location Fire # (if avail.)
Mailing 34433 WALBURG LN	A Maria	Town of BURLINGTON
Address		Street Address or Road Name and Number
City BURLINGTON State V	VI Zip Code 53105	34433 WALBURG LN
County Co. Permit # Notification #	Complete	Subdivision Name Lot # Block #
Racine	10-27-199	3
Well Constructor (Business Name) Lic. #	Facility ID # (Public W	ells) Latitude / Longitude in Decimal Degree (DD) Method Code
ASCHAUER E G @ SONS INC 66		42.6316 °N -88.2924 °W GCD013
	Well Plan Approval #	NW SE Section Township Range
Address BO BOY 000		or Govt Lot # 18 2 N 19 E
Address PO BOX 206 KANSASVILLE WI 53139-0206	Approval Date (mm-od-y	yy) 2. Well Type New Well
		of previous unique well # constructed in
Hicap Permanent Well # Common Well #	Specific Capacity	Reason for replaced or reconstructed well?
	0.80	NEW CONST.
3. Well serves 1 # of	Hicap Well ? No	
Private,potable	Hicap Property? No	
Heat Exchange# of drillholes	Hicap Potable ?	Construction Type Drilled
4. Potential Contamination Sources - ON REVERSE S	SIDE	
5. Drillhole Dimensions and Construction Method		Geology 8. Geology Type, From (ft.): To (ft.)
Dia. (in.) From (ft.) To (ft.) Upper Enlarged	Lower Open	Codes Caving/Noncaving, Color, Hardness, etc
10 Surface 10 Drillhole	Bedrock	F FILL Surface
6 10 102 Rotary - Mud Circulat	tion	R C G STONY RED CLAY 2 2
Yes Rotary - Air		G C GRAVEL @ CLAY 27 8
Rotary - Air & Foam .		Y SAND @ GRAVEL 86 10
Drill-Through Casing	Hammer	onito e di intella
Reverse Rotary	TO STATE OF THE ST	
Cable-tool Bitin.		
Dual Rotary		EE - E
Temp. Outer Casing . Removed? del		
explain on back side)		
. Casing, Liner, Screen		9. Static Water Level 11. Well is
Dia. (in.) Material, Weight, Specification	From (ft.) To (ft.)	58 ft. below ground surface 14 in. above grade
Manufacturer & Method of Assembly		10. Pump Test Developed ? Yes
6 STEEL 18.97# PER FT A53B SAWHILL P.E.B.	Surface 99	Pumping level 77 ft. below surface Disinfected ? Yes
WELD JTS.		Pumping at 15 GP M for 4 Hrs. Capped ? Yes
Dia. (in.) Screen type, material & slot size	From (ft.) To (ft.)	Pumping Method ?
6 TELESCOPE 304 SS #25	99 102	12. Notified Owner of need to fill & seal ?
. Grout or Other Sealing Material		12. Nothing Owner of Head to the a seal ?
Method FULL HOLE		
	(ft.) # Sacks Cement	Filled & Sealed Well(s) as needed? No
CRUMBLES DRILL CUTTINGS @ Surface:	10	NONE
iLOI i	"	
5501		
scon .	a a	13. Constructor / Supervisory Driller Lic # Date Signed
SCOTI		13. Constructor / Supervisory Driller Lic # Date Signed EA 10-27-1993
SCOTI	. , , ,	

4a. Potential Contamination Sources	Is the well loca	ated in floodpl	ain? <u>No</u>				
Туре	Qualifier	Distance	Туре			Qualifier	Distance
POWTS dispersal component (soil absorption mound)	n unit	70	•	Drain to Cleary			15 15
Building Overhang		15		ilding Sanitary			40
Downspout/Yard Hydrant		15		olding, or POW	TC Took		54
			Gopiic oi 11	olding, or r Ovv	IO IAIIK		54
Comment:							
Water Quality Text:							
Water Quantity Text:							
Difficulty Text:							
Created On: 11-30-1993 Created by	: HFRC LOAD	U	lpdated On:	06-27-2019	Updated by:	PARCEL_MATO	СН

		EXIIDIT 3
Well Construction Report WISCONSIN UNIQUE WELL NUM		Madison WI 53707
Property DOWNAN, JIMA SANDY Owner	Phone #	# 1. Well Location Fire # (if avail.)
Mailing 34633 WALBURG LN		Town of BURLINGTON 34633
Address		Street Address or Road Name and Number
City BURLINGTON	State WI Zip Code 531	105 WALBURG LN
County Co. Permit # Notific	ation # Comp	oleted Subdivision Name Lot # Block #
Racine 28581	930 03-10-	9-2008
Well Constructor (Business Name)	Lic. # Facility ID # (Publi	ic Wells) Latitude / Longitude in Decimal Degree (DD) Method Code
MICHAEL G HARTMAN	436	°N ∘W
	Well Plan Approva	al# NW SE Section Township Range
Address MICHAEL HARTMAN WELL DRL	G &	or Gov! Lot # 18 2 N 19 E
PUMP I NORTH LAKE WI 53064-0218	Approval Date (mm-	
4 §		of previous unique well # constructed in
Hicap Permanent Well # Common	apatine capacity	Reason for replaced or reconstructed well?
	1.70	NEW HOME
3. Well serves 1 # of		No
Private, potable	Hicap Property ?	No
leat Exchange# of drillholes	Hicap Potable ?	Construction Type Drilled
. Potential Contamination Sources - ON F	EVERSE SIDE	
Drillhole Dimensions and Construction	Method	Geology 8. Geology Type, From (ft.): To (ft
ia. (in.) From (ft.) To (ft.) Upper Enlarge	ed Lower Op	Codes Caving/Noncaving, Color, Den Hardness, etc
6 Surface 109 Drillhole	Bedro	ock - Y - SAND, GRAVEL Surface 4
5 109 112	Mud Circulation	- S SAND 40 56
The state of the s	Air <u>No</u>	
r and a result of the second s	Air & Foam	Y - SAND, GRAVEL 105 112
	ough Casing Hammer	100 112
: Reverse	ol Bit In. dia	1
Checker Research	ary	i e
	uter Casingin. dia	
Table 1978	ed?depth ft. (If NO	
explain o	n back side)	
Casing, Liner, Screen		9. Static Water Level 11. Well is
a. (in.) Material, Weight, Specification	From (ft.) To (f	(ft.) 78 ft. below ground surface 18 ln. above grade
Manufacturer & Method of Assembly	0.00	10. Pump Test Developed ? Yes
6 0.280 A 53 GRB WHEATLAND STE	EL WELDED Surface 10	09 Pumping level 90 ft. below surface Disinfected ? Yes
a. (in.) Screen type, material & slot size	From (ft.) To (f	
5 #18 SLOT COOK	109 1	Pumping Method 7
Grout or Other Sealing Material	•	12. Notified Owner of need to fill & seal ?
ethod MOUNDED		12. Housed of the or hood to hird sodi 1
nd of Sealing Material From	(ft.) To (ft.) # Sacks Ceme	ent
RUMBLES Sur	face	Filled & Sealed Well(s) as needed?
		NO WELL
		## 1 TO 1
		13. Constructor / Supervisory Driller Lic # Date Signed
		MH 03-14-2008
		Drill Rig Operator Lic or Reg # Date Signed
		JB 03-24-2008
		. 00-24-2008

4a. Potential Contamination Sources Is the well located in floodplain? Qualifier Distance Type Qualifier Distance Туре 10 9 Foundation Drain to Clearwater Building Overhang 38 70 Wastewater Sump Clearwater Sump 35 Sewer - Building Sanitary SEPTIC/SEWER NOT IN Comment: Water Quality Text: Water Quantity Text: **Difficulty Text:** Granted Variance or Exception Type Date Reason HERSHS Updated On: 12-03-2008 Updated by: Created by: WELL CONST LOAD Created On: 05-22-2008

Well Construction Report WISCONSIN UNIQUE WELL NUM	BER	TW092		Drinking Water and Department of Nati Madison Wi 53707				orm 3300-077
Property Owner		Phone #	.ED	1. Well Location			Fire #	(if avail.)
Mailing PO BOX 786		(414)42230		Town of BURLINGT	ON			
Address				Street Address or R	oad Name	and Numbe	r	
City HALES CORNERS	State WI	Zip Code 53130		34711 WALBURG L	N			
County Co. Permit # Notifica	ation #	Complete	d	Subdivision Name			Lot#	Block #
Racine 250223	315	05-24-200	07	WALBURG ESTS			3	
Well Constructor (Business Name)	Lic.# F	acility ID # (Public W	ells)	Latitude / Longitude	In Decimal	Degree (DI	D) Metho	od Code
MICHAEL G HARTMAN	436			۰۷	I	0	W	
	W	/ell Plan Approval #		NE SW	Section	Township	Ran	ge
Address MICHAEL HARTMAN WELL DRL	G 0			or Govt Lot#	18	2 N	19	E
PUMP I	Δ ^α A	pproval Date (mm-dd-y	y yy)	2. Well Typs New	Well			
NORTH LAKE WI 53064-0218		*		of previous unique w			structed in	
Hicap Permanent Well # Common	Well # S	pecific Capacity		Reason for replaced	or reconstru	ucted well?		
	5			NEW HOME				
B. Well serves 1 # of	Hi	cap Well ? No						
Private,potable	: Hi	cap Property? No				9		W.
leat Exchange# of drillholes	· Hi	cap Potable ?		Construction Type I	Orilled			
. Potential Contamination Sources - ON F	EVERSE SID	E				•		
i. Drillhole Dimensions and Construction I	Method			logy 8. Geolo			· From (f	t.) To (ft
Dia. (in.) From (ft.) To (ft.) Upper Enlarge	ed .	Lower Open	Cod	es Caving/N Hardness	oncaving, C	Color,		
6 Surface 94 Drillhole		Bedrock		- C - SURFAC			Surfac	ce 1
5 94 97	Mud Circulation		ļ	Y - SAND, G	RAVEL		+	16. 5
-	Air			S - SAND			. 5	55 8
	Air & Foam			P - HARDPA	.N		8	35 9
Driit-Ting Reverse	ough Casing Hai	mmer	ļ	Y - SAND, G	RAVEL		٤	92: 9
	ol Bitin. dia	a	1					
	tary							
Temp. O	uter Casing	_in. dia						
	red?depth	ft. (If NO						
· · · · · · · · · · · · · · · · · · ·	on back side)		_			1	341-111-	
. Casing, Liner, Screen				tatic Water Level			. Well is	
ia. (in.) Material, Weight, Specification Manufacturer & Method of Assembly	e ŭ	From (ft.) To (ft.)		. below ground surface	æ		in. above g	MINOCONI
6				Pump Test		De	veloped?	Yes
6 0.280 A 53 GRB WHEATLAND STE	EL MEIDED	C		ping level 80 ft. belov		1	sinfected ?	Yes
ia. (In.) Screen type, material & slot size			Pum	ping at 15 GP M for 4	Hrs.	Ca	pped ?	Yes
5 #18 SLOT COOK	<u></u>	94 97	Pum	ping Method ?				
Grout or Other Sealing Material			12. N	lotified Owner of nee	d to fill & se	al ?		
ethod MOUNDED		J						
		.) # Sacks Cement		ra 				
RUMBLES Su	rface		Filled	l & Sealed Well(s) as	needed?			No
			NO /	NELL				
			<u> </u>					
	8	AE OF ST		onstructor/Supervis	ory Driller	Lic#	Dat	e Signed
			МН			2	74	24-2007
		1	D-10 F	Dia Operator		Lie or R	eg# Dat	e Signed
			Drin i	Rig Operator		LICOTT	cy " Dai	5 6/8/104

4a. Potential Contamination Sources Is the well located in floodplain? Qualifier Qualifier Туре Distance Type Distance POWTS dispersal component (soil absorption unit 80 Foundation Drain to Clearwater 11 or mound) 28 Wastewater Sump **Building Overhang** 10 Sewer - Building Sanitary 30 Clearwater Sump Septic or Holding, or POWTS Tank 31 Comment: Water Quality Text: Water Quantity Text: Difficulty Text: Updated by: WELL PROCESS Created by: WELL CONST LOAD Updated On: 09-12-2007 Created On: 09-12-2007

WISCO	onstruction Report DNSIN UNIQUE WE	ELL NUMBER	CG490		Drinking V Departmer Madison V	nt of Natur					3300-07
Property Owner	MARCHAL NEWS	,	Phone #		1. Well Loc	ation			F	ire # (if	avail.
Mailing	36107 52ND ST		(100)		Town of Bl	JRLINGTO	N				
Address					Street Add	ress or Roa	ad Name a	and Numi	ber		
City BUF	RLINGTON	State	WI Zip Code 5310	5	7626 MCH	ENRY ST.					
County	Co. Permit #	Notification #	Comple	ted	Subdivision	Name			Lot#	В	lock #
Racine			07-27-1	989							
Well Cons	tructor (Business Name) Lic.	# Facility ID # (Public	Wells)	Latitude / L	ongitude ir	n Decimal	Degree (DD) M	lethod (Code
ASCHAUE	ER E G AND SONS INC	66			42.6349	°N	-8 8.290	7	°W G	CD013	3
			Well Plan Approval	#	\$E	NE	Section	Townshi	ip	Range	
Address	P O BOX 206	22			or Govt Lot		18	2	N	19	E
	KANSASVILLE WI 53	139	Approval Date (mm-dc	i- y yyy)	2. Well Typ						
			*		of previous	7.7			nstructed	in in	
licap Pern	manent Well #	Common Well #	Specific Capacity		Reason for r	13	reconstru	icted well	17		
			0.10		NEW CONS	T					
. Well ser		RN SHOP	Hicap Well ? No								
rivate,pot			Hicap Property ? No								
leat Excha			Hicap Potable ?		Construction	Type Dri	illed			- Name	
. Potentia	l Contamination Sour	ces - ON REVERSE	SIDE								
	rom (ft.) To (ft.) Up Surface 20 Dri 20 206 Yes	Rotary - Mud Circu Rotary - Air & Foan Drill-Through Casin Reverse Rotary Cable-tool Bit Dual Rotary Temp. Outer Casin	in. dia gin. dia		F F G C C C B S	Caving/Nor Hardness, e FILL BRAVEL @ BTONY LIV	etc CLAY E-CLAY		Su	17face 4 63 154	1:
Casing, I	Liner, Screen			9. St	atic Water L	evel		1	1. Well Is	В	
	aterial, Welght, Specific		From (ft.) To (ft.	63 ft.	below groun	nd surface		2	0 in. abo	ve grad	е
Ma	anufacturer & Method of	Assembly		10. P	ump Test		<u> </u>	D	eveloped	1? ' Y	es
	TEEL 18.97# PER FT A! ELD JTS	53 COM PAC PEB	Surface 15	4 Pump	ing level 135	ft. below	surface	D	isinfecte	d? Y	es
	creen type, material & sl	ot size	From (ft.) To (ft.	Pump	ing at 6 GP	for 2 Hrs.		О	apped?	Y	'es
• • • •	1 1000 100	290			ing Method	?					
Grout or	Other Sealing Materia			12. N	otified Owner	r of need to	fill & sea	7			
ethod FU	17-81 No. 10 - 100-100-100-100-100-100-100-100-10										
	ing Material	From (ft.) T	o (ft.) # Sacks Cemen								
	RRY @ CUTTINGS	Surface	20		& Sealed We	ell(s) as ne	eded?			N	0
				13. Co	onstructor / S	unervison	Driller	Lic#	7,	Date Sig	ned
				EASI		apoi visoi y	· PINIOI	- LIU#		**************************************	a transmission
					ia Onavete	*20		1 i= =)7-27-1	
					ig Operator			Lic or F		Date Sig	
				FA				*	. 0	7-27-19	989

4a. Potential Contamination Sources Is the well located in floodplain ? Qualifier Distance Type Qualifier Distance POWTS dispersal component (soil absorption unit > 100 Foundation Drain to Clearwater or mound) Other Contamination Sources 150 Building Overhang Septic or Holding, or POWTS Tank 60 Comment: Water Quality Text: Water Quantity Text: Difficulty Text: Created On: 11-28-1989 Created by: HFRC LOAD Updated On: 06-27-2019 Updated by: PARCEL_MATCH

Well Construction Report WISCONSIN UNIQUE WELL NUMBER	CU265	Drinking Water and Groundwater - Department of Natural Resources, B Madison WI 53707	
Property CAN FINKE CONSTRUCTION Owner	Phone #	1. Well Location	Fire # (if avail.)
Mailing 5870 HWY 36	(414)/-63-7-602	Town of BURLINGTON	
Address		Street Address or Road Name and Nu	mber
City BURLINGTON State V	VI Zip Code 53105	WALBURG LN	
County Co. Permit # Notification #	Completed	Subdivision Name	Lot# Black#
Racine	10-14-1989		
Well Constructor (Business Name) Lic. #	Facility ID # (Public Wells	c) Latitude / Longitude in Decimal Degree	(DD) Method Code
HOOVER WATER WELL SERVICE INC 311		°N	°W GPS008
	Well Plan Approval #	NW SE Section Towns	ship Range
Address 21445 DURAND AVE			2 N 19 E
UNION GROVE WI 53182-9711	Approval Date (mm-dd-yyyy)	CARE IN MARK MARKET	
and the second s	an all and an		constructed in
licap Permanent Well # Common Well #	Specific Capacity	Reason for replaced or reconstructed w	rell ?
	2.10	NEW HOME	
. Well serves 1 # of	Hicap Well ? No		
ed widout sector & Cotton Aprilla and the cotton an	Hicap Property? No		
leat Exchange# of drillholes	Hicap Potable ?	Construction Type Drilled	
Potential Contamination Sources - ON REVERSE S	IDE		
Drillhole Dimensions and Construction Method		eology 8. Geology Type, cdes Caving/Noncaving, Color,	From (ft.) . To (
ia. (In.) From (ft.) To (ft.) Upper Enlarged Drillhole	Lower Open	Hardness, etc	. :
TO SURIACE 20 Rotary - Mud Circulati	Bedrock Y	C G GRAVELY YELLOW CLAY	Surface
5 20 82 Rotary - Air		G S GRAVEL, SAND @ CLAY	10
Rotary - Air & Foam		S G SAND @ GRAVEL	79 8
Drill-Through Casing I	Hammer		
Reverse Rotary			
Yes Cable-tool Bit 10in. die	a		
Dual Rotary	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Temp. Outer Casing	,		
Removed?dep explain on back side)	m n. (n NO		
Casing, Liner, Screen	9.	Static Water Level	11. Well is
a. (In.) Material, Weight, Specification	From (ft.) To (ft.) 55	ft. below ground surface	12 in. above grade
Manufacturer & Method of Assembly		. Pump Test	Developed ? Yes
5 LTV STEEL T@C ASTM 15.45 PPF A53B	Surface 80 Pu	mping level 62 ft. below surface	DisInfected ? Yes
a. (in.) Screen type, material & slot size		mping at 15 GP for 3.50 Hrs.	Capped? Yes
5 #20 JOHNSON SS	00 00	mping Method ?	
Grout or Other Sealing Material	12	Notified Owner of need to fill & seal ?	l
ethod BAILER	-		
nd of Sealing Material From (ft.) To	(ft.) # Sacks Cement		
AY SLURRY Surface	20 Fill	ed & Sealed Well(s) as needed?	
	13.	Constructor / Supervisory Driller Lic #	Date Signed
	JD	K	10-20-1989
	,	11 14 15 15	* 50 8 .45
	Dri	Rig Operator Lic o	r Reg # Date Signed

4a. Potential Contamination Sources	is the well loca	ated in floodpl	ain? <u>No</u>	************			
Туре	Qualifier	Distance	Type		*	Qualifier	Distance
POWTS dispersal component (soil absorptio or mound)	n unit	70	Foundation	Drain to Clean	water		12
Building Drain - Sanitary		40	Sewer - Bu	ilding Sanitary			45
Building Overhang		12	Septic or H	olding, or POW	TS Tank		60
Comment:							
Water Quality Text:							
Water Quantity Text:					200		
Difficulty Text:							
Created On: 05-14-1990 Created by:	HFRC LOAD	υ	pdated On:	05-14-1990	Updated by:	MIGRATION	



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 Topsoll

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



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



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



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 9-9-2020 Signed K. Kordus

Robert Kordus
President