Due Date: April 15

#65 Waupaca Trail E Reloc

State of Wisconsin Department of Natural Resources dnr.wi.gov

Motorized Recreation Grant Application

otorizon itooroution oranti	'thbileamell
or: (choose all that apply)	Form 8700-159 (R 02/2024)
☐ ATV/UTV Trail Aid	Page 1 of 5

Notice: Completion of this form is required under Wisconsin Statutes 23.09(26) and 23.33. Failure to complete this form will result in denial of	
financial assistance. Personally identifiable information found on this form is not intended to be used for any other purpose. The Department of	
Natural Resources (DNR) may provide this information to requesters as required by Wisconsin's Public Records law (ss. 19.31 – 19.39, Wis. Sta	

financial assistance. Personally identifiable info Natural Resources (DNR) may provide this info									
Instructions: Applications may combine more than one source of funds. They may						DNR Use Only			
be submitted for consideration of traditional Stewardship funding. Submit one copy of a necessary attachments. Send applications	chments	. See Page	e 2 for	Category			Number		
Section 1: Applicant Information									
Applicant / Organization Name					•	ndividual other tha	n autho	rized in	dividual to act
Waupaca County Parks				on behalf	of the ap	plicant. 🖂 Se	elect if the	ne sam	e as applicant.
Individual Authorized to Act on Behalf of A	plicant	per Reso	lution	Check Re	cipient	Name (Name to A	ppear c	n Ched	ck)
John D. Francis									
Title				Title					
Parks and Solid Waste Director									
Address			,	Address					
811 Harding Street									
City	State	ZIP Cod	е	City				State	ZIP Code
Waupaca	WI	549	81						
Telephone Number	Email	Address					8)		
715-258-6243 john.francis@co.wa			co.wau	paca.wi.ı	18				
Section 2: Project Information Require	d for al	l Project	S						
Project Title						t Funded Miles	New M	iles (if a	applicable)
Trail E Manditory Re-route with new culvert					401.1		-0.1		
County Township Range Sectio				1/4 1/4	1/4	GPS Coordinate Lat. 44.369			
Waupaca 22	N 12		20	SW▼	NE▼	Long89.067			
Project Description Summary						-			

Project Description Summary

Trail is moving to the edge of a parcel as the landowner is turning the property into a bird sanctuary and does not want a trail through the center of the parcel. This will require the placement of a 60" squash culvert in a drainage ditch to allow the trail to cross along the Eastern boundary of the property. A permit has been applied for and recieved through the DNR. The resulting change in trail length will result in losing 0.1 mile of trail.

X I certify that all maintenance land use agreements are on file.

Estimated Cost						
Maintenance	Acquisition	Insurance	Development	Bridge Rehab.	Trail Rehab.	Total Estimated Cost
-\$30.00			\$11,300.00			
			Leave Blank - DNR U	Jse Only		
Annilount Contif						
Applicant Certif	NAMES OF TAXABLE PARTY OF TAXABLE PARTY OF TAXABLE PARTY.					
Printed Name of	Authorized Offici	ial	Offic	ial's Title		
John D. Francis			Parl	ks and Solid Wa	ste Director - W	aupaca County
As the applicants	authorized offic	cial, I certify that, to	the best of my knowle	edge, the informati	on in this applicat	ion is true and correct.

Motorized Recreation Grant Application Form 8700-159 (R 02/2024) Page 3 of 5

Appendix A – Required for Bridge Rehab/Replac	e, New, or Reroute with New Bridge
☐ Bridge Rehab/Replace ☐ New Bridge ☐	⊠ Reroute with new bridge
County Township Range Ser	ection 1/4 1/4 GPS Coordinates:
Waupaca $\boxed{}$ 22 N 12 \bigcirc W	20 SW NE Lat. 44.369939 Long89.067707
Water Body Name	Bridge Name County Inventory Number
Un-named drainage ditch	Culvert on BC Marsh Property n/a
Funded Trail Name or Number (SNARS if applicable)	Has this bridge site ever received development or rehabilitation funds
Trail E	in the past? Yes • No Year: \$
Bridge is located on: Private property	Old Bridge/Culvert Size <u>n/a</u>
Public property	New Bridge/Culvert Size 60" x 30' steel squash pipe
Landowner Where Bridge is Located	Telephone Number Length of Trail Use Agreement (5 year minimum)
BC Marsh LLC - Robert Faulks	715-412-0202 10 years
Current maximum load lbs. Age of Brid	dge Bridge Material
Proposed maximum load lbs.	
	Club Contact Telephone Number
8	Justin Hahn 715-281-0726
	What is the maximum load of the other bridges on the system if proomed with this bridge?
What is the weight of your puller & drag/grading equipment?	
18,000 lbs	
What other recreational trail uses are planned for this bridge?	
None	
If there are other Recreational uses planned, how much of the b	oridge cost will be paid for by non-snowmobile or non-ATV users?
n/a	
● Yes	anagement Specialist (WMS) regarding a permit?
\bullet Yes $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	tten correspondence from WMS.)
	t. regarding a floodplain determination?
Yes No Will an H & H (hydrologic and hydraulic) stud	ly be required?
Bridge Project Detailed Description	

Bridge Project Detailed Description

See attached project narrative.

Motorized Recreation Grant ApplicationForm 8700-159 (R 02/2024) Page 4 of 5

		Bridge Structure	
		Quote 1	Quote 2
	(Steel	Steel () Wooden
Bridge Dimensions:	`	60" x 30' squash	60" x 30' squash
	S & S Exca		Faulks Brothers
Design Weight Load		lbs.	lbs.
Cost of Structure: 1. Engin		\$	
2. Struct		\$ 8,500.00	\$ 21,350.00
	Subtotal	\$ 8,500.00	\$ 21,350.00
		Quote 1	, Quote 2
	⊙ C	contractor or O Sponsor	● Contractor or ○ Sponsor
Installation Costs:		Estimate	Estimate
1. Engineering		\$	\$
2. Site Preparation		\$	\$
3. Abutments		\$	\$
4. Pilings/Piers		\$	\$
5. Approaches		\$	\$
6. Riprap		\$	\$
7. Labor		\$	\$ <u>5,250.00</u>
8. Equipment Rental		\$	\$
9. Culverts		\$	\$
10. H & H Study		\$	\$
11. Wetland Delineation	2	\$	\$
12. Other <u>Installation and Fig</u>	ill S	2,800.00	\$
	Subtotal	\$ 2,800.00	\$ 5,250.00
	Total Cost	11,300.00	\$ 26,600.00
For the application g	rant, you	must take the lowes	,
Entire Deck and Railing Pr	ojects	O Contractor	
Bridge Dimensions:			
Design Weight Load	,-	lbs.	
1. Materials	-		
2. Labor	9		
	Total		

Motorized Recreation Grant Application

Form 8700-159 (R 02/2024)

Page 5 of 5

Appendix B – Required for Trail/Qualified Troute Re	ehab, Reroute, or Development
☐ Trail Rehab ☐ Qualified Troute ☐ New	Trail X Trail Reroute (Mandatory or Discretionary)
County Township Range Section	n 1/4 1/4 GPS Coordinates:
Waupaca ▼ 22 N 12 Ow 20	SW NE Lat. 44.369939 Long89.067707
	as this trail ever received development or rehabilitation funds in the ast? Yes No Year: \$
Trail is located on: Length of Ease	ement or Landowner Use Agreement Expiration Date
Private property	10 years 04/03/2034
Landowner Where Trail is Located	Telephone Number
BC Marsh LLC - Robert Faulks	715-412-0202
What other recreational trail uses are planned for this trail?	
None	
If there are other Recreational uses planned, how much of the trail of	development/rehab. cost will be paid for by other users?
n/a	
How many miles would be affected if this project is not funded?	Will this result in closure of a trail?
6.5 miles of trail would be closed	Yes No
	sonable alternative?
• Yes No The shortes	t way around on existing trails is 21.1 miles.
Does any section of this trail contain a bridge? Yes No Will this bridge require rehor or in the next few years?	nabilitation now What is the weight of your puller & drag/ grading equipment?
	18,000 lbs.
Yes	gement Specialist (WMS) regarding a permit?
• Yes O No Is a permit needed? (Please provide any written	correspondence from WMS.)
Yes	rmittent or perennial waterway? Surface Water Data Viewer
Yes No Will this project be located near or cross any wet	land?
Yes No Will this project involve land disturbance – includ (Less than 4/10th mile for a typical trail) DNR St	ing clearing and grubbing – of 1 acre or more of land? orm Water Contact List

Trail Project Detailed Description

See attached project narrative.

Tail E Re-Pointe with Culvert

Guidelines for Applicant

Complete this form for each relocation you are submitting a grant application for. Provide any additional documents not requested on application checklist to substantiate your points, including actual deeded easements.

Mandatory or Discretionary? (no points)	
A) Trail is already closed or will be closed for the upcoming season. Mandatory	
B) Trail won't be closed for the coming season, but relocation is preferable for landowner request, to avoid road use, etc = Discretionary	

Category	Possible Points	Actual Points
1 Mainteance Increase Only		
New trail footprint has already been cleared/constructed, application is requesting only a maintenance increase	2	0
2 Dedicated Highway Rec Wing	ng a samang a	periodi esta a a a
An opportunity to develop a dedicated rec wing on a highway will allow for increased safety of trail users by getting them off of a shared highway bridge.	2	0
3 Funding (maximum points 2) Are other funds already committed?		
50% or greater from other funding source(s)?	2	0
11% - 49% from other funding source(s)?	1	0
0% - 10% from other funding source(s)?	0	0
4 Length of Written Easements or Land Use Agreement (max points 4) (ch. 23.09(26)(am)1 WI Stats)		
On public land (County, State, Federal)	4	0
10 or more year deeded easement on private land or other public land, for all portions of that trail segment to the nearest road on each side		0
3-9 year deeded easement on private land or other public land, for all portions of that trail to the nearest road on each side	2	0
10 or more year land use agreement (LUA, not deeded) on private land or other public land	1	1
3-9 year land use agreement (LUA, not deeded) on private land or other public land	0	0
5 Miles Impacted – How many miles will need to rerouted if the trail is shut down? 21.1 Measured from nearest intersection on both sides of lost segment. (max 4 points)		
Less than 20 miles	1	0
20 miles or more No other snowmobile trails connect. Explain:	3 4	3 0
DEDUCTIONS		il.
8 County Active Project Deduction (maximum deduction 1 point) A snowmobile active		
project is one that has exceeded it's initial grant period.		
Two or more active projects - deduct 1 point	-1	0
GRAND TOTAL	,	4

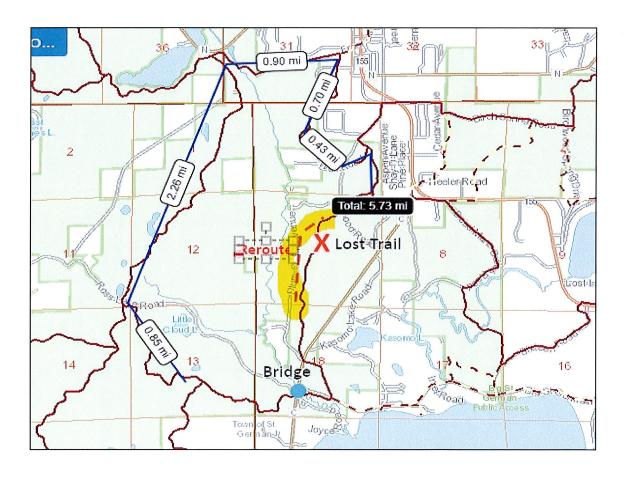
Comments/Notes:

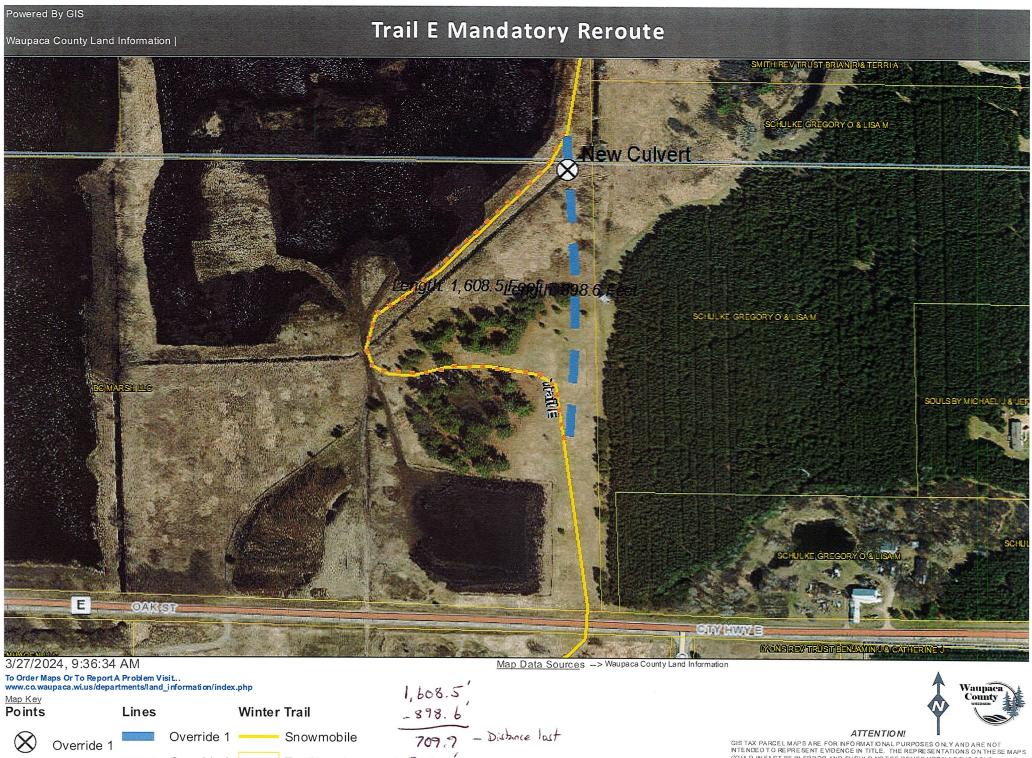
- · b.5 miles of fail will be last it this tail is not re-located.
- · It is 21.1 miles to use existing trails to get around this trail section it it were to be closed.
- · see attached maps for debails.

5) Example of Intersection to Intersection Measurement

If this trail is closed and a relocation not funded, how far around would riders need to travel on existing trails?

In the example below, to bypass the trail segment that is closing, riders would need to travel 5.73 miles on a trail to the NW if the reroute is not approved.





. 13 miles lost

Override 1

Override 2

Override 1

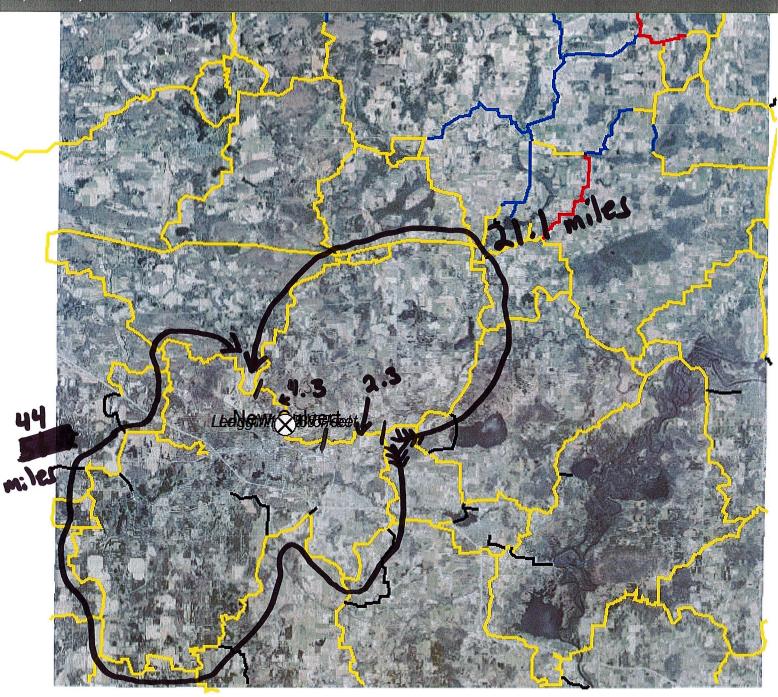
Snowmobile

Tax Parcels

ATTENTION!

GIS TAX PARCEL MAPS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT INTENDED TO REPRESENT EVIDENCE IN TITLE. THE REPRESENTATIONS ON THESE MAPS COULD IN FACT BE IN ERROR AND SHOULD NOT BE RELIED UPON AS THE SOLE DETERMINING FACTOR IN THE LOCATION OF ANY GIVEN PARCEL, WAUPACA COUNTY IS NOTRESPONSIBLE FOR ANY INACCURACIES CONTAINED HEREIN, INDIVIDUALS SHOULD CONSULT LEGAL REPRESENTATION OR PROFESSIONAL SURVEY ADVICE TO CONFIRM

Trail E Reroute - System Map



Winter Trail

Snowmohila & ATI/

3/27/2024, 11:15:59 AM

To Order Maps Or To Report A Problem Visit..
www.co.waupaca.wi.us/departments/land_information/index.php

Lines

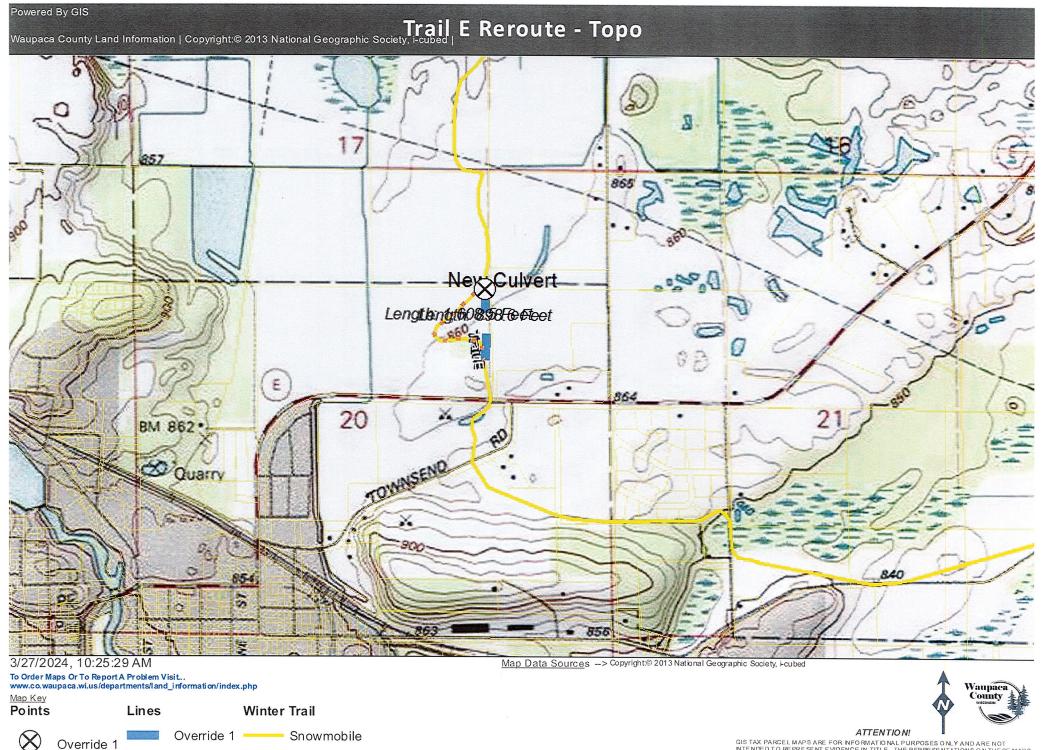
Map Key Points

Override 1

ATV Override 1 Override 2 Snowmobile Unfunded



Map Data Sources



Override 2

Tax Parcels

ATTENTION!

GIS TAX PARCEL MAPS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT INTENDED TO REPRESENT EVIDENCE IN TITLE. THE REPRESENTATIONS ON THESE MAPS COULD IN FACT BE IN ERROR AND SHOULD NOT DE REULED UPON AS THE SOLE DETERMINING FACTOR IN THE LOCATION OF ANY GIVEN PARCEL. WAUP-ACA COUNTY IS NOT RESPONSIBLE FOR ANY INACCURACIES CONTAINED HEREIN. INDIVIDUALS SHOULD CONSULT LEGAL REPRESENTATION OR PROFESSIONAL SURVEY ADVICE TO COMERM.

3/27/2024, 11:47:50 AM

To Order Maps Or To Report A Problem Visit.. www.co.waupaca.wi.us/departments/land_information/index.php

Map Key

Wetlands (DNR Wetland Inventory)

Addresses / Points of Interest

CSM-Plat of Survey

Parcel Numbers / Owner Names

Parcel Boundaries

Historic Lot Lines

- Historic Lot Lines
- Meander Line

Tie Bar



Parcal Changes (Splits Comb

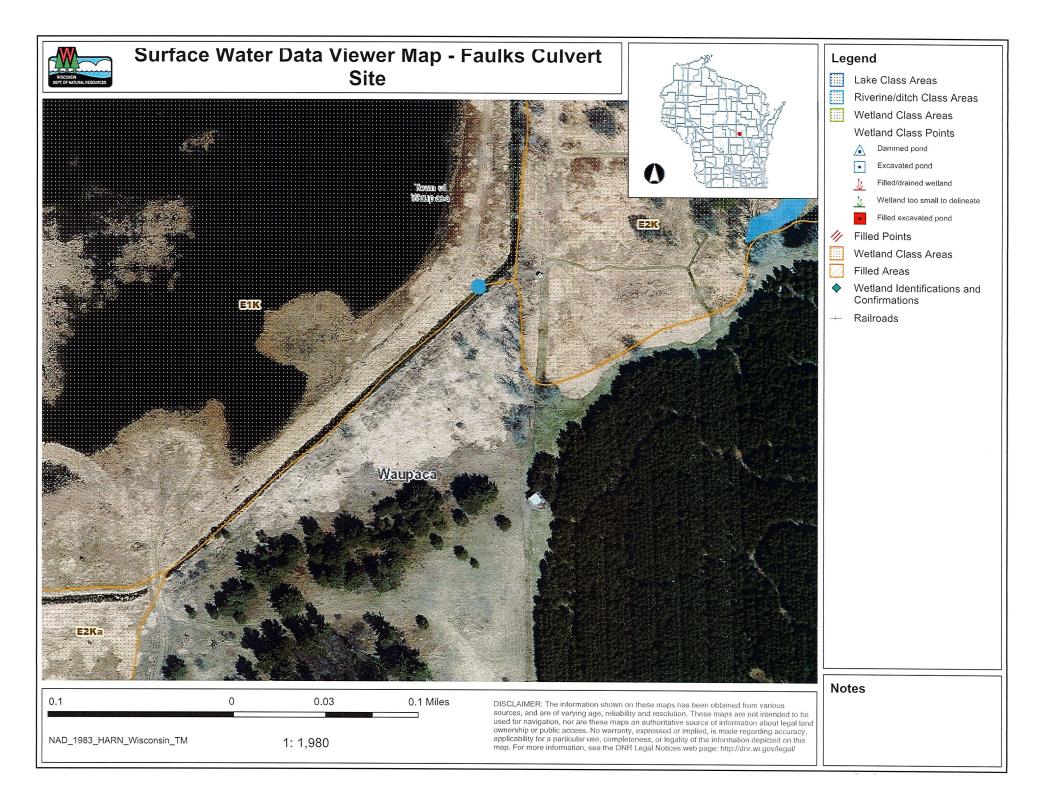
Parcel Changes (Splits-Combos etc)

Map Data Sources --> Waupaca County Land Information





GIS TAX PARCEL MAPS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT INTENDED TO REPRESENT EVIDENCE IN TITLE. THE REPRESENTATIONS ON THE SE MAPS COULD IN FACT BEIN BERROR AND SHOULD NOT BE REUED UPON AS THE SOLE DETERMINING FACTOR IN THE LOCATION OF ANY GIVEN PARCEL. WALP ACA COUNTY IS NO THESP ONSIBLE FOR ANY INACCURACIES CONTAINED HEREIN. INDIVIDUALS SHOULD CONSULT LEGAL REPRESENTATION OR PROFESSIONAL SURVEY ADVICE TO CONFINE



Capital Improvement Ownership Acknowledgement

(Landowner or Representative)

:

John D. Francis

(Representative of the County)

(Date)

4 April 2024

(Date)

(Scandinavia V. Kings Snow mobile Club

(Date)

S & S Excavating Job Estimate

N6256 CTY. RD. O Manawa, Wi 54949 920-596-3215

Job -	
Scandinavia Vikings Snowmobile Club	
Lenny Hahn Lennyhahn07@gmail.com	
715 281 0726	
710 201 0720	
Description - First culvert in ditch	
Culvert 60"x30"	\$ 8,500
These quotes are only good for 30 days	7
Excavating includes installing culvert and leveling 7 loads of fill and one load to cogrow vegetation on culvert	ver and \$ 2,800
	11,300
	. , ,
Does not include repairing of private power or water lines. You will need to locate private for use if there are grown Dispare Hatling and the stage will be a seen as a line of the seen and the seen are grown Dispared Hatling and the seen are lines.	e utilities
for us if there are any; Diggers Hotline only locates public lines. Please give me as must notice as possible and it is a three day notice for Digger's Hotline	e to locate
Trease give me as must notice as possible and it is a time day notice for Digger's froming	to locate.
Questions or concerns call me at 920-538-4000	
Mark Schuelke	
Authorized Rep	



Phone: Fax: 715-258-8566 715-942-0509

Date:

3/22/24

Expires:

4/22/24

NICK PANKRATZ nick@waupacasand.com

Quote Number: 11089

SCAN05

Ship to/Job Site:

JUSTIN HAHN

SCANDINAVIA VIKINGS SNOWMOBILE CLUB

PO BOX 152

SCANDINAVIA WI 54977

PHONE: **EMAIL**

Quote To:

SCANDINAVIA VIKINGS- CULVERT FAULKS MARSH

BOB FAULKS MARSH

CTY RD E

WAUPACA WI 54981

Budgetary Estimate for 60" x 30' HDPE Culvert and Installation on Bob Faulks Marsh Property, Cty Rd E, City of Waupaca

QUOTE

Option 1 - 60" x 30' HPDE Culvert w/Endwalls

- Furnish and install (1) 60" x 30' HDPE Culvert w/endwalls.
- Furnish, haul, and place Imported Structural Fill in area approx. 30' x 35' x 5'. Level and compact.
- Furnish, haul, and place 3/4" Limestone base in area approx. 20' x 45' x 1', medium Rip Rap and Fabric for culvert ends. Level and compact as needed.

Option 1 Cost

\$23,500.00 **-** \$25,500.00 +/-

Project Breakdown

Materials

\$18,250.00 - \$20,250.00

Labor & Equipment

\$5,250.00

\$23,500,00 - \$25,500,00

Option 2 - 71" x 47" x 30' CMP Culvert (steel)

- If a steel "Squash" culvert is used instead of HDPE (plastic) culvert, it would be an additional \$3,100.00.

26,600

* Final Cost based on actual quantities of materials used.

Note:

No permits are included.

Project would need to be completed in winter and haul road to site prepared by others.

PAYMENT TERMS All invoices are due and payable upon completion. A service charge of 1.5% per month will be added to all past due amounts. All prices subject to applicable sales taxes.

LIEN RIGHTS AS REQUIRED BY THE WISCONSIN CONSTRUCTION LIEN LAW, FAULKS BROS. CONSTRUCTION, INC. HEREBY NOTIFIES OWNER THAT PERSONS OR COMPANIES FURNISHING LABOR OR MATERIALS FOR THE CONSTRUCTION ON OWNER'S LAND MAY HAVE LIEN RIGHTS ON OWNER'S LAND AND BUILDINGS IF NOT PAID. THOSE ENTITLED TO LIEN RIGHTS, IN ADDITION TO THE UNDERSIGNED, FAULKS BROS. CONSTRUCTION, INC. ARE THOSE WHO CONTRACT DIRECTLY WITH THE OWNER OR THOSE WHO GIVE THE OWNER NOTICE WITHIN 60 DAYS AFTER THEY FIRST FURNISH LABOR OR MATERIALS FOR THE CONSTRUCTION. ACCORDINGLY, OWNER PROBABLY WILL RECEIVE NOTICES FROM THOSE WHO FURNISH LABOR OR MATERIALS FOR THE CONSTRUCTION, AND SHOULD GIVE A COPY OF EACH NOTICE RECEIVED. TO HIS MORTGAGE LENDER, IF ANY. FAULKS BROS. CONSTRUCTION, INC. AGREES TO COOPERATE WITH THE OWNER AND HIS LENDER, IF ANY, TO SEE THAT ALL POTENTIAL LIEN CLAIMANTS ARE DULY PAID.

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs must be approved by owner, and an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance. Note: This proposal may be withdrawn by us if not accepted within 30 days.

Signature	NICK PANKRATZ	FAULKS BROS. CONSTRUCTION, INC.	
ACCEPTANCE OF I outlined above.	PROPOSAL - The above prices, specifications and condition	s are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will b	e made as
Date of Acc	eptance:	Signature:	

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2984 Shawano Avenue
Green Bay, WI, 54313

Tony Evers, Governor

Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



03/19/2024

BC Marsh LLC Robert Faulks N2285 Long Cove Drive Waupaca, WI 54981

GP-NE-2024-69-00424

RE: Coverage under the waterway statewide general permit to install a waterway crossing over a tributary to Waupaca River, located north of CTH E, in the SW1/4, NE1/4, Sec. 20, T22N, R12E, City of Waupaca, Waupaca County

Dear Mr. Faulks:

Thank you for submitting an application for a General Permit to install a waterway crossing over a tributary to Waupaca River located, City of Waupaca, Waupaca County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions.—The eligibility standards can be found on your application checklist or in the statewide general permit (found at http://dnr.wi.gov/topic/waterways/ - keyword: general permits). The permit conditions are attached to this letter. You are responsible for meeting all general permit eligibility standards and permit conditions. This includes notifying the Department before starting the project and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Bobbi Jo Mahon at (920) 362-1361 or email bobbiejo.mahon@wisconsin.gov to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with waterway regulations, which help to protect the water quality, fish and wildlife habitat, natural scenic beauty and recreational value of Wisconsin's water resources for future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

Bobbi Jo Mahon

Water Management Specialist

By Maka

Copy to:

USACE Project Manager Barb Nowak-City Clerk

Jon Kaiser-Conservation Warden John Francis-Waupaca County Parks

Scott Koehnke-WMS, WDNR

WZ File

Trail E Culvert (Faulk's Property) Project Narrative

Project Description:

The Scandinavia Vikings Snowmobile Club would like to move their trail to the Eastern edge of the Faulk's Property to avoid unnecessary disturbance to what is to become a wildlife sanctuary. Currently, the snowmobile trail crosses the drainage ditch near the center of the 40 acre parcel the trail is located on. There is a 2' x 40' culvert under the existing road/trail. They are proposing to place a 60" squash culvert (71" x 47") x 30' near the Eastern edge of the parcel to cross the drainage ditch. If the club is unable to move the trail, the landowner will not allow the trail to cross their property.

Local Regulatory Coordination:

Upon talking to the Waupaca County Planning and Zoning Department, it was determined that a local permit would not be required for the project.

Methods, Materials, and Equipment:

We are proposing to use a 60" squash culvert (71" \times 47") \times 30' – likely a galvanized steel one to keep the culvert from floating up while installing it. According to the culvert placement worksheet calculations this size pipe should be sufficient. This ditch has very little flow – there is almost no elevation change for most of it's length. The culvert that the old trail crossed (about 770' to the SW) is a 2' \times 40' culvert and has been in place with no issues for a very long time.

The new culvert will be embedded 4-6" into the bottom of the ditch, then a mixture of sand and gravel will be used to fill and compact around the pipe. The final surface of the new trail will be about 20' wide with the banks sloping down such that about 1' of the pipe is showing on each side of the trail. The site is accessible from both sides, so there is no reason for any part of the equipment except the bucket to be in the water. The side banks of the trail around the culvert will be planted with vegetation to control future runoff.

Proposed Construction Schedule:

We are hoping to install the pipe in late summer/fall of 2024 if a grant is approved through the snowmobile program.

Erosion Control:

Temporary silt fence will be installed near the waterline on the new section of trail with the culvert under it. The banks will be seeded to a vegetative cover, once that is established, the silt fence will be removed.

Excavation and Fill Activities:

There should be very little material pulled out of the drainage ditch – just enough to seat the pipe 4-6" below the bottom of the ditch. This material will be stored on site then used on the side banks of the trail. The fill will be sand/gravel and will be compacted around the pipe to prevent washouts in the future.

Avoiding Impact to Wetlands and Waterways:

With the new pipe being much larger than the existing one, there should be no issues with backing up water. As stated before, there is very little flow in the ditch.

Area Impacted:

There will be about 30 lineal feet of the drainage ditch impacted by this culvert project.

Navigational Clearance:

The proposed culvert would not allow a water-craft to pass without portaging around. There are at least two other spots on the ditch that have similar impact. Should someone want to float down the ditch, the portage would be as easy as pulling out on one side of the culvert, crossing the trail, and putting in on the other side.

Supporting Documentation:

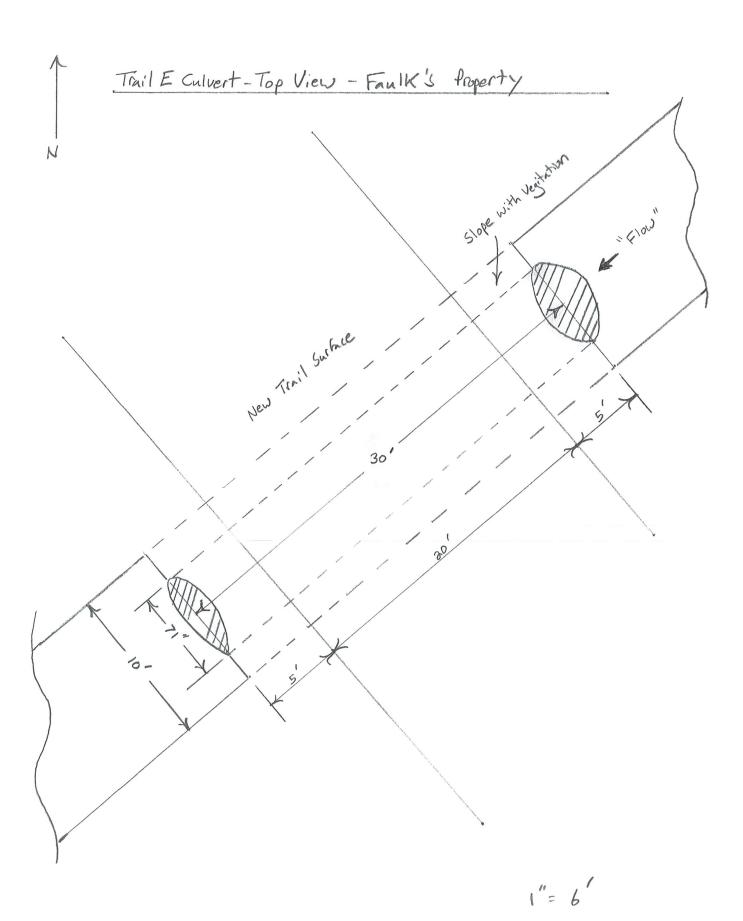
See the attached drawings, aerial photos, and worksheet for more details.

be

General Permit Worksheet Culvert Placement on Navigable Waterways

This worksheet should be completed and accompany all application materials (Waterway General Permit Application and Approval - Form 3500-108) and any other additional support documents.

Project Start Date (mm/dd/yy): 06/01/24
Be aware of the construction season prohibitions: (A construction waiver must be approved by the local fisheries biologist) Trout waters and their tributaries: 9/15 - 5/15 Warmwater streams North of Hwy 29: 4/1 - 6/1 Warmwater streams South of Hwy 29: 3/15 - 5/15
Will the proposed project affect the navigational use of the waterbody? Yes No I If "Yes", the following portage will be provided (describe portage): The culvert will restrict acress, but this is a damage ditch with other culverts already in place, the closest being 777 ht to the Southwest.
CULVERT SIZING To be eligible for a general permit without a professionally engineered culvert design, the required culvert area may not exceed 20 square feet. To be eligible for a general permit with a professionally engineered culvert design, the required culvert area may not exceed 40 square feet.
Calculating Culvert area
To determine the required culvert area, 3 measurements should be made: channel width of the stream in feet at the ordinary high water mark (W ₁), channel width of the stream in feet at the stream bottom (W ₂), and the height in feet of the ordinary high water above the stream bottom (H) (see diagram). These 3 measurements are made at each of 3 locations or transects along the stream: the location of the proposed crossing, 100 feet upstream from the crossing. The individual measurements of W ₁ , W ₂ and H are averaged to derive the final W ₁ , W ₂ and H values. The required culvert area is then calculated with the following equation:
Required Culvert area (square feet) = $H \times (W_1, W_2)$
Height: $1 \times W_1 = 0 + W_2 = 0$ = Culvert Area (square feet)
Culvert area and corresponding round culvert size
Culvert area (sq ft) Culvert diameter (in.) Culvert area (sq ft) Culvert diameter (in.) 1.80 18 3.10 24 4.90 30 7.10 36 9.60 42 12.60 48 15.90 54 19.60 60 23.80 66 66 60
The following erosion control measures will be employed:
Silt fence Erosion Mat Other
Seeding/Mulch Riprap



Trail E Culvert Cross Section - Faulk's Property

