

DANIEL P. MCCOY
COUNTY EXECUTIVE

COUNTY OF ALBANY
DEPARTMENT OF PUBLIC WORKS
449 NEW SALEM ROAD
VOORHEESVILLE, NEW YORK 12186-4826
(518) 765-2055 - FAX (518) 447-7047
WWW.ALBANYCOUNTY.COM

LISA M. RAMUNDO, P.E. COMMISSIONER

May 6, 2024

Hon. Joanne Cunningham, Chairwoman Albany County Legislature 112 State St., Rm. 710 Albany, NY 12207

Dear Chairwoman Cunningham,

We request the Legislature's approval of an agreement with Gorman Brothers, Inc. for Cold in Place Recycling Projects on CR410 (Thayers Corners Rd.) in the Town of Westerlo for a length of 2.22 miles and CR414 (Horseshoe Bend Rd.) in the Town of Westerlo for a length of 1.20 miles.

As part of Albany County DPW's Highway Maintenance Plan, we are planning on using the Cold-In-Place Recycling (CIP) process for approximately 3.42 miles of roadway. CIP is one of the processes we use for maintaining the 290 center lane miles of County highways. The roads chosen for this treatment have deteriorated beyond the point that milling and repaving would be sufficient, but have not deteriorated to the point where they require full depth replacement.

In the CIP process, we grind  $\approx$  4" into the existing asphalt surface. The product is then sent through a crusher, asphalt emulsion is added along with stone at a predetermined rate. Once the product is mixed, it is placed back onto the roadway through a paver and compacted to the desired density (95%).

The entire process takes place using a "train" which includes an emulsion tanker, milling machine, crusher/screener and an asphalt paver followed by a pneumatic and vibratory rollers. The process basically turns the top 4" of asphalt into a recycled binder course. We then pave 2" of top course over that using the Hauling & Placing of Asphalt Contract. The CIP process extends pavement life by approximately 10 years.

We have used Gorman Brothers Inc. as our contractor for this work for over 28 years. They are on the approved State Contract and have always provided excellent work for the County.

I have reviewed and evaluated the various contractors providing said service under New York State contract Group 31555-Award 23334 and recommend Gorman Brothers, Inc. as offering the best value for Albany County with a cost total for the projects not to exceed \$424,429.10.

If there are any questions or further information is needed regarding this request, please feel free to contact my office.

Sincerely,

Lisa M. Ramundo Commissioner

cc: Hon. Dennis Feeney, Majority Leader

Hon. Frank Mauriello, Minority Leader Rebekah Kennedy, Majority Counsel Arnis Zilgme, Minority Counsel



### County of Albany

Harold L. Joyce Albany County Office Building 112 State Street - Albany, NY 12207

### Legislation Text

File #: TMP-5480, Version: 1	
REQUEST FOR LEGISLATIVE ACTIO	N
Description (e.g., Contract Authorizat Contract Authorization with Gorman Bro	tion for Information Services): s., Inc. for Cold-In-Place Recycling Projects.
Date:	May 6, 2024
Submitted By:	Rosa Maria Tirino
Department:	Public Works
Title:	Director of Operations
Phone:	518-655-7919
Department Rep.	
Attending Meeting:	Lisa M. Ramundo, PE, Commissioner
Purpose of Request:	
<ul> <li>□ Adopting of Local Law</li> <li>□ Amendment of Prior Legislation</li> <li>□ Approval/Adoption of Plan/Procedure</li> <li>□ Bond Approval</li> <li>□ Budget Amendment</li> <li>☑ Contract Authorization</li> <li>□ Countywide Services</li> <li>□ Environmental Impact/SEQR</li> <li>□ Home Rule Request</li> <li>□ Property Conveyance</li> <li>□ Other: (state if not listed)</li> </ul>	Click or tap here to enter text.
CONCERNING BUDGET AMENDMEN	<u>TS</u>
Increase/decrease category (choose a ☐ Contractual ☐ Equipment ☐ Fringe ☐ Personnel ☐ Personnel Non-Individual	all that apply):

File #: TMP-5480, Version: 1		
□ Revenue		
Increase Account/Line No.: Source of Funds: Title Change:	Click or tap here to enter text. Click or tap here to enter text. Click or tap here to enter text.	
CONCERNING CONTRACT AUTHOR	RIZATIONS	
Type of Contract:  ☐ Change Order/Contract Amendmen ☐ Purchase (Equipment/Supplies) ☐ Lease (Equipment/Supplies) ☐ Requirements ☒ Professional Services ☐ Education/Training ☐ Grant Choose an item.	t	
Submission Date Deadline Click  Settlement of a Claim  Release of Liability	or tap to enter a date.	
☐ Other: (state if not listed)	Click or tap here to enter text.	
Contract Terms/Conditions:		
Party (Name/address): Gorman Bros.,Inc. 200 Church St. Albany, NY 12202		
Additional Parties (Names/addresses): Click or tap here to enter text.		
Amount/Raise Schedule/Fee: Scope of Services: Bond Res. No.: Date of Adoption:	\$424,429.10 Cold-In-Place Recycling Projects Click or tap here to enter text. Click or tap here to enter text.	
CONCERNING ALL REQUESTS		
Mandated Program/Service: If Mandated Cite Authority:	Yes □ No ⊠ Click or tap here to enter text.	
ls there a Fiscal Impact: Anticipated in Current Budget:	Yes ⊠ No □ Yes ⊠ No □	

File #: TMP-5480, Version: 1

County Budget Accounts:

Revenue Account and Line:

Click or tap here to enter text.

Revenue Amount:

Click or tap here to enter text.

Appropriation Account and Line:

HHTH

Appropriation Amount:

\$424,429.10

Source of Funding - (Percentages)

Federal:

Click or tap here to enter text. Click or tap here to enter text.

State: County:

100%

Local:

Click or tap here to enter text.

Original Awarding Agency / Funder:

Click or tap here to enter text.

New York State Pass-Through Agency (if applicable):

Click or tap here to enter text.

Term

Term: (Start and end date)

06/01/2024-10/31/2024

Length of Contract:

5 Months

Impact on Pending Litigation

Yes □ No 🖾

If yes, explain:

Click or tap here to enter text.

Previous requests for Identical or Similar Action:

Resolution/Law Number:

Click or tap here to enter text.

Date of Adoption:

Click or tap here to enter text.

### <u>Justification</u>: (state briefly why legislative action is requested)

The Department of Public Works is requesting Legislature's approval of an agreement with Gorman Brothers, Inc. for Cold in Place Recycling Projects on CR410 (Thayers Corners Rd.) in the Town of Westerlo for a length of 2.22 miles and CR414 (Horseshoe Bend Rd.) in the Town of Westerlo for a length of 1.20 miles. As part of Albany County DPW's Highway Maintenance Plan, we are planning on using the Cold-In Place Recycling (CIP) process for approximately 3.42 miles of roadway. CIP is one of the processes we use for maintaining the 290 center lane miles of County highways. The roads chosen for this treatment have deteriorated beyond the point that milling and repaying would be sufficient, but have not deteriorated to the point where they require full depth replacement. In the CIP process, we grind approximately 4" into the existing asphalt surface. The product is then sent through a crusher, asphalt emulsion is added along with stone at a predetermined rate. Once the product is mixed, it is placed back onto the roadway through a paver and compacted to the desired density (95%). The entire process takes place using a "train" which includes an emulsion tanker, milling machine, crusher/screener and an asphalt paver followed by a pneumatic and vibratory rollers. The process basically turns the top 4" of asphalt into a recycled binder course. We then pave 2" of top course over that using the Hauling & Placing of Asphalt Contract. The CIP process extends pavement life by approximately 10 years. We have used Gorman Brothers Inc. as our contractor for this work for over 28 years. They are on the approved State Contract and have always provided excellent work for the County. We have reviewed and evaluated the various contractors providing said service under New York State contract Group 31555- Award 23334 and recommend Gorman Brothers, Inc. as offering the best value for Albany County

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with a cost total for the projects not to exceed \$424,429.10.	440V64/6444

#### LOT 3 - COLD RECYCLING (Version 04/01/2024)

#### AGENCY/USER COMPLETES THIS SECTION FOR QUICK QUOTE Date when the Quick Quote form is sent to the contractor: May / 20 / 2024 NOTE: 1. The user and the contractor understand that the Project's Total Cost to be shown below will include all the needed Price Adjustments for the month indicated (the month when the Quick Quote form is sent to the contractor). If the project (or part of the project) is executed in a different month than the one used to calculate this Quick Quote, then the Project's Total Cost will change accordingly to reflect the Price Adjustments for the Month in which the project (or part of the project) was actually performed. 2. The contractor understands that at no time may a quick quote unit price (without the Price Adjustment) exceed the contract price. Materials cost, hauling expenses, etc., can be lowered by the contractor any time during the quick quote Agency/User: Albany County DPW Project Name: County Route 414 Quick Quote # 414 Project Location: Westerlo Square Yards to Be Recycled = 16,900,000 SqY Depth of Recycling : 4 inches Square Yards of Shoulder to be Milled = 0.000 SqY Depth of Milling: Shoulder Milling Disposal by: The Authorized User may include gallon amounts for Emulsion and PG Binder, but the Contractors will choose only one of them (either Emulsion or PG Binder) for their quick quote response. \* Mix Design will be Provided by the Contractor at the time of the project (unless specifically provided by the Agency) but for the Quick Quote calculation purposes, the following table of conversion factors may be taken by the Authorized User as a guide to convert the project's SqY into the different items: Emulsions- 1.8 gal/SY for 4" recycling and 1.35 gal / SY for 3" recycling PG Binder - 1.35 gal/SY for 4" recycling; 1.00 gal/SY for 3" recycling Aggregate - 90lbs/SY for 4" recycling and 68lbs/SY for 3" recycling Portland Cement - 4lbs per SY for 4" recycling and 3lbs per SY for 3" recycling Fog Seal - 0.1 gal/SY Total Gallons of Emulsion = 22,130,000 Gallons or 0.000 Gallons Total Gallons of PG Binder = 1,690.000 Gallons Total Gallons Fog Seal = 0.000 Tons Total Tons Aggregate = 0.000 \_\_\_\_ Tons of Cement No Portland Cement Required Additional Items (enter a check mark if item is required):

Ø	Work Zone Traffic Control by Contractor	Number of Pilot Vehicles
	Rumble Strips Required	Linear Feet of Rumble Strips
☑	Additional Flaggers Required	Number of Additional Flaggers
	OCP Insurance Required	

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

Agency/User Telephone:	(51	8) 765-2055		
Quick Quote must be returned	d by:	5/24/24		
Agency/User Comments: (No	te: Press Alt	+Enter to create a r	iew line)	
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		Companya Pengangan		
		Malagraphic actions		
		Sapania sum sa manggaran		

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

CONTRACTOR COMPLETES THIS SECTION FOR QUICK QUOTE

Project Name: County I	Route 414	Quick Quote # 414
Contractor & PC #:	PC70343 - Gor	man Bros., Inc
Plant Location: 6 Freema	ana Bridge Rd, Scotia, NY 12302	Plant #: <u>£0104</u>
Estimated Haul Distance:	<u>William</u> Miles	Telephone: 518-782-9988
Estimated Number of Days	or Hours	to Complete the Project
Type of Recycling:	In Place	
Recycling Price =	\$3,820 per Square Yard	
Total Square Yards =	= <u>16,900.000</u> SqY	
A. Recycling Total Cos	t = \$64,558.000	
the Quick Quote calculation purp guide to convert the project's Sq* Emulsions- 1.8 gal/SY for 4" rec; PG Binder - 1.35 gal/SY for 4" rec; Aggregate – 90lbs/SY for 4" recy	v the Contractor at the time of the project (unless oses, the following table of conversion factors my vinto the different items: vcling and 1.35 gal / SY for 3" recycling recycling; 1.00 gal/SY for 3" recycling vcling and 68lbs/SY for 3" recycling at 4" recycling and 3lbs per SY for 3" recycling	
B. Emulsion Pri	ce = \$3.750 per Gallon	
Material Price Adjus	tment Calculation for the Month of:	May / 2024
C. Monthly Material Pri	ce Adjustment - Emulsion	per Gallon = <b>\$</b> 0.022
D. Emulsion Pri	ce with Price Adjustment (B + C) =	\$3.728 per Gallon
E. Total Gallons of	Emulsion = 22,130.000	Gallons
F. Emulsion	Total Cost (D x E) = \$82,500.640	
G. Liquid Bituminous M	Iaterial (Fog Seal) Price =	per Gallon
<u>Material Price Adjus</u>	tment Calculation for the Month of:	May / 2024
H. Monthly Material (Fo	og Seal) Price Adjustment per Gallon =	-\$0.017
I. Liquid Bitum. Mat. (l	Fog Seal) Price w/ Price Adjustment (L+	M) = \$3.283 /Gal
J. Total Gallons of Fog	Seal = 1,690.000 Gallor	ns
K. Liquid Bituminous !	Material (Fog Seal) Total Cost (I x J) =	\$5,548.270
L. Heat/Haul/Apply Price	ee = \$0.080 per Gallon	
M. Total Gallons of	Emulsion = 22,130.000	Gallons
N. Heat/Haul/Apply To	otal Cost (L x M) = \$1,770.400	
O. Aggregate Price =	\$0,000 per Ton	
P. Total Tons of Aggreg	tate = 0.000 Tons	
Q. Aggregate Total Co	st (O X P) = \$0.000	
R. Portland Cement Price	e = \$0.000 per Ton	
S. Total Tons of Cemen	t = 0.000 Tons	

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

CONTRACTOR COMPLETES THIS SECTION FOR QUICK QUOTE

rioje	ect Name: County Route 414 Quick Quote # 414
	Work Zone Traffic Control Price = \$0,500 per SY
	Total Square Yards = 16,900,000 SqY
U.	Work Zone Traffic Control Total Cost = \$8,450.000
	Surcharge - Small/Recycled in Short Segments Projects = \$0.000 per SY
	Total Square Yards = SqY
V.	Surcharge - Small/Recycled in Short Segments Proj. Total Cost = \$0.000
	Price Additional Flagger(s) = \$1,350,000 per Day
	Number of Additional Flagger(s) = Number of Days =1
W.	Additional Flagger(s) Total Cost = \$1,350.000
	Price Additional for Rumble Strips = \$0.000 per Linear Foot
	Number of Linear Feet = LF
<i>X</i> .	Additional for Rumble Strips Total Cost = \$0.000
	Price Mobilization to Project Location = \$0.000 per Square Yard
	Total Square Yards = SqY
<i>Y</i> .	Mobilization to Project Location Total Cost = \$0.000
	Shoulder Milling (Contractor Disposal) = \$0.000 per SY
	Total Square Yards = SqY
Z	Shoulder Milling (Contractor Disposal) Total Cost = \$0.000
	Shoulder Milling (State/User Disposal) = \$0.000 per SY
	Total Square Yards = SqY
A1	Shoulder Milling (State Disposal) Total Cost = \$0.000
B1 Duni	OCP Insurance = \$0,000  Sect's Total Cost including all the Price Adjustments for: May / 2024
rroje	
	Project's Total Cost including Price Adjustustment (A+F+K+N+Q+T+U+V+W+X+Y+Z+A1+B1) =  \$164,177.310
Can	Contractor Supply? Yes
Can	Contractor meet Schedule? Yes
Print	t Name Dane Mellon Date 5/23/24
Cont	tractor Signature Dane Mellon
NOT	TE:  the user and the contractor understand that the Project's Total Cost shown above includes all the needed Price.

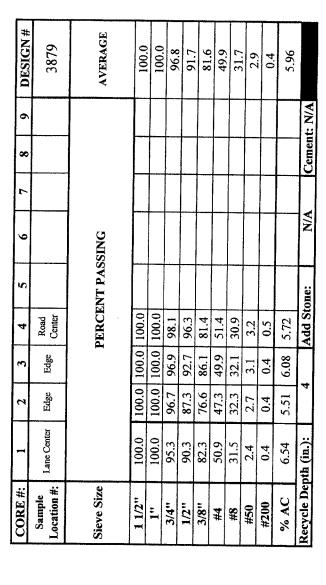
Start: CR 405 End: CR 401 Length: 6,300

Prepared By: The Gorman Group Port of Albany, Albany, NY

### Core Locations

Sample#:	Mile Point:	Pavement Depth:	Sample Location:
1	1,000' from CR 401	6.5"	Lane Center
2	2,000' form CR 401	6"	Road Center
3	3,000' from CR 401	6"	Edge
4	4,000' from CR 401	6"	Lane Center
5	5,000' from CR 401	4"	Edge
6	6,000' from CR 401	6"	Road Center
7			
8			****
9			
10			
11			
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13			
14			
15			
16			***
17			
18			
19			
20		***************************************	***************************************

Start: CR 405 End: CR 401 Length: 6,300





Design Chart

	1	ADDSTONE	0	0	0	0	0	0		0	0	
	Emulsion(Gal/Yd³)	ADDSTONE TYPE	N/A			Percent Added	%0.0	Added Stone(lb/yd²)	0	Percent original	100.0%	
CR 414	3.0%	Minimum	100	100	06	70	09	35	20	м	2	
Road:	Emulsion %:	Maximum	100	001	100	8	80	65	50	20	8	
												_
Albany County	3879	Original	100.0	100.0	8.96	91.7	81.6	49.9	31.7	2.9	0.4	
Location:	Mix Design #:	SIEVE NUMBER	1 1/2"	÷.,	3/4"	1/2"	3/8"	##	8#	#20	#200	

1.59

	#200	/		ned Mix	Ę	Ę	
	Q #			Combination Combination	Minimum	Махітыт	- Original
	<b>\$</b>	<b>5</b> /					
	#	/					
	3/8"			<i> </i>	1		
	1/2"				$\int_{-\infty}^{\infty}$		
	3/4"	1					
	+				ľ	8	
120.0 T 100.0 D 100.0	771.	20.0	40.0	3 8	G	100.0	120.0

Combined Mix

SIEVE SIZE

1 1/2"

100.0 100.0 96.8

91.7 81.6 49.9 31.7 2.9

1" 3/4" 1/2" 3/8" #4 #8 #50

Emulsion % is a suggested starting point. May vary in the field.

Strength Type	Emulsion %	Stability	Flow	Sp. Gr.	Density
	2.0	3003.1	19.8	2.112	
Wet	2.5	3274.2	19.4	2.097	
	3.0	3732.7	21.3	2.084	130.0
	2.0	3184.9	20.7		
Dry	2.5	3425.4	18.8		
	3.0	3829.8	19.4		

3879 2.9% 97.46%

Mix Design #: RAP Moisture %:

TSR:

5.97% HFMS-2 3.0% 3%

Calculated Air Voids %:
Emulsion Grade:
Emulsion Content %:
Added Water %:

	-				wet stability	2.060 Dry Stability	Wet Density	Dry Density			
	€ 2.120		2.100	2,080		- 2.060	2.040		2.020	2,000	
					:						
		:		1	:		1	:			3.0
sity		:			:		f :			:	
& Den			And the state of						٠	į	
Stability & Density					/						2.5
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	:			11	•		i				2.0
		:			:	:			:		
	4500.0	4000.0	3500.0	3000.0	2500.0	2000.0	1500.0	1000.0	500.0	0.0	

Emulsion	Stability	Flow	Sp. Gr.	Density		Wet Average	rerage
%	,			6	Em. %	2	2.
	3010.3	18.2		131.8	Stability	3003.1	3274
	2997.5	19.9	2.115	132.0	Flow	19.8	19.
20	3001.4	21.3	2.110	131.7	Sp. Gr.	2.112	2.09
<b>i</b>	3224.7	19.1	2.095	130.7	Density	131.8	130.
	3118.6	22.1	2.091	130.5	Strength	191.19	208.4
では、大きのでは、	3211.4	30 A	PAU C	130.0			I

Strength Type

Wet

Dα

Em. %	Stability	Flow	Sp. Gr.	Density	Strength	
Density	1311	131.0	130.5	129.7	129.2	128.8
Sp. Gr.	2.101	2.099	2.091	2.078	2.071	2.064
Flow	21.3	18.8	18.1	18.3	19.5	18.6
Stability	3277.6	3311.7	3233.4	3584.9	3344.6	3346.7
Emulsion %			25			
Strength Type		Wet		i	D <sub>1</sub>	

Sp. Gr.	Density		<b>Tensile Strength Ratio</b>	ngth Ratio	
	farama.	Em. %	2	2.5	က
2.088	130.3	Wet	191.19	208.45	237.64
2.081	129.9	Dry	202.76	218.07	243.82
2:082	129.9	TSR	94.29	95.59	97.46
2.039	127.2				
2.051	128.0				
2.048	127.8				

21.4

3699.3 3787.2 3711.5 3811.4 3799.5 3878.6

3.0

ρ

Wet

Flow

Stability

Emulsion %

Strength Type

19.5 18.2 20.5

Flow	19.8	19.4	21.3
Sp. Gr.	2.112	2.097	2.084
Density	131.8	130.9	130.0
Strength	191.19	208.45	237.64
	Dry A	Dry Average	
Em. %	2	2.5	3
Stability	3184.9	3425.4	3829.8
Flow	20.7	18.8	19.4
Sp. Gr.	2.090	2.071	2.046
Density	130.4	129.2	127.7
Strength	202.76	218.07	243.82

1/26/2024

Start: CR 405 End: CR 401 Length: 6,300

Prepared By: The Gorman Group Port of Albany, Albany, NY

Recommendation

Based on testing results, 3% HFMS-2 Emulsion had the best combination of strength and TSR.

We recommend a starting point of 3%.

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

### AGENCY/USER COMPLETES THIS SECTION FOR QUICK QUOTE

Date when the C	uick Quote form is se	in to the conti	44.01. <u>31.991.518</u>	an will war com		- Produce duline	/ 3	
Adjustments for the of the project) is ex will change accordi actually performed.  2. The contractor of the contractor o	contractor understand that month indicated (the mon ecuted in a different month ngly to reflect the Price Ad understands that at no time aterials cost, hauling expet	th when the Quic than the one use ljustments for the may a quick q	k Quote form is se d to calculate this Month in which th	nt to the co Quick Quo ne project ( ithout the	ontractor).  te, then the or part of the price Adjuster of the Pri	If the pro e Project's he project ustment)	ject (or Total ( ) was <b>exceed</b>	part Cost
Agency/User:			Albany County I	DPW				30/45/05 30/45/05
Project Name:	County Route 410				Quick (	Quote # 🛚	41	0
Project Location	1: Westerlo							KON.
	e Yards to Be Recycle of Recycling :	AUTHORAGO AND	200,000	SqY				
Shou	th of Milling :	San San Language Company			Life Soft			
The Authorized U one of them (eithe * Mix Design will the Quick Quote caguide to convert the Emulsions - 1.8 gal/ PG Binder - 1.35 g Aggregate - 90lbs// Portland Cement	alder Milling Disposal  ser may include gallon ar r Emulsion or PG Binder the Provided by the Contract leulation purposes, the foll to project's SqY into the diff SY for 4" recycling; 1.0 SY for 4" recycling; 1.0 SY for 4" recycling and 68 tlbs per SY for 4" recycling.	mounts for Emu r) for their quick- tor at the time of owing table of co free titens: 35 gal / SY for 3" 10 gal/SY for 3" rec	t quote response.  The project (unless onversion factors many)  recycling ecycling ycling	specificall	y provided	by the Ag	ency) b	ut fo
The Authorized U one of them (eithe * Mix Design will the Quick Quote oguide to convert the Emulsions- 1.8 gal/PG Binder - 1.35 g Aggregate - 90lbs/ Portland Cement Fog Seal - 0.1 gal/S	alder Milling Disposal  ser may include gallon ar r Emulsion or PG Binder the Provided by the Contract leulation purposes, the foll to project's SqY into the diff SY for 4" recycling; 1.0 SY for 4" recycling; 1.0 SY for 4" recycling and 68 tlbs per SY for 4" recycling.	mounts for Emu r) for their quick tor at the time of owing table of co ferent items: 35 gal / SY for 3" 10 gal/SY for 3" re g and 3lbs per SY	t quote response.  The project (unless onversion factors many)  recycling ecycling ycling	specificall	y provided	by the Ag	ency) b	ut fo
The Authorized Use one of them (either Mix Design will be Quick Quote or guide to convert the Emulsions- 1.8 gal/PG Binder - 1.35 g Aggregate - 90lbs// Portland Cement - Fog Seal - 0.1 gal/S  Total Gal  Total Gal	alder Milling Disposal  ser may include gallon ar  r Emulsion or PG Binder  the Provided by the Contract  cludation purposes, the foll  project's SqY into the diff  SY for 4" recycling and 1.  al/SY for 4" recycling and 68  this per SY for 4" recycling  y  tons of Emulsion =  or  or  or  or  or  or  or  or  or  o	mounts for Emu  T) for their quick tor at the time of owing table of co Ferent items: 35 gal / SY for 3" 10 gal/SY for 3" re g and 3lbs per SY  37,00	the project (unless sonversion factors may be recycling ecycling yeling of for 3" recycling Gallo	s specificall hay be taked nrs	y provided	by the Ag	ency) b	ut fo
The Authorized U one of them (eithe * Mix Design will the Quick Quote ca guide to convert the Emulsions- 1.8 gal/ PG Binder - 1.35 g Aggregate - 90lbs/ Portland Cement - Fog Seal - 0.1 gal/s  Total Gal  Total Gal  Total Gal	ser may include gallon ar r Emulsion or PG Binder re Provided by the Contrac leulation purposes, the foll g SY for 4" recycling and 1. al/SY for 4" recycling and 68 this per SY for 4" recycling Y tons of Emulsion = or lons of PG Binder = lons Fog Seal =	mounts for Emu  ) for their quick tor at the time of towing table of co ferent items 35 gal / Sy for 3" re g and 3lbs per Sy  37,00  0,0  2,80	the project (unless inversion factors in a conversion factor i	s specificall hay be taked nrs	y provided	by the Ag	ency) b	ut fo
The Authorized U one of them (eithe * Mix Design will the Quick Quote ca guide to convert th Emulsions- 1.8 gal/ PG Binder - 1.35 g Aggregate - 90lbs/ Portland Cement Fog Seal - 0.1 gal/  Total Gal  Total Gal  Total Gal  Total Gal  Total Total Ton	alder Milling Disposal  ser may include gallon ar  r Emulsion or PG Binder  be Provided by the Contrac  cludation purposes, the foll  project's SqY into the diff  SyY for 4" recycling and 1.3  alSY for 4" recycling and 68  tlbs per SY for 4" recycling in 68  tlbs per SY for 4" recycling in 69  tlbs per SY for 4" recy	by:  mounts for Emu r) for their quick tor at the time of owing table of co ferent items. 35 gal / SY for 3" 10 gal/SY for 3" rec g and 3lbs per SY  37,00  2,80  0,0	the project (unless inversion factors in a conversion factor i	specifically ay be taken	y provided n by the Au	by the Ag	gency) b Jser as	ut fo
The Authorized U one of them (eithe * Mix Design will the Quick Quote ca guide to convert the Emulsions- 1.8 gal/ PG Binder - 1.35 g Aggregate - 90lbs/ Portland Cement - Fog Seal - 0.1 gal/s  Total Gal  Total Gal  Total Gal  Total Ton Portland C	ser may include gallon ar r Emulsion or PG Binder re Provided by the Contrac leulation purposes, the foll g SY for 4" recycling and 1. al/SY for 4" recycling and 68 this per SY for 4" recycling Y tons of Emulsion = or tons of PG Binder = lons Fog Seal = s Aggregate = Cement Required	mounts for Emu  ) for their quick tor at the time of owing table of co ferent items: 35 gal / Sy for 3" re g and 3lbs per Sy  37,00  2,80  0.0	the project (unless inversion factors in a conversion factor i	specifically ay be taken	y provided	by the Ag	gency) b Jser as	ut fo
The Authorized Use one of them (either Mix Design will be the Quick Quote or guide to convert the Emulsions 1.8 gal/PG Binder - 1.35 g Aggregate - 90lbs/. Total Gal. Total Gal. Total Gal. Total Gal. Total Ton Portland C	ser may include gallon ar r Emulsion or PG Binder le Provided by the Contrac lculation purposes, the foll project's Sq' into the diff Sy' for 4" recycling and 1. lal/SY for 4" recycling and 68 libs per SY for 4" recycling and 68 libs per SY for 4" recycling In all State of the service of th	mounts for Emu  The for their quick tor at the time of cowing table of cofferent items.  So gal / Sy for 3" re  g and 3lbs per Sy  37,00  2,80  0,1  if item is requ.	the project (unless inversion factors in a recycling ecycling yeling for 3" recycling Gallo Gall	is specifically any be taken as the same a	y provided n by the At	by the Ag	gency) b Jser as	ut fo
The Authorized Use one of them (either Mix Design will be the Quick Quote case of them (either Mix Design will be the Quick Quote case of the Mix Design will be the Quick Quote case of the Mix Design of the Mix	ser may include gallon ar r Emulsion or PG Binder re Provided by the Contrac leulation purposes, the foll g SY for 4" recycling and 1. al/SY for 4" recycling and 68 this per SY for 4" recycling Y lons of Emulsion = or lons of PG Binder = lons Fog Seal = s Aggregate = Cement Required se tenter a check mark	mounts for Emu  The for their quick tor at the time of cowing table of cofferent items.  So gal / Sy for 3" re  g and 3lbs per Sy  37,00  2,80  0,1  if item is requ.	the project (unless inversion factors in a conversion factor in a conversion facto	is specifically any be taken any betaken a	y provided in by the At	by the Agathorized U	gency) b Jser as	ut fo
The Authorized Use one of them (either Mix Design will be the Quick Quote case of the Quot	ser may include gallon ar r Emulsion or PG Binder le Provided by the Contrac lculation purposes, the foll project's Sq' into the diff Sy' for 4" recycling and 1. lal/SY for 4" recycling and 68 libs per SY for 4" recycling and 68 libs per SY for 4" recycling In all State of the service of th	mounts for Emu  The for their quick tor at the time of cowing table of cofferent items.  So gal / Sy for 3" re  g and 3lbs per Sy  37,00  2,80  0,1  if item is requ.	the project (unless inversion factors in a recycling ecycling yeling for 3" recycling Gallo Gall	is specifically any be taken any betaken a	y provided n by the At	by the Agathorized U	f Cem	ut fo

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

Agency/User Telepho	one:	(518) 765-2	<b>U93</b>		
Quick Quote must be	returned by:	5	24/24		
Agency/User Commer	its: (Note: Pres	s Alt+Enter t	create a new li	ne)	
			As only		
					PERMIT
			NAME OF THE		
-14344706474					
S. Albertana					
					American (
		J. HARRY			
			Algeria (		
					Liberal (1
		Land			
			Hebriel		
	erotypia (1) Gilijoanas XII				

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

CONTRACTOR COMPLETES THIS SECTION FOR QUICK QUOTE

Projec	t Name:	County Ro	ute 410			Qui	ck Quote#	410
Contr	actor & P	<u>C#:</u>	414 T P C	P	270343 - Gогш	nan Bros., In	¢	
Plant l	Location:	6 Freemans	Bridge Rd, !	Scotia, NY	12302 🖟 🗒	d App. N. J.	Plant #:	L0104
Estima	ated Haul I	Distance:	20021 2001	Miles		Teleph	one: 518	-782-9988
Estima	ated Numb	er of Days	2	or Hours	150 3115 t	o Complete	the Project	
	Type of Re	ecycling:	2.015.2454	In Pla	ce	SE COL		
	Recycling	Price =	\$3.820	) per S	quare Yard			
	Total Squa	are Yards =	28,200.0	000 SqY				
А.	Recycling	Total Cost	= \$107,	724.000				
Emulsion PG Bin Aggreg Portlan	ons- 1.8 gal/S ider - 1.35 ga gate - 90lbs/S	project's SqY in SY for 4" recycle al/SY for 4" recycle SY for 4" recycle libs per SY for 4 Y	ing and 1.35 gal yeling; 1.00 gal/ ing and 68lbs/SY	/ SY for 3" recycl SY for 3" recycl	cling ing			
B.	Emuls	sion Price	.=	\$3,750	per Gallon			
	Material I	Price Adjustm	ent Calculat	ion for the A	Sonth of:		May /	2024
C.	Monthly N	Material Price	Adjustment	- ]	Emulsion	per Gallon	=\$0	.022
D.	Emuls	sion Price	with Price A	djustment (	(B+C) =	\$	3.728	per Gallor
Е.	Total Gall	ons ofI	Emulsion	= 3	7,000.000	Gallons		
F	Emuls	sion '	Total Cost (I	O x E) =	\$137,936.000	)		
G.	Liquid Bit	uminous Mat	erial (Fog Se	al) Price =	\$	3.300 j	er Gallon	
	<u>Material I</u>	Price Adjustm	ent Calculat	ion for the N	10nth of:		May /	2024
Н.	Monthly N	Material (Fog	Seal) Price A	djustment p	er Gallon =	-\$0.0	17.	
I.	Liquid Bit	um. Mat. (Fo	g Seal) Price	w/ Price Ad	ljustment (L+	M) = _	\$3.28	3/Ga
J.	Total Gall	ons of Fog Se	eal =	2,800.0	000 Gallon	s		
К.	Liquid Bi	tuminous Ma	aterial (Fog	Seal) Total	$Cost (I \times J) =$		\$9,19	2.400
L.	Heat/Haul	/Apply Price	=	\$0,080	per Gallon			
М.	Total Gall	ons of	Emulsion	=3	7,000.000	Gallons		
N.	Heat/Hau	ıl/Apply Tota	al Cost (L x l	M) =	\$2,960.000			
O.	Aggregate	Price =	\$0,00	0 per 1	Гоп			
Р.	Total Ton	s of Aggregat	ie =	0.00	0 Tons			
<u>Q.</u>	Aggregat	e Total Cost	(O X P) =	\$0.0	00			
R.	Portland C	7 D-i	7565					
1		Lement Price	= 16.75	\$0,000	per Ton			
S.	Total Ton	s of Cement =	100,000,000,000	\$0,000	*			

### LOT 3 - COLD RECYCLING (Version 04/01/2024)

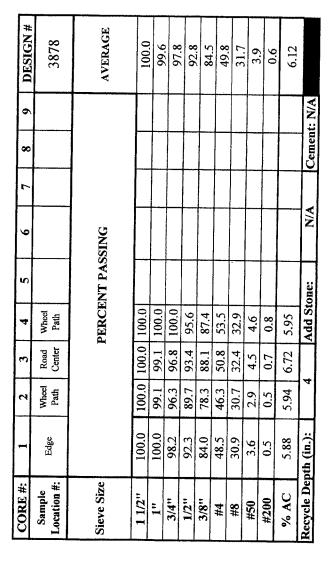
CONTRACTOR COMPLETES THIS SECTION FOR QUICK QUOTE

Proje	ect Name: County Route 410 Quick Quote # 410
	Work Zone Traffic Control Price = \$0.500 per SY
	Total Square Yards = 28,200.000 SqY
U.	Work Zone Traffic Control Total Cost = \$14,100.000
	Surcharge - Small/Recycled in Short Segments Projects = \$0.000 per SY
	Total Square Yards = SqY
<i>V</i> .	Surcharge - Small/Recycled in Short Segments Proj. Total Cost = \$0.000
	Price Additional Flagger(s) = \$1,350.000 per Day
	Number of Additional Flagger(s) = 1 Number of Days = 2
W.	Additional Flagger(s) Total Cost = \$2,700,000
	Price Additional for Rumble Strips = \$0,000 per Linear Foot
	Number of Linear Feet = LF
<i>X</i> .	Additional for Rumble Strips Total Cost = \$0,000
	Price Mobilization to Project Location = \$0,000 per Square Yard
	Total Square Yards = SqY
<i>Y</i> .	Mobilization to Project Location Total Cost = \$0.000
	Shoulder Milling (Contractor Disposal) = \$0.000 per SY
	Total Square Yards = SqY
Z.	Shoulder Milling (Contractor Disposal) Total Cost = \$0.000
	Shoulder Milling (State/User Disposal) = \$0.000 per SY
	Total Square Yards = SqY
41	Shoulder Milling (State Disposal) Total Cost = \$0.000
B1	OCP Insurance = \$0,000
Proj	iect's Total Cost including all the Price Adjustments for: May / 2024
	Project's Total Cost including Price Adjustustment (A+F+K+N+Q+T+U+V+W+X+Y+Z+A1+B1) = \$274,612.400
Can	Contractor Supply? Yes
Can	Contractor meet Schedule? Yes
Print	t Name Dane Mellon Date 5/23/24
Cont	tractor Signature Dane Mellon
	IE:  The user and the contractor understand that the Project's Total Cost shown above includes all the needed Price.

### Core Locations

Sample#:	Mile Point:	Pavement Depth:	Sample Location:
1	650' from CR 401	5.5"	Lane Center
2	2,500' from CR 401	5.5"	Edge
3	4,000 from CR 401	5"	Road Center
4	5,350' from CR	8.5"	Wheel Path
5	6,500' from CR 401	6"	Edge
6	7,700' from CR 401	5.5"	Road Center
7	9,250' from CR 401	6.5"	Lane Center
8	11,000' from CR 401	6"	Wheel Path
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			







Design Chart

Start:CR 401 End: CR 402 Length: 27,456 LF

**Customer: Albany County** Route: Route 4 County: Albany County

ADDSTONE 0 0 0 0 0 ADDSTONE TYPE Emulsion(Gal/Yd3) Added Stone(lb/yd Percent Added Percent original 100.0% %0.0 N/A CR 410 Minimum 3.0% 100 100 90 90 70 60 60 20 3 Emulsion %: Maximum Road: 100 100 100 90 80 65 50 8 Albany County Original 3878 100.0 9.66 8.76 84.5 92.8 49.8 31.7 3.9 0.6 SIEVE NUMBER Mix Design #: Location: 1 1/2" 1" 3/4" 1/2" 3/8" #200 #20 # # 8

——— Original			Combined Mix			/	/	<i> </i>		#200
					/	/	<b>d</b> /		+	#
				/	, the	/	/		+	#
		9		/	/	•				3/8"
		#	' /	/						12,
			/							3/4"
		/							†	<b>.</b>
120.0 }			+ 0.08	+ 0.09		40.0	300		0.0	1.172"
Γ	Combined Mix					84.5	<del></del>			

SIEVE SIZE

1" 3/4" 1/2" 3/8"

Emulsion % is a suggested starting point. May vary in the field.

#4 #8 #50 #200

Start: CR 401 End: CR 402 Length: 11,600'

Strength Type	Emulsion %	Stability	Flow	Sp. Gr.	Density
	2.0	3087.4	18.4		131.3
Wet	2.5	3166.5	19.5	2.084	130.0
	3.0	3305.5	18.1	2.084	130.0
	2.0	3370.0	18.7	2.069	129.1
ρα	2.5	3321.8	19.5	2.040	127.1
	3.0	3587.4	19.2	2.053	128.1

3878 2:7% 92:40%

Mix Design #: RAP Moisture %: TSR:

		Wet	2.5	3166.5	19.5	2.084	130.0
Calculated Air Voids %:	6.20%		3.0	3305.5	18.1	2 084	130 (
Emulsion Grade:	HFMS-2		2.0	3370.0	18.7	2.069	129.1
Emulsion Content %:	3.0%	Dry	2.5	3321.8	19.5	2.040	127
Added Water %:	5-1-3 <b>%</b> E		3.0	3587.4	19.2	2.053	128.1
		Stability & Danait	1				
3700.0		Stability & L	יבוואורא		,		
3600.0					[ 2.120		
3500,0		:		\	2.100		
3400.0					2 080		
3300.0			:		7,70	•	<u></u>
3200.0					2.060	Dry Stability	iity
3100.0				:	2 040	Wet Density	sity
3000.0					:	Dry Density	
2900.0					- 2.020		<del></del>
2800.0							
2.0		2.5		3.0	7.000		
							-

2.084 130.0 210.44

2.084 19.5

201.59

3305.5

3166.5

	Dry A	Dry Average	
Em. %	2	2.5	3
Stability	3370.0	3321.8	3587.4
Flow	18.7	19.5	19.2
Sp. Gr.	2.069	2.040	2.053
Density	129.1	127.1	128.1
Strength	214.55	211.48	228.39

Density

Sp. Gr.

Flow

Stability

Emulsion %

Strength Type

	<b>Tensile Strength Ratio</b>	ength Rati	0
Em. %	2	2.5	3
Wet	196.55	201.59	210.44
Dry	214.55	211.48	228.39
TSR	91.61	95.32	92.14

		The second secon			
		3117.2	21.2	2.081	129.9
Wet		3202.6	19.8	2.088	130.3
	400	3179.6	17.6	2.082	129.9
	<b>6.</b>	3481.4	19.5	2.044	127.6
Dry		3258.2	21.2	2.031	126.8
		3225.8	17.8	2.046	127.0
Strength Type	Emulsion %	Stability	Flow	Sp. Gr.	Density
		3298.7	17.4	2.079	129.7
Wet		3321.5	19.1	2.085	130.1
	Ç	3296.3	17.8	2.087	130.2
	2	3581.1	20:1	2.055	128.2
Dry		3514.6	19.1	2:052	128.0
		3666.5	18.3	2.051	128.0

Prepared By: The Gorman Group Port of Albany, Albany, NY

Route: CR 410 County: Albany County Customer: Albany County

Start: CR 401 End: CR 402 Length: 11,600'

Recommendation

Based on testing results, 3% HFMS-2 Emulsion had the best combination of strength and TSR.

We recommend a starting point of 3%.