

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION
600 EAST BOULEVARD AVE, DEPT 408
BISMARCK ND 58505-0480

SOLICITATION AMENDMENT 1

March 9, 2022

Solicitation Number: 408.22.02.003
Title: 2022 Garrison Phase 5 AML Project
Deadline for Receipt of Bids: March 24, 2022, 11:00 A.M., CT
Solicitation Issued: February 28, 2022

The solicitation established a deadline for receipt of written questions. The written questions received by the deadline and their answers are provided below. They do not change the solicitation except where noted.

1. QUESTION: "What are the approximate grout hole locations?"

ANSWER: See Attachment 1 for the locations of the void holes from the 2021 Exploratory Drilling AML project. These will be pumped during the 2022 Garrison Phase 5 AML Project.

2. QUESTION: "How many holes you anticipate drilling?"

ANSWER: There will be approximately 5,000 feet drilled. The average total drilling depth is around 50 feet.

3. QUESTION: "How close the contractor needs to get to homes/backyards?"

ANSWER: The contractor will be expected to get as close to homes as safely possible. See Photos 1 and 2 of the Pre-Bid, Virtual Tour for pictures of holes drilled in 2021 for a reference.

4. QUESTION: "Can you provide borelogs drilled in this area or in the proximity along with a map locating them?"

ANSWER: Yes, a drilling summary of the 2021 drillholes is included as Attachment 2.

5. QUESTION: "Are boulders anticipated to be found during drilling?"

ANSWER: No.

6. QUESTION: "Description on drill logs. How detailed of a description is required? Is a detailed lithology description required? Or should the description only include voids, previously pumped grout, rubbles zones, water-bearing formations, coal seams, contacts between these zones, and overburden lithology?"

ANSWER: The level of detail required is indicated in Section 6, B. Drilling, 2. Construction Requirements, b. Drill Hole Records of the IFB.

7. QUESTION: “What is the typical depth of the void inside the mine?”

ANSWER: The average void thickness was 4.5 feet for all holes that contained voids. That range varied from 1 foot to 9 feet thick. The average rubble thickness was 7 feet for all holes that contained rubble. The average depth to the top of the void is 40 feet.

8. QUESTION: “Will the state manage permits to go into private lots/backyards?”

ANSWER: Yes.

9. QUESTION: “When will the coring be performed?”

ANSWER: Coring will be conducted at least 14 days after all grout has been pumped.

10. QUESTION: “Will coring be performed after completion of all grouting?”

ANSWER: Yes.

11. QUESTION: “Based on your method of payment for coring, the contractor will be paid based on the coring’s recovery. Is that correct?”

ANSWER: Yes, the method of measurement for payment for coring is indicated in Section 6, B. Drilling, 3. Method of Measurement, c. Coring of the IFB.

12. QUESTION: “Specifications section 200.B.3.c on payment for coring mentions, “CONTRACTOR shall recover a minimum continuous core of 90% of the core length to receive full pay on this item.” However, if a rubblelized/void condition exist, it means that there is a percentage of voids in that zone. Therefore, the core barrel will inevitably recover void too. Please explain why is the contractor penalized for finding voids in the subsurface. That is an in-situ condition out of the contractor’s control.”

ANSWER: No penalties will be assessed if CONTRACTOR hits rubble or void while coring. The penalty is for failure to collect continuous cores grout, rubble, clay, etc.

13. QUESTION: “What is the maximum pressure to be achieved at the gauge during injection of grout?”

ANSWER: There is no specified maximum pressure to be achieved. Typically, we stop pumping when resting pressure exceeds 50 PSI.

14. QUESTION: “Can you provide project bid tabs, specs and actual quantities for the last 3 jobs in Garrison?”

ANSWER: Bid tabs for our projects going back to 2011 can be found at <https://www.psc.nd.gov/jurisdiction/aml/bidtabulation.php>. The specifications have changed very minimally in the last 20 years.

The table below summarizes the major drilling and grouting work at the Garrison AML site:

Project Type	Year	Feet Drilled	Feet Cased	Total Grout Pumped	Total cost
Exploratory Drilling	1997	11,371	493	--	\$24,426.80
Drilling and Grouting	2002	22,062	1,597	1,055	\$120,939.76
Exploratory Drilling	2003	20,100	4,460	--	\$55,000.00
Drilling and Grouting	2004	14,585	2,870	1,720	\$217,069.70
Drilling and Grouting	2005	17,985	534	2,024	\$304,223.50
Exploratory Drilling	2021	7,239	1,783	--	\$130,938.00
Total		93,342	11,737	4,799	\$900,279.39

15. QUESTION: “Can you provide a map of the area with an underlain map of the mine?”

ANSWER: No map of the area exists.

Questions regarding this amendment must be submitted in writing by March 17th, 2022, to the Procurement Officer. Ross Edison Procurement Officer E-mail: redison@nd.gov Telephone: 701-328-4101 TTY Users call: 7-1-1

2021 Exploratory Drillholes

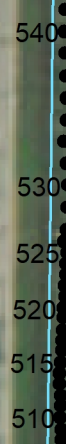
- Coal
- Grout from Previous Project
- Void



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Attachment 1

T148N R84W Sec 17 and 18
Garrison, ND
McLean County
ND PSC AML Division
March 8th, 2022



Attachment 2

Hole	Status	Coal		Void		Rubble		Total	Total
		Top	Bottom	Top	Bottom	Top	Bottom	Drilled	Cased
401	Void	29	31	31	35	35	38	40	25
402	Void			25	34	34	38	40	20
403	Void	36	37	46	47	37	46	55	31
404	Void	34	37	37	38	38	46	55	32
405	Void	35	36	45	46	46	50	55	32
406	Coal	45	54					60	
407	Coal	45	52					55	
408	Coal	45	52					55	
409	Coal	45	52					55	
410	Void	45	47	47	52	51	53	55	42
411	Void	53	55	46	52	52	53	55	40
412	Coal	45	52					55	
413	Coal	44	52					55	
414	Abandoned							15	
415	Void	35	38	45	50	50	53	55	40
416	Coal	46	54					55	
417	Void	35	38	47	52	52	54	55	42
418	Void	46	48	48	53			55	43
419	Coal	46	54					55	
420	Coal	46	54					55	
421	Coal	47	54					55	
422	Coal	48	56					60	
423	Void	45	50	50	55			60	45
424	Void	49	50	50	54			60	45
425	Coal	49	55					60	
426	Coal	49	55					60	
427	Coal	49	55					60	
428	Coal	49	55					58	
429	Void			50	55			56	45
430	Coal	48	55					56	
431	Coal	48	55					56	
432	Coal	49	55					56	
433	Void	48	50	50	54			55	45
434	Void	48	49	49	54			56	44
435	Coal	47	54					55	
436	Coal	47	54					55	
437	Coal	46	54					55	
438	Coal	46	53					55	
439	Void	46	48	48	53			54	40
440	Void	42	43	47	50	50	53	54	42
441	Void	35	36			36	53	54	31
442	Void	35	37	37	43	43	53	54	32

Hole	Status	Coal		Void		Rubble		Total	Total
		Top	Bottom	Top	Bottom	Top	Bottom	Drilled	Cased
443	Void	35	36	36	45	45	53	54	31
444	Void	35	36	36	43	43	53	54	31
445	Void	43	45	45	47	47	50	51	40
446	Void	43	45	45	48	48	50	51	40
447	Void	43	44	44	48	48	51	54	40
448	Void	43	44	44	49	49	51	51	39
449	Void	42	43	43	49			50	38
450	Coal	42	49					50	
451	Coal	42	49					50	
452	Void	32	34	42	44	44	49	50	30
453	Void	20	22	33	35	35	48	49	28
454	Void	42	43	43	45	45	49	50	38
455	Coal	41	48					49	
456	Coal	40	47					48	
457	Coal	40	47					48	
458	Void	36	37	42	48			49	37
459	Coal	36	43					44	
460	Void	36	37	37	46			47	32
461	Void	36	38	38	44			45	33
462	Coal	36	44					45	
463	Coal	36	44					45	
464	Void	35	37	37	43			44	32
465	Void	35	37	37	44			45	32
466	Coal	35	43					44	
467	Void	32	33	37	43			44	32
468	Coal	35	43					44	
469	Void	26	29			32	44	45	27
470	Void	18	20	30	31	31	40	45	25
471	Void	19	21	26	27	27	40	45	21
472	Void	27	28			30	44	45	25
473	Void	35	37			37	44	45	32
474	Coal	37	44					45	
475	Coal	36	44					45	
476	Coal	36	44					45	
477	Coal	35	43					44	
478	Void	40	42	42	47			48	37
479	Void	40	42	42	48			49	37
480	Coal	39	44					45	
481	Void	30	33	35	44			45	30
482	Void	39	40	40	44			45	35
483	Coal	39	45					46	
484	Coal	39	45					46	
485	Void	16	18	28	33			40	23
486	Void	15	17	28	33	33	44	45	23

Hole	Status	Coal		Void		Rubble		Total	Total
		Top	Bottom	Top	Bottom	Top	Bottom	Drilled	Cased
487	Coal	37	45					46	
488	Coal	38	44					45	
489	Coal	36	43					44	
490	Coal	35	43					44	
491	Coal	34	41					42	
492	Coal	33	40					40	
493	Filled Adjacent	33	35					40	
494	Void	32	34	34	39	39	40	40	29
495	Coal	33	39					40	
496	Void	33	34	34	39			40	21
497	Void	24	25	25	30	30	40	40	20
498	Void	24	25	25	27	27	39	40	20
499	Void	23	24	24	28	28	40	40	19
500	Coal	32	39					40	
501	Filled Adjacent	30	32					38	
502	Filled Adjacent	31	32					39	
503	Coal	31	38					39	
504	Void	44	45	45	46	46	52	53	40
505	Coal	52	59					60	
506	Void	51	52			56	64	65	50
507	Coal	51	58					59	
508	Coal	51	58					59	
509	Coal	51	58					59	
510	Coal	51	58					59	
511	Coal	51	58					59	
512	Coal	51	58					59	
513	Coal	51	58					59	
514	Coal	50	57					58	
515	Coal	50	57					58	
516	Coal	50	57					58	
517	Coal	50	57					58	
518	Coal	50	57					58	
519	Coal	49	56					57	
520	Coal	49	56					57	
521	Coal	49	56					57	
522	Coal	49	56					57	
523	Coal	49	55					56	
524	Coal	49	55					56	
525	Coal	48	55					56	
526	Coal	48	55					56	
527	Coal	47	55					56	
528	Coal	49	55					56	
529	Coal	48	55					56	
530	Coal	48	55					56	

Hole	Status	Coal		Void		Rubble		Total	Total
		Top	Bottom	Top	Bottom	Top	Bottom	Drilled	Cased
531	Coal	48	54					55	
532	Coal	47	53					54	
533	Coal	17	18					60	
534	Coal	18	19					50	
535	Coal	18	19					50	
536	Coal	47	53					54	
537	Coal	46	52					53	
538	Coal	46	52					53	
539	Coal	45	52					53	
540	Coal	46	52					53	
541	Coal	45	51					52	
542	Coal	44	50					51	