

Purchasing Division Finance Department

Room 120 411 West First Street Duluth, Minnesota 55802



Addendum 2 Solicitation 23-4405 DIA Taxiway C – North Rehabilitation

This addendum serves to notify all bidders of the following changes to the solicitation documents:

DOCUMENT HOLDERS on the above-named project are hereby notified that this document shall be appended to, take precedence over and become part of the original bidding documents dated April 17, 2023 for this work. Bids submitted for the construction of this work shall conform to this document.

This addendum consists of 4 pages including revisions to the technical specifications and clarifications to questions received by bidders.

Changes to Specifications:

- 1. Replace P-401 page 3 and page 5 Asphalt Mix Pavement
 - a. Binder has been changed to PG 58H-34.
 - b. APA and Hamburg wheel tests are waived.

Clarifications:

- 2. Question Are the millings stockpile areas accessible by truck currently? If so, where would the access road be located and would that access road need to be removed upon completion of the work?
 - a. There appears to be an access road through the area right now. Weather dependent it may need some of the millings so it doesn't get too sloppy and to create a turn-around area for the trucks.
 - b. The only area that may need to be removed is the area where the access road connects to Twy C (if millings are placed there).
- 3. Question Are the millings being stockpiled directly on the grass surface?
 - a. Yes

- 4. Two stockpile locations are given. Is there a required quantity to be placed per location?
 - a. No, however there is a maximum height of 20' for the millings.
- 5. How would any topsoil, seed, fertilizer, mulch (as shown in G4.00) be paid for?
 - a. Since this is a mill/fill, we anticipate these items to be minimal or nonexistent.

Therefore, these items are incidental to the rehabilitation of Taxiway C.

- 6. Is the project duration 14 calendar days, or is that just the duration for phase 1C?
 - a. There are 14 calendar days to complete all the work up to temporary pavement markings.
- 7. Does the temporary striping need to be placed in Phase 1A and 1B during one of the two closures at each location? Or can that be done at the same time as the temp striping for Phase 1C?
 - a. Place all temporary markings during the Phase 1C closure.

Note: Receipt of this Addendum No. 2, dated May 9, 2023 shall be acknowledged Bid Express. Failure to do so will not allow Bidder to submit Bid.

END OF ADDENDUM

Please acknowledge receipt of this Addendum by checking the acknowledgment box within the www.bidexpress.com solicitation.

Posted: **May 9, 2023**

12/21/2018 AC 150/5370-10H

Material Test	Requirement	Standard
Liquid limit	25 maximum	ASTM D4318
Plasticity Index	4 maximum	ASTM D4318
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	Loss after 5 cycles: 10% maximum using Sodium sulfate - or - 15% maximum using magnesium sulfate	ASTM C88
Clay lumps and friable particles	0.3% maximum	ASTM C142
Sand equivalent	45 minimum	ASTM D2419
Natural Sand	0% to 15% maximum by weight of total aggregate	ASTM D1073

- c. Sampling. ASTM D75 shall be used in sampling coarse and fine aggregate.
- **401-2.2 Mineral filler.** Mineral filler (baghouse fines) may be added in addition to material naturally present in the aggregate. Mineral filler shall meet the requirements of ASTM D242.

Mineral Filler Requirements

Material Test	Requirement	Standard
Plasticity Index	4 maximum	ASTM D4318

401-2.3 Asphalt binder. Asphalt binder shall conform to ASTM D6373 Performance Grade (PG) **58H-34.**

Asphalt Binder PG Plus Test Requirements

Material Test	Requirement	Standard
Elastic Recovery	75% minimum	ASTM D6084

401-2.4 Anti-stripping agent. Any anti-stripping agent or additive (anti-strip) shall be heat stable and shall not change the asphalt binder grade beyond specifications. Anti-strip shall be an approved material of the Department of Transportation of the State in which the project is located.

COMPOSITION

- **401-3.1 Composition of mixture(s).** The asphalt mix shall be composed of a mixture of aggregates, filler and anti-strip agent if required, and asphalt binder. The aggregate fractions shall be sized, handled in separate size groups, and combined in such proportions that the resulting mixture meets the grading requirements of the job mix formula (JMF).
- **401-3.2 Job mix formula (JMF) laboratory.** The laboratory used to develop the JMF shall possess a current certificate of accreditation, listing D3666 from a national accrediting authority and all test methods required for developing the JMF; and be listed on the accrediting authority's website. A copy of

12/21/2018 AC 150/5370-10H

- Supplier-recommended field mixing and compaction temperatures.
- Plot of the combined gradation on a 0.45 power gradation curve.
- Graphical plots of air voids, voids in the mineral aggregate (VMA), and unit weight versus asphalt content. To achieve minimum VMA during production, the mix design needs to account for material breakdown during production.
- Tensile Strength Ratio (TSR).
- Type and amount of Anti-strip agent when used.
- Asphalt Pavement Analyzer (APA) results.
- Date the JMF was developed. Mix designs that are not dated or which are from a prior construction season shall not be accepted.

Test Property	Value	Test Method
Number of blows or gyrations	75	
Air voids (%)	3.5	ASTM D3203
Percent voids in mineral aggregate (VMA), minimum	See Table 2	ASTM D6995
Tensile Strength Ratio (TSR) ¹	not less than 80 at a saturation of 70-80%	ASTM D4867
Asphalt Pavement Analyzer (APA) ²	Less than 10 mm @ 4000 passes	AASHTO T340 at 250 psi hose pressure at 64°C test temperature

Table 1. Asphalt Design Criteria

The mineral aggregate shall be of such size that the percentage composition by weight, as determined by laboratory sieves, will conform to the gradation or gradations specified in Table 2 when tested in accordance with ASTM C136 and ASTM C117.

The gradations in Table 2 represent the limits that shall determine the suitability of aggregate for use from the sources of supply; be well graded from coarse to fine and shall not vary from the low limit on one sieve to the high limit on the adjacent sieve, or vice versa.

Test specimens for TSR shall be compacted at 7 ± 1.0 % air voids. In areas subject to freeze-thaw, use freeze-thaw conditioning in lieu of moisture conditioning per ASTM D4867

AASHTO T340 at 100 psi hose pressure at 64°C test temperature may be used in the interim. If this method is used the required Value shall be less than 5 mm @ 8000 passes