Date:	December 4, 2018
То:	All Proposers
Subject:	Addendum No. 7
	Consisting of ten (10) Pages
RFP No.:	18-10-1940LE
Project Name:	N12(19-4)1,2&4
Owner:	Navajo Division of Transportation

Proposer shall make note of and/or incorporate all changes listed below into the requested Request for Proposal (RFP):

- 1. On Pages 13-15 of the RFP, Attachments, 1) Bid Schedule; the Bid Schedule has been revised and is attached to Addendum 7. The equivalent updated excel file is attached as a separate file (not included in the page count for Addendum No. 7).
- 2. The BIA (Engineer of Record) has reviewed and revised several plan sheets based on the questions submitted. Please replace the N12(19-4)1,2&4 plan set with the one dated/approved 12-04-18 on the cover sheet.



- 3. On Exhibit F, Supplemental Specifications of the Contract Book, remove and replace **Section 408 COLD RECYCLED ASPHALT BASE COURSE** with the attached.
- 4. The Navajo Division of Transportation has received the following questions regarding this RFP and thereby issues the following responses.

Questions Submitted	Responses Provided
 There appears to be large quantity errors for 2 items. We feel that these differences are quite large and a material change to the contract and request to be reviewed and changed by addendum. The items are 30103-2000 and 40802- 0700 as follows: 30103-2000 Untreated Aggregate Base: Unpaved Shoulder SB – 17,200 m x 1.456 m(Includes taper) x .128 m = 3205 m3 Unpaved Shoulder NB – 17,200 m x 1.456 m(Includes taper) x .128 m = 3205 m3 Turnouts – 1980 m3 CRABC w/ 50% AB – 17,200 m x 14 m(includes tapers) x .203 = 48,882 m3 /2 = 24,441 m3 Add for Snow Chain Areas – 600 m3 TOTAL = 33,431 M3 x 2164 kg/m3 = 72,344,684 kg = 72,344 tn vs 6332 tn 40802-0700 Cold Recycled Asphalt Base Course: Mainline – 17,200 m x 13.114 m = 225,560 m2 Snow Chain Areas – 7710 m2 TOTAL = 233,270 m2 vs 116,300 tn 	The BIA has reviewed the two quantities of concern. The quantity for 30103-2000 Untreated Aggregate Base was reviewed and will be revised to 17,872 metric tons . The contractor's assumption that the entire project will be using a 50/50 ABC/CRABC mixture was incorrect. The intent for a 50/50 ratio was for any remaining volume required after the bulk of the CRABC material is utilized on the project. The Sequence of Pavement Reconstruction notes on sheet 2 of the plans has been revised to reflect this. The quantity for 40802-0700 Cold Recycled Asphalt Base Course was reviewed and will be revised to 232,138 square meters . The 408 Supplemental Specification section has been modified as well. The Bid Schedule has been updated to reflect the revised/new quantities.
2. 20101-000 Roadway Excavation: We have found an error in the Estimated Earthwork Chart. On line 8 labeled "Sub- TOTAL", it shows 36,215 m3 of BORROW. Line #9 labelled "Waste From The Mainline" shows 21,502 m2 of WASTE. Line 10 labelled "Sub-TOTAL" shows 21,502 m3 of WASTE and 14,713 m3 of BORROW. It appears to subtract 21,502 m3 of Waste from 36,215 m3 of Borrow to	The BIA reviewed and confirmed the error in the ESTIMATED EARTHWORK VOLUME table on sheet 6 of the plans. The table has been revised and updated. A 20403-0000 Unclassified Borrow bid item for 13,057 cubic meters has been created. The Bid Schedule has been updated to reflect the revised/new quantities.

get the final quantity of 14,713 m3 of	
Borrow. Line #11 labelled "TOTAL" shows	
a WASTE of 6,789 m3 which is calculated	
by subtracting 14,713 m3 from 21,502	
m3. We find error in this last step. The math	
as shown in the chart is as follows: 36,215 –	
21,502 = 14,713 – 21,502 = 6789 m3 of	
WASTE. The 21,502 m3 was subtracted	
TWICE, the 2nd time unnecessarily and	
showed an incorrect result of the project	
having WASTE instead of BORROW. It is	
apparent that the project will require the use	
of Borrow. Due to the large amount of	
dollars involved, we feel an addendum is	
necessary to add a Borrow item. We have	
the following questions for this item:	
A. Will a Borrow item be added to the	
Contract?	
B. If a Borrow item is not added and it	
becomes apparent during the	
construction of the project that	
Borrow is needed, will a change order	
be issued to cover the cost of the	
borrow or does the Contractor need to	
account for that cost and include it in the Deadway Eye item per Section	
the Koadway Excitem per Section $204.16 (a) (1) (f)?$	
204.10(a)(1)(1)	

END OF ADDENDUM NO. 7

Thank you for your interest!

W Ardaniel Begay, Principal Contract Analyst Project Contact Person

Navajo Division of Transportation



BID SCHEDULE NAVAJO NATION DIVISION OF TRANSPORTATION

PROJECT: N12(19-4)1,2&4

Date: December 04, 2018

LENGTH: 17.20 km

ITEM	DESCRIPTION		Units	Unit Bid Price	Total Price
10901-0000	Extra & Miscellaneous Work - Authorized under Suppl. Spec. 109.02(s) of Exhibit F		Lump Sum	\$200,000.00	\$200,000.00
15101-0000	Mobilization	All Required	Lump Sum	\$	\$
15201-0000	Construction Survey & Staking	All Required	Lump Sum	\$	\$
15301-0020	Contractor Quality Control	13,750.00	Man Hr	\$	\$
15701-0000	Temporary Erosion Control	All Required	Lump Sum	\$	\$
15708-1000	Temporary Straw Mulching	20.61	ha	\$	\$
20102-0000	Clearing and Grubbing	All Required	Lump Sum	\$	\$
20304-1000	Removal of Structures and Obstructions	All Required	Lump Sum	\$	\$
20401-0000	Roadway Excavation	126,350.0	m ³	\$	\$
20403-0000	Unclassified Borrow	13,057.0	m ³	\$	\$
20801-0000	Structure Excavation	1,383.0	m ³	\$	\$
20803-0000	Structure Backfill	603.0	m ³	\$	\$
20443-1000	Earthen Dike/Berm, Type "A"	171.0	m	\$	\$
20601-0000	Development of Water Supply	25.0	M-liter	\$	\$
21301-4000	Subgrade Stabilization with Road Bond EN-1, 305 mm	31,545.6	m²	\$	\$
25101-2000	Placed Riprap , Class-2	323.4	m ³	\$	\$
25110-2000	Grouted Riprap Class-2	195.8	m ³	\$	\$
25112-2000	Wire Enclosed Riprap, Class 2	1,694.5	m ³	\$	\$
30103-2000	Untreated Aggregate Base, Grading Special	17,872.0	t	\$	\$
40201-0500	Hot Asphaltic Concrete Pavement, Class B, Grade B, Type III Smoothness	53,924.0	t	\$	\$
40502-0800	Asphalt Cement, Grade PG-58-28	3,235.0	t	\$	\$
40802-0700	Cold Recycled Asphalt Base Course, 279 Depth	232,138.0	m²	\$	\$
41101-5000	Prime Coat - Penetrating Emulsified Prime, Grade PEP	231.0	t	\$	\$
41201-1000	Asphalt Emulsion Tack Coat, Grade SS-1	38.0	t	\$	\$
55201-0200	Structural Concrete Class A(AE)	332.0	m ³	\$	\$
55401-1000	Reinforcing Steel , Grade 420, Epoxy Coated	22,886.7	kg	\$	\$
55101-2200	660 mm diameter Steel Pipe Pile filled with concrete, in place (Bridge N504)	355.0	m	\$	\$
55115-1000	Preboring of Piles	251.0	m	\$	\$
60101-1000	Minor Concrete, Class A(AE)	80.0	m³	\$	\$
60201-0810	610 mm Corrugated Steel Pipe	1,132.6	m	\$	\$
60201-0910	762 mm Corrugated Steel Pipe	393.9	m	\$	\$
60201-1010	914 mm Corrugated Steel Pipe	82.9	m	\$	\$
60201-1110	1067 mm Corrugated Steel Pipe	52.4	m	\$	\$
60201-1210	1219 mm Corrugated Steel Pipe	200.0	m	\$	\$
60201-1410	1524 mm Corrugated Steel Pipe	109.7	m	\$	\$



BID SCHEDULE NAVAJO NATION DIVISION OF TRANSPORTATION

Date: December 04, 2018

LENGTH: 17.20 km

ITEM	DESCRIPTION	Quantity	Units	Unit Bid Price	Total Price
60201-1810	2134 mm Corrugated Steel Pipe	42.0	m	\$	\$
60202-0610	889 mm Span x 610 mm Rise Corrugated Steel Pipe-Arch	96.3	m	\$	\$
60202-0710	1067 mm Span x 737 mm Rise Corrugated Steel Pipe-Arch	354.2	m	\$	\$
60202-0810	1245 mm Span x 838 mm Rise Corrugated Steel Pipe-Arch	331.0	m	\$	\$
60202-0910	1448 mm Span x 965 mm Rise Corrugated Steel Pipe-Arch	107.3	m	\$	\$
60202-1110	1803 mm Span x 1194 mm Rise Corrugated Steel Pipe-Arch	418.5	m	\$	\$
60210-0810	End Section 610 mm CSPC	101	Each	\$	\$
60210-0910	End Section 762 mm CSPC	14	Each	\$	\$
60210-1010	End Section 914 mm CSPC	6	Each	\$	\$
60210-1110	End Section 1067 mm CSPC	2	Each	\$	\$
60210-1210	End Section 1219 mm CSPC	6	Each	\$	\$
60211-1010	End Section 889 mm Span x 610 mm Rise CSPA	4	Each	\$	\$
60211-1110	End Section 1067 mm Span x 737 mm Rise CSPA	15	Each	\$	\$
60211-1210	End Section 1245 mm Span x 838 mm Rise CSPA	7	Each	\$	\$
60211-1310	End Section 1448 mm Span x 965 mm Rise CSPA	4	Each	\$	\$
60211-1510	End Section 1803 mm Span x 1194 mm Rise CSPA	6	Each	\$	\$
60301-0710	2448 mm Structural Plate Pipe Culvert, SPPC	87.8	m	\$	\$
60302-0910	2616 mm Span x 1803 mm Rise Structural Plate Pipe-Arch, SPPA	189.0	m	\$	\$
60304-0100	17.374 m Span x 3.249 m Rise Pre-Cast Arch Culvert Units with Precast Wingwalls - (Bridge N504)	23	Each	\$	\$
60304-0200	17.374 m Span x 3.249 m Rise Pre-Cast Arch Culvert with Precast Wingwalls - (Bridge N505)	21	Each	\$	\$
60701-1000	Remove, Clean and Stockpiling Pipe	1,369.5	m	\$	\$
61701-5000	Guardrail System, SGR04b, Type PDE02 with End Treatment SKT-350 & Thrie Beam, Type "A" Installation	944.9	m	\$	\$
61801-0000	Concrete Jersey Barrier, with transition barrier, Bridge N505	36.6	m	\$	\$
61901-3500	Wildlife Crossing Fence	35,104.0	m	\$	\$
61902-2310	Type 2 Gate only for 4.5 m wide Turnout	4	Each	\$	\$
61903-0310	Cattleguard (2-Unit) 4900 mm Width with Type 2 Gate	38	Each	\$	\$
61903-0710	Cattleguard (3-Unit) 7190 mm Width with Type 2 Gate	14	Each	\$	\$
61903-1010	Cattleguard (4-Unit) 9480 mm Width with Type 2 Gate	9	Each	\$	\$
61903-1110	Cattleguard (5-Unit) 11900 mm Width with Type 2 Gate	2	Each	\$	\$
61920-3000	Remove And Reset Cattleguard (At N12 & N64 Intersection)	1	Each	\$	\$
62101-0000	Right-Of-Way Monument	Of-Way Monument 80 Each \$		\$	
62102-0000	Reference Marker	80	Each	\$	\$
62510-1000	Seeding, Dry Method	20.61	ha	\$	\$



BID SCHEDULE NAVAJO NATION DIVISION OF TRANSPORTATION

Date: December 04, 2018

LENGTH: 17.20 km

ITEM	DESCRIPTION		Units	Unit Bid Price	Total Price
62901-1100	Erosion Control Matting, Type IV		m²	\$	\$
63302-2001	Sign Installation, 1-Post - 38 mm x 38 mm, Square Steel Post	39.8	m²	\$	\$
63302-2002	Sign Installation, 1-Post - 44 mm x 44 mm, Square Steel Post	72.3	m²	\$	\$
63302-2006	Sign Installation, 2-Post - 50 mm x 50 mm, Square Steel Post	22.7	m²	\$	\$
63302-2007	Sign Installation, 2-Post - 57 mm x 57 mm, Square Steel Post	19.6	m²	\$	\$
63302-2012	Sign Installation, 4-Post - 57 mm x 57 mm, Square Steel Post	1.9	m²	\$	\$
63308-2000	Object Marker, Type 2, Square Steel Tube, 1- 38 mm x 38 mm	110	Each	\$	\$
63308-3010	Object Marker, Type 3, Square Steel Tube, 1- 38 mm x 38 mm	10	Each	\$	\$
63309-0040	Delineator, 1-38 mm x 38 mm Square Steel Tube, Type "1b"	115	Each	\$	\$
63318-1020	Milepost, 1- 38 mm x 38 mm square steel tube	26	Each	\$	\$
63401-1510	Pavement Markings, Type "H" Solid Yellow	11,620.5	m	\$	\$
63401-1520	Pavement Markings, Type "H" Solid White	34,313.9	m	\$	\$
63401-1610	Pavement Markings, Type "H" Broken Yellow	12,305.8	m	\$	\$
63401-1620	Pavement Markings, Type "H" Broken White	240.0	m	\$	\$
63405-2900	Pavement Marking, , Type "H", Turn Arrow	21	Each	\$	\$
63405-2950	Pavement Marking, Type "H", Straight Arrow	19	Each	\$	\$
63405-3000	Pavement Marking, Type "H", Straight/ Turn Arrow Combination	11	Each	\$	\$
63405-3050	Pavement Marking, Type "H", word " ONLY "	12	Each	\$	\$
63405-3260	Pavement Markings, Type "H" STOP bar	24	Each	\$	\$
63405-3290	Pavement Markings, Type "H", diagonal striping, solid yellow	9	Each	\$	\$
63501-0000	Temporary Traffic Control Main Road Only	All Req'd	Lump Sum	\$	\$
63502-3000	Temporary Traffic Control, Raised Pavement Marker	7,644	Each	\$	\$
63509-1000	Flagger	12,655	Man Hrs.	\$	\$
63510-1000	Construction of Temporary Detour Roads for bridges including all Traffic Control Devices	All Req'd	Lump Sum	\$	\$
	Subtotal:			\$	
			ion Tax (6%):	\$	
	Contractor Name Total Bid Price		Bid Price:	\$	

SCOPE-OF-WORK

The proposed work consists of furnishing all labor, material, equipment and incidentals necessary for construction of 17.20 km of grade and drainage, placement of aggregate base, hot asphaltic concrete pavement, bridge work, precast arch structures, and other miscellaneous construction in accordance with the specification and design drawings for this Project. The quantities listed for each item is estimated and the Unit Price is applicable to each as given in the Bid Schedule above. The final pay quantity measurements shall be rounded to the significant figures given in this bid schedule for the final pay estimate. Payment for work performed on Items furnished will be made in accordance with Sub-Section 109.05, Scope of Payment of FP-14. The Unit Bid Price must include all overhead, profit, and bonding.

408.01 Description.

This work consists of providing all labor, equipment, materials, and incidentals for constructing one or more courses of cold recycled asphalt base course (CRABC) using reclaimed asphalt pavement material and/or reclaimed aggregate base material and/or reclaimed emulsified asphalt base material with water. Any other additives are not required. The reclaimed asphalt pavement material shall be pulverized/milled in accordance with Subsection 413.03 Milling using a milling machine that meets Subsection 413.02.

408.02 Material.

Conform to the following Subsections:	
Aggregate (new)	703.06
Emulsified asphalt	702.02
Lime	702.05(c)
Water	725.01(c)

Recycling agent - Conform to AASHTO R 14 or use an approved petroleum product additive that restores aged asphalt to the required specifications.

Cold recycled asphalt base course aggregate gradation shall meet the following:

Sieve Designation	Percent Passing by Weight
37.5-mm (1 1/2-inch)	100

Construction Requirements

408.03 Submittals.

Furnish a mixture of reclaimed asphalt pavement material and/or reclaimed aggregate base material and/or reclaimed emulsified asphalt base material and water that meets the aggregate gradation above.

408.04 Surface Preparation.

For in-place mixing, clear, grub, and dispose of all vegetation and debris within 300 millimeters of the pavement to be recycled. Perform the work according to Section 201. Prepare the surface according to Subsection 303.06.

Before any work is performed on the existing roadbed, the Contractor shall remove and reinstall all existing signs, delineators, or guardrail along the shoulder of the existing roadway if such signs, delineators, or guardrail will interfere with the Contractor's operations. This work shall be considered a subsidiary obligation of the Contractor and no direct payment shall be made.

408.05 Weather Limitations.

Place the cold recycled asphalt base course (CRABC) material on a dry, unfrozen surface only when the air temperature in the shade is above $2^{\circ}C(35^{\circ}F)$. Do not place cold recycled asphalt base course when fog, showers, rain, frost, or temperatures below $2^{\circ}C(35^{\circ}F)$ are anticipated within 24 hours following the placement of the mix.

408.06 Mixing.

Use rotary mixers, cold-milling machines, travel plants, stationary mixing plants, or other approved equipment for producing the completed base course mixture. If emulsified asphalt is used, mix as follows:

(a) Maintain the aggregate temperature between 16 and 80 °C.

(b) Maintain emulsified asphalt temperature within the approved range.

(c) Combine and dry mix the aggregate for a period sufficient to provide a uniform gradation. Add additives and water first. Add the emulsified asphalt last. Mix the material until particles are uniformly coated, the mixture has a uniform color, and particles are evenly distributed coarse to fine.

For in-place mixing, use self-propelled equipment capable of scarifying, crushing, mixing, weighing, and placing the mixture. Use equipment with meters capable of registering the rate of addition of the emulsified asphalt, recycling agent, or water. Adjust the travel speed and number of passes to obtain a thorough and uniform mixture.

For central plant mixing, use suitable equipment for scarifying and crushing the existing pavement. Use acceptable continuous flow or batch-type mixer equipped with batching or metering devices designed to measure the specified quantities of the respective material.

The final emulsified asphalt, recycling agent, and lime content will be established by the CM after evaluation of field results.

408.07 Spreading, Finishing, and Compacting.

The Contractor shall confine his operations to a minimum practical area of roadway at all times. In no case shall any portion of the work be uncompleted through the compaction stage by the end of the work day. The roadway shall be available for two-way, two-lane public traffic at the end of each work day. The existing pavement and base shall be scarified, pulverized and processed into windrows such that the mixture can be uniformly mixed. Spread, finish, and compact the mixture according to Subsection 301.04 and 301.05. Surface tolerance shall be in accordance to Subsection 301.06, except finish the surface to within ± 13 mm ($\pm 1/2$ -inch) from staked line and grade elevation. Maintenance shall be in accordance to Subsection 301.07 and the contract supplemental specifications. Maintenance shall be performed during construction and period of suspended work as required under Subsection 107.06.

Where cold recycled asphalt base course is placed on geotextile materials, in order to prevent damage to the geotextile materials, the Contractor does not have to process the bottom 51 mm (2 inches) of the lower lift.

408.08 Acceptance.

See Table 408-1 for sampling and testing requirements.

The CRABC material shall be measured per section 408.09 in-place on the new top of finished base course layer not to exceed the widths as shown in the design typical of the design plans and tolerances under Table 152-1 of section 152.03.

408.09 Measurement.

Measure the Section 408 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

When measurement is by the metric ton, do not deduct for the emulsified asphalt, recycling agent, water, and lime contained in the mixture.

Measure the CRABC by the square meter using the **width** horizontally across the top of the final finished cold recycled asphalt base course surface **only** by the meter. Measure the length horizontally along the centerline of the roadway by the meter. No measurement shall be made for: furnishing a milling machine or using this machine to pulverize/mill the existing asphalt pavement, processing, stockpiling, and subsequent placement to the lines and grade shown on the design plans. This work shall be considered incidental to the bid items shown in the bid schedule for Section 408.

408.10 Payment

The accepted quantities will be paid at the contract price per unit of measurement for the Section 408 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Material or	Type of	Characteristic	Test Methods	Sampling	Point of Sampling	Reporting
Product	Acceptance		Specifications	Frequency		Time
	(Subsection)		-			
Cold Recycle	Measured and	Gradation	AASHTOT27	3 per day	From the	24 hours (next
	tested				windrow after	day)
	for conformance				final processing	
	(106.04)					
Base	Measured and	Moisture-	AASHTO T	1 proctor curve	From the	24 hours (next
	tested	density	180	per week; min.	windrow after	day)
	for conformance	(max. density)	Method D	of 5 points per	final processing	
	(106.04)			proctor		
Materials	Measured and	Density &	AASHTOT310	3 per day	In-place	24 hours (next
	tested	moisture				day)
	for conformance	content	Direct			
	(106.04)		Transmission			
			Method			

Table 408-1Sampling and Testing

Addendum Acknowledgement

Addendum:

In submitting this Bid, Respondent represents that: *Respondent has examined and carefully studied the RFP and attachments, and any data and reference items identified in the RFP documents, and hereby acknowledges receipt of the following Addenda:*

Addendum No:		Addendum Date:
Respondent's Acknowledgement Signatur	e:	
Name and Title		Company Name

Signature