# Request for Proposals Bid Number: 17-08-1725LE

The Navajo Nation Office of the Controller - Purchasing Department, and Navajo Division of Transportation - Department of Roads, are accepting qualifications and sealed bids for route N5020-Red Valley, NM; subgrade preparation, soil stabilization, spot graveling with stabilizer, and culvert replacements for 6.0 mile.

Contacts for a bid packet are Lorita Etsitty, Navajo Nation Purchasing Department, <a href="https://www.nnooc.org">www.nnooc.org</a>, (928)871-6317; or, Don Jackson, Navajo DOT, Department of Roads, <a href="mailto:djackson@navajodot.org">djackson@navajodot.org</a>, (505)371-8364.

The closing date for this project is September 25, 2017, at 4:00pm, Mountain Daylight Savings Time. Any RFPs received after the closing date will be considered non-responsive and returned to the sender. No facsimile or emailed RFPs will be accepted.

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#### Section 1 - Overview

1. Request for Proposal (RFP) Packet – The Instructions on the proposal preparation, required documents, eligibility requirements and evaluation criteria are provided herein.

The RFP package may be obtained from the Navajo Division of Transportation, Navajo Transportation Complex, #16 Old Coal Mine Road, Mentmore, NM, starting September 7, 2017, during regular business hours. The Navajo Transportation Complex is located north of NM State Highway 264, and approximately 2 miles east of the New Mexico/Arizona State Line. Contacts for a proposal packet are Lorita Etsitty, Navajo Nation Purchasing Department, <a href="www.nnooc.org">www.nnooc.org</a>, (928)871-6317; or, Don Jackson, Navajo DOT, Department of Roads, <a href="djackson@navajodot.org">djackson@navajodot.org</a>, (505)371-8364.

You may also download this RFP from the Navajo DOT website (<u>www.navajodot.org</u>).

Note: If a firm downloads from the websites given above, or gets a copy of the RFP from another source other than the 2 persons noted in the above paragraph, please contact Don Jackson by email so that if an addendum(s) is issued, your firm will receive the addendum(s).

2. General Scope of Work (SOW) – This project is to conduct a routine road maintenance program/maintenance activity to grade & drain up to 6.2 miles of N5020-Red Valley. This will entail subgrade preparation, soil stabilization of in-situ surface course, spot graveling with stabilization, and culvert replacement at 7-locations. Ground disturbance will be intensive and extensive. The Navajo Nation is the lead agency and is using Fuel Excise Tax funds for project funding.

#### 3. Schedule of Activities

Activities:		Due Date:		
i.	Advertised Period	September 7–18, 2017		
ii.	Non-mandatory pre-bid meeting at project site	September 19, 2017, @ 11:00am.		
iii.	Deadline to Submit RFP Questions	September 22, 2017		
iv.	Response to Written RFP Questions	Up to September 25, 2017		
V.	RFP Submittal Deadline	September 29, 2017		
vi.	Evaluation	October 2, 2017		
vii.	Final Selection of Firm	October 3, 2017		
viii.	Possible Interviews of Top 5 Firms	October 5, 2017		

4. Inquiries – Questions regarding this RFP must be submitted by <u>email</u>, to the Project Contact listed below. Written questions as to the intent or clarity of this RFP can be submitted to the Project Contact until close of business, 5:00 PM (Window Rock, AZ time) on September 22, 2017. Written responses to written questions and any RFP amendments will be distributed by email to all parties who obtained an RFP package and have notified Lorita Etsitty, NN Purchasing Department, or Don Jackson, Navajo DOT. No further questions, in any form, will be entertained after September 22, 2017, deadline.

Project Contact: Don Jackson, Engineer, Navajo Division of Transportation, Telephone: (505) 371-8364, and Email: <a href="mailto:djackson@navajodot.org">djackson@navajodot.org</a>.

5. Proposal Submittal Deadline – Proposals must be physically submitted to the following address by September 29, 2017, no later than 4:00 PM (local Window Rock, AZ time).

Navajo Division of Transportation Attention: Don Jackson Navajo Transportation Complex #16 Old Coal Mine Road Mentmore, NM 87319

Late, facsimiled or e-mailed proposals will not be accepted. These will be returned to the firm un-rated and firms responding in such fashion shall be considered nonresponsive.

- 6. Addendum to the RFP In the event it becomes necessary to revise any part of the RFP, Navajo DOT shall issue a written addendum on the specifics of the change and inform all concerned. Addendums will be made available for download form the Navajo DOT website (www.navajodot.org). The addendum(s) do not need to be included as part of the RFP document. However, the consulting firm should acknowledge receipt and review of the addendum(s) under the Letter of Interest.
- 7. Rejections of Proposals The Navajo DOT reserves the right to reject any or all proposals and to waive informalities in the proposals received whenever such a rejection or waiver is in the best interest of the Navajo nation.
- 8. Proprietary Information Any restrictions on the use of data contained within any proposals must be clearly stated in the proposal. Each and every page that contains proprietary information must be stamped or imprinted "Proprietary".
- 9. Ownership of Proposals All materials submitted with the RFP accepted for rating shall become the property of Navajo DOT and not returned to the firm. The Navajo DOT has the right to use any or all information presented in the RFP subject to limitations outlined in Paragraph 8, above. Disqualifications or non-selection of a firm or proposal does not eliminate this right.
- 10. Cost Incurred The Navajo DOT is not liable for any cost incurred by the firm prior to issuance of a signed contract for services.
- 11. Contractual Obligation The contents of the proposal may become part of contractual obligations of the contract award. Failure of the firm to accept these obligations may result in cancellation of the award for services.
- 12. Evaluation Criteria Proposals accepted for rating shall be evaluated based on the criteria and point system set forth in Part 12(a) that follows.

## Part 12(a) – Rating System on Evaluation Criteria

Each proposal will be evaluated and rated as follows. Descriptions of the components are provided in Section 3 – Proposal Content and Evaluation Criteria

A. Qualifications 20 Points

B. Approach to Scope of Work, to include Project Understanding, Familiarity and Interest Shown.

C. Experience 20 Points

D. Record of Past Performance, 25 Points with references from 3 similar projects.

Total Points 100 Points

A Short List of qualified candidates will be determined from the 100 points. To get to the Short List, the firms must receive a minimum of 70 points.

Preference Points: If a Priority 1 firm makes the Short List, that firm will receive an additional ten (10) points added to their score ranking. If a Priority 2 firm makes the Short List, that firm will receive an additional five (5) points added to their score ranking. Non-priority firms do not receive additional points. This is a requirement from the Navajo Nation Business Opportunity Act. Firm must provide documentation per the Business Regulatory Department as prioritized under Section 204 (A) (1) and (2) of the revised Navajo Nation Business Opportunity Act, of its Priority 1 or 2 status.

It is intent of Navajo DOT to rank the firms according to the responses submitted. The Navajo DOT reserves the right to conduct detailed interviews in person, of the five (5) top ranked firms, if warranted.

- 13. Standard Contract The Navajo Nation reserves the right to incorporate contract provisions which are based on applicable requirements, such as, Navajo Nation Laws, State, and local requirements, etc. into the contract documents. This includes provisions of the Navajo Business and Procurement Act, at 12 N. N. C. § 1501et Seq., and the Navajo Business Opportunity Act, at 5 N. N. C. § 201 et Seq.
- 14. Taxes All work performed and services provided within the territorial jurisdiction of the Navajo Nation is subject to the five-percent (5 %) Navajo Sales Tax (24 N. N. C. § 601 et Seq.).
- 15. Insurance The Navajo Nation will require the successful firm, at its sole expanse, to procure and maintain adequate and sufficient insurance for all potential liability, such as, commercial general liability, automobile liability, worker's compensation, performance & payment bonds, bid bond, etc. The general contractor shall provide all bonds and insurance prior to the Notice to Proceed with Construction.

16. Disclaimer – The Navajo Nation's acceptance or review of any proposal shall not guarantee the execution of any contract, and the proposed contract shall be reviewed by all appropriate departments through the 2 N. N. C. § 164 review process, including the Navajo Nation Department of Justice, for administrative and legal sufficiency, prior to execution by the Navajo Nation. The Navajo Nation reserves the right to reject any proposed contract prior to execution, for improprieties in the procurement process or applicable Navajo Nation or federal laws or regulations, or the failure to submit all requested documents or information.

## Section 2 – Proposal Requirements and Selection

- 1. Proposal Submission
  - A. Proposal must be submitted in a sealed envelope clearly marked:
    - a. "DO NOT OPEN RFP for Bid <u>#17-08-1725LE</u> N5020-Red Valley, NM; subgrade preparation, soil stabilization, spot graveling with stabilizer, and culvert replacements for 6.2 mile
    - b. The name of the firm submitting the proposal shall be legibly written and shown on the outside of the sealed envelope, to include the firms address.
  - B. Proposal Standards: The firm shall submit one (1) original and three (3) identical copies of their RFP packet for the evaluation committee members. Appearance of proposal is important and professionalism in proposal presentation should not be neglected. The proposal standards are as follows:
    - a. This RFP proposal may not exceed 15 single-sided pages (maximum  $8 \frac{1}{2}$ " x 11") with a minimum of 10 pt. type.
    - b. Pages that have photos, charts, and graphs will be counted towards the maximum number of pages.
    - c. The following information is not included in the 15-page limit: proposal front and back cover; cover letter on company letterhead; divider and/or tabs, as long as there is nothing on them; and maximum 1-page resumes of each team member.
    - d. RFP submittals should be plastic or metal spiral-bound only. <u>Please do not submit RFP in loose-leaf 3-ring binders; these will be considered non-responsive and returned to the firm un-rated.</u>
    - e. Submissions exceeding the 15-page limit or any resumes exceeding the 1-page limit will be considered non-responsive and will be returned to the Applicant un-rated.
  - C. In a separate sealed envelope clearly marked as "BID PROPOSAL", the firm shall provide its bid amount to complete the Scope of Work. The sealed envelope will not be opened by the Navajo DOT until after the RFP proposals have been reviewed and ranked.

## 2. Proposal Review Process

Receipt of proposals will be verified on the due date specified. The Navajo DOT will screen and evaluate proposals received in accordance to the following criteria. Proposals which fail this check will be considered non-responsive and returned to the firm un-rated.

- a. Proposal is received by the required deadline date and time.
- b. Proposal meets the proposal submission requirement set forth above under Section 2, Part 1, (A), (B), & (C).

## 3. Proposal Evaluation

- a. Proposal shall be evaluated and rated in accordance with the criteria outlined in Part 12(a) Rating System on Evaluation Criteria.
- b. The Navajo DOT will rate the proposal based on total points awarded and the top five (5) qualified firms with the highest rating and ranking will be determined as most responsive. The Navajo DOT reserves the right to interview the top (5) qualified firms.

## 4. Award of Contract

a. The Navajo DOT will issue a Notice to Proceed to the firm upon execution of the contract. No work shall be performed by the firm until such notice is given by Navajo DOT. The Navajo DOT is not liable for any cost incurred by the firm prior to issuance of a signed contract award, for construction of N546-Shiprock, NM.

# Section 3 - Proposal Content and Evaluation Criteria

- 1. Qualifications of the firm. Proposals must specifically address and affirm the following:
  - a. Letter of Interest that indicates why your firm should be selected for project N5020-Red Valley. In addition, firm should acknowledge receipt and review of the addendum(s).
  - b. Evidence of insurance and statement from bonding company that all bonds will be completed prior to Notice to Proceed with Construction.
  - c. Resume of personnel that will be involved in the task of completing projects, including professional qualifications and experiences. Include personnel of sub-consultants which will be utilized by the prime consultant.
  - d. Organizational Chart outlining the inter-relationship and line of communication between the firm and sub-consultants.
  - e. Capability to perform all or most aspects of the project and recent experiences in providing services comparable to the proposed SOW as listed in Section 4. Provide key personnel's professional qualifications and experience and availability for the proposed work, and, roles and responsibilities. Include their knowledge of Navajo Nation, FHWA, and BIA regulations, policies, procedures, and specifications.

- 2. Approach to Scope of Work, to include Project Understanding, Familiarity, and Interest Shown.
  - a. Project Understanding Describe your understanding of the project and approach to delivering the project SOW for the work described in Section 4. Include a Gantt chart.
  - b. Familiarity Describe the firm's familiarity with the Navajo DOT.
  - c. Interest Shown Describe your interest in undertaking the N546-Shiprock, project.

## 3. Experience

Interested firms shall provide evidence and quality of service rendered relative to similar Scope of Work anticipated under this contract. Projects may be located on the Navajo Nation, other Indian Reservations, and rural communities. Interested firms shall provide three (3) references from similar projects within the last five (5) years. If interested firms have not performed similar projects over the last (5) years, then project-specific references can be submitted. Individual projects should highlight as many of the services requested under this contract. List the reference's, contact person's name, and phone number. Interested firms and their sub-consultants shall provide evidence of management capacity and scheduling, staff expertise, internal quality control and organization structure.

#### 4. Record of Past Performance

Interested firms must demonstrate it has the administrative and technical capabilities to perform the requested services (as listed under Section 4) on contracts with government agencies, including: quality of work, ability to meet schedules, and stay within budget. Indicate if firm has previous experience providing similar Scopes of Work for other Navajo Nation agencies, BIA, or other DOT's in rural places.

## Section 4 – Scope of Work, and Plans & Specifications

# Navajo Division of Transportation - Betterment Projects Project Number: N5020-Red Valley, NM

## Scope of Work

# Project Summary:

This project is to conduct a routine road maintenance program/maintenance activity to grade & drain up to 6.2 miles of N5020-Red Valley. This will entail subgrade preparation, soil stabilization of in-situ surface course, spot graveling with stabilization, and culvert replacement at 7-locations. Ground disturbance will be intensive and extensive. The Navajo Nation is the lead agency and is using Fuel Excise Tax funds for project funding. All specifications for the Scope of Work and Bid Items uses the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-14," U.S. Customary Units, referred to from hereon as "FP-14", unless otherwise stated.

# Project Scope:

- 1) Beginning of Project (BOP) and End of Project (EOP), refer to attached Strip Map of N5020. Lat, Long for BOP: (36°42'15.65"N, 108°53'16.53"W); Lat, Long for EOP: (36°37'3.43"N, 108°53'22.56"W).
- 2) **FP-14, Division 150, Section 151 Mobilization**. This is to include permits, insurance, and bonds (Bid bond, Performance bond, & Payment bond).
- 3) **FP-14, Division 150, Section 152 Construction Survey and Staking.** Firm will stake out road centerline and perform construction staking with survey data supplied by Navajo DOT. Explain approach to handling this item.
- 4) FP-14, Division 150, Section 154 Contractor Sampling & Testing, and Quality Control. Furnish all equipment, labor, and materials to perform all testing, per plans and specifications complete, including Quality Control Plan.
- 5) **FP-14, Division 200, Section 204 Borrow (furnish unclassified borrow and place).** Borrow source is located adjacent to project. See Typicals for borrow placement. Payment for this Item is for procuring of borrow material and placing on route i.e. compaction & shaping will be paid under **Section 303 Roadway Reconditioning**. Incorporate testing requirements into Bid Item #3, Quality Control; Materials Testing. Explain approach to incorporating borrow placement into existing surface course, and overall handling of this item.
- 6) **FP-14, Division 200, Section 204.10 & 204.12 Furrow Ditches.** Reshape and provide material per specifications for 15 existing furrow ditches.
- 7) **FP-14, Division 200, Section 213 Surface Course Stabilization.** Two (2) soil stabilizers are proposed for the roadway. Each stabilizer will be used on half the proposed road construction. Incorporate testing requirements into Bid Item #3, Quality Control; Materials Testing. Contractor shall stabilize per Manufacturer instructions; and, have a qualified person/personnel from the manufacturer on site during application of the stabilizer. A topical application will also be applied to the surface course. Products to be

- used on this project are Soiltac and Soil Sement. No heavy equipment, only equipment required for soil stabilization activity, will be allowed on N5020 during and after activity soil stabilization is complete. Explain approach to handling this item.
- 8) FP 14, Division 300, Section 303 Roadway Reconditioning (303.07). Subgrade will match crown/shape of 5-inch stabilized surface course. For compaction of borrow material, refer to Section 204.11 Compaction. Note: for top 5-inches of borrow placement, refer to Bid Items No. #5 (3.1 miles) & #6 (3.1 miles). Existing turnouts need to be checked to ensure they are not abandoned. If not abandoned, construct turnouts to match proposed road grade and include drainage improvements. Explain approach to incorporating BORROW placement into existing surface course, and overall handling of this item.
- 9) **FP 14, Division 600, Section 625 Seeding, Dry Method.** Seeding is for borrow site and east shoulder. Explain approach to handling this item.
- 10) **FP 14, Division 600, Section 633 Permanent Traffic Control.** Post and signs will be steel.
  - a. 1 each, R1-1-30, Sign height will be 7-ft from base.
  - b. 6 each, R2-1-24-30, Sign height will be 7-ft from base.
  - c. 1 each Reduced Speed Limit Sign (20mph), Type W3-5, 36"x36".
- 11) Culvert replacements will have minimum cover requirements during construction and post-construction, per Manufacturer's recommendations. Do not include 4-inch stabilized surface course for minimum cover requirements. New culverts will have same slope, length, diameter, and skew, as the culverts being replaced. All culvert replacement pipes will follow attached Culvert Specifications. There will be no end sections for any culverts. Culvert replacement quantities are:
  - 24-inch x 35-ft
  - 36-inch x 23-ft
  - 24-inch x 24-ft
  - 24-inch x 24-ft
  - 24-inch x 34-ft
  - 24-inch x 53-ft
  - 48-inch x 48-ft
- 12) Apply water to all roadway surfaces for compaction and dust control. Firm is responsible for acquiring a water permit from Navajo Nation Water Code.
- 13) Quality Control, to include materials testing.
- 14) All work shall stay within the existing prism "foot print" and turnout areas on the roadway. Explain understanding of this item.
- 15) Provide an estimated timeline bar chart schedule for this project.
- 16) Explain approach for other activities required for acceptable Scope of Work and compliance with specifications.
- 17) List equipment to be used for this project.
- 18) List product certifications.
- 19) If applicable, list certifications of personnel.
- 20) Explain roles & responsibilities of all personnel for this project.

- 21) State how project communication is intended to keep all parties involved in the project.
- 22) Roadway shall be opened to two-way traffic at the end of each work day and weekends.
- 23) Signage & delineators will be according to most current MUTCD specifications.
- 24) Traffic Control and Safety Plan shall be adhered to throughout the construction of the project.
  - a. Provide and comply with traffic control plan.
- 25) Safety plan. Explain approach to handling this item.
- 26) Comply with all archeology, environmental, and biological conditions. Explain approach to handling this item.
- 27) Project records will include receipts of materials purchased for project e.g. haul tickets & water receipts; daily, weekly, monthly, & final report(s); and, the total cost summary of the project. Provide original copies of project records to Navajo DOT.
- 28) Staging Area to be determined by Navajo DOT.
- 29) Dispose of all trash and debris, per FP-14.
- 30) Site cleanup within the project area includes staging area, ditch line, back slope, and fore slope, per FP-14.
- 31) Navajo DOT will be responsible for Notice of Intent to BIA-DOT.
- 32) Take necessary precautions to prevent damage to any subsurface, surface, and overhead utility lines. Firm is responsible for notifying utility companies.
- 33) SWPPP. This is not a pay item and is considered an incidental cost. Explain approach to handling this item.
- 34) Coordination with utility companies to locate utilities within construction area. Explain approach to handling this item.

# **Quality Assurance:**

Navajo DOT will provide quality assurance to ensure that work is being performed in accordance with the Scope of Work and project specifications...

Final inspection will include Navajo DOT & BIA-DOT for acceptance of scope of work, and compliance with clearances.

# Compliance:

Comply with conditions stated in all compliance reports, cultural & biological. If cultural site is discovered, immediately notify NDOT Project Management & Roads Dept.

## SPECIAL CONTRACT REQUIREMENTS

FP-14: All material under the Divisions of the "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-14, U.S. Customary Units," henceforth called FP-14, published in book form by U.S. Department of Transportation, Federal Highway Administration, shall apply to this contract as revised below.

## **DIVISION 100 GENERAL REQUIREMENTS**

Section 103. — SCOPE OF WORK

Delete: -103.05 Partnering.

Section 106. — ACCEPTANCE OF WORK

106.05 Statistical Evaluation of Work and Determination of Pay Factor. No Pay Factors.

## Section 108. — PROSECUTION AND PROGRESS

108.01 Commencement, Prosecution, and Completion of Work. Change second paragraph to: A preconstruction conference will be held 5 business days after the contract is awarded and before beginning work. Seven days before the preconstruction conference, submit copies of the preliminary construction schedule according to Section 155.

#### **DIVISION 150 – PROJECT REQUIREMENTS**

Section 153 - Contractor Quality Control

153.03 Quality Control Plan (QCP). Delete second sentence and insert: the Contractor's QCP must be sealed and signed by a Civil Engineer registered in the state the project is located.

153.09 Measurement and Payment. Delete this section and insert: No measurement or payment will be made for the Contractor's QCP.

154.07 Measure the Section 154 pay items listed in the bid schedule according to Subsection 109.02. Delete and insert with: Payment will be paid through the Bid Item, Materials Testing.

154.08 Payment. 25% of lump sum, not to exceed 0.5 percent of the original contract amount, will be paid after acceptance of testing facilities and personnel.

Section 155 – Schedules for Construction Contracts

155.03 General. Add: Provide schedules at no more than 7 days after contract award.

155.06 Baseline Schedule Update. Add: Any schedule update showing completion date beyond the contract time shall be accompanied with a request for time extension in accordance with Subsection 108.03.

155.08 Measurement. Delete this subsection and insert: The Construction Schedule will not be measured directly for payment but will be considered a subsidiary obligation of the Contract.

Section 156 – Public Traffic.

156.04 Accommodating Traffic During Work. Add: During construction, the Contractor shall allow motorist access at all times. Signs warning drivers of construction zone shall be placed at the beginning and end of construction limits prior to the start of any construction work. The Traffic Control Plan must be submitted for acceptance, accepted and implemented before any other work can commence at the project site. Prior to the commencement of work and on a weekly basis, the Contractor shall inform the Navajo DOT of the traffic restrictions.

156.07 Limitations on Construction Operations. Add: (1) Minimum of one lane of traffic shall be open daily; (m) Flaggers shall be on duty during construction hours; (n) No work or access restrictions are allowed during the following periods – federal holidays & Fridays prior to Labor Day and Memorial day.

ADD the following section:

Section 159 – Navajo Nation Sales Tax

159.01 Description. The project is located on the Navajo Nation and is subject to the laws and regulations of the Navajo Nation. Contractors shall make themselves aware of any labor requirements, taxes, fees, licenses, permits or conditions that may be imposed by the Navajo Nation on work performed in the area.

TAX: A 5% sales tax will be required on all payments to the contractor. The Navajo Tribal Financial Office will pay on the approved monthly Contractor Invoice. The Contractor will then be invoiced 5% tax on the payments made and will be required to pay that amount to the Navajo Division of Transportation.

159.02 Acceptance. Acceptance shall be based on an invoice from the Navajo DOT and an invoice from the appropriate Tribal Administration office on the tax.

159.03 Measurement. Measurement of the Tribal tax shall be lump sum.

159.04 Payment. Payment shall be made under the Bid Item, Tribal Tax (5%).

#### **DIVISION 200 – EARTHWORK**

Section 209 – Structure Excavation and Backfill. **Add**: for 24-inch pipe use existing backfill. For 36-inch & 48-inch diameter pipe, bottom half of backfill will conform to Section 209.02; for remaining backfill, use existing backfill.

Section 213 – Surface Course Stabilization

213.01 Description. Add: The project includes the application of Synthetic Polymer Emulsions to the surface course aggregate and in-situ surface course. The stabilizer shall be applied per the manufacturer's recommendations for a 5" penetration depth. The application shall include a topical application after the gravel is bladed and compacted.

Products to be used on this project are Soiltac and Soil Sement.

Contractor shall consult with manufacturer for application rates and methods. Contractor to test borrow material placed on roadway. Test to include are sieve analysis, Atterburg Limits (PI, liquid & plastic limit), hydrometer, and Proctor Test (optimum moisture content). Provide results to Manufacturer to determine application rate/directions, construction support, maintenance requirements, and lifespan estimates. Contractor will submit results to Project Engineer for approval prior to Surface Course Stabilization.

213.12 Payment. Add: Payment will be made under: Pay Item, Surface Course Stabilization, 5-inch depth. Unit = SY.

# **DIVISION 300 – AGGREGATE AND BASE COURSES**

Section 303.10 – Road Reconditioning.

Add: Payment will be made per finished roadway surface. Payment will be made under, 30301-Road Reconditioning, Pay Unit = SY.

## **DIVISION 600 – INCIDENTAL CONSTRUCTION**

Section 635 – Temporary Traffic Control

635.01 Description. DELETE the following from the first sentence: as ordered.

635.04 General. ADD: Three copies of a traffic control plan that is in accordance with the MUTCD will be submitted for each item impacting traffic 10 days after award of this contract for review. The plan will include the maximum spacing distance that the contractor is proposing to use when placing channeling devices. If the traffic plan does not conform with the MUTCD requirements because the contractor changed their operations and/or special or hazardous conditions arise, the COR shall direct the contractor to revise their plan and temporary traffic control devices and services immediately to conform to the MUTCD.

635.24 Measurement. DELETE this subsection and INSERT: Temporary traffic control will be measured by the lump sum and no measurement for payment will be made for furnishing, installing, and maintaining all traffic control devices and services required for the control and protection of traffic.

635.25 Payment. DELETE: (b) an additional 25 percent of the pay item amount will be paid following completion of 50 percent of the contract amount. ADD: Payment will be made under: Pay Item, Temporary Traffic Control. Pay Unit: LS.

N 5020 - Red Valley Bid # 17-08-1725LE

# September 8, 2017

Specification for Corrugated Metal Pipe Culvert Navajo DOT

#### 1.0 General

1.1 This Specification covers the manufacture and installation Corrugated Metal Pipe Culverts. (CMPC)

For the Navajo Department of Transportation (NDOT)

#### 2.0 Design Standard

2.1 The CMPC shall meet the design parameter of the American Association of State and Transportation Professionals (AASHTO), and the American Society for Testing and Materials (ASTM).

#### 3.0 Material

- 3.1 The Base Material with a Polymer Coated Steel Coils shall conform to applicable requirements of AASHTO M246 or ASTM A742.
- 3.2 All CMPC shall be manufactured from a 16ga Steel with a **Polymeric Coating**, with minimum durability requirements of the following: ph Range (3.0 to 12.0); Resistivity Range Minimum:
  - 250 ohms cm with no Maximum.

#### 4.0 Pipe

- 4.1 The CMPC shall be manufactured in accordance with AASHTO M245 & ASTM A762
- 4.2 Corrugated Metal Pipe Culvert (CMPC) to have a corrugation pattern of 2-2/3" x 1/2" for Inside Diameter Designations of 12" to 48"
- 4.3 Corrugated Metal Pipe Culvert (CMPC) to have a corrugation pattern of 5x1 for Inside Diameter Designations of 54" to 144"
- 4.4 CMPC to be manufactured with a Continuous Helically Corrugated Lock-Seam.
- 4.5 CMPC to have Annular Re-Rolled Ends
- 4.6 CMPC Pipe Wall Thickness shall range form .064-inches (16ga) to .168-inches (8ga) per recommendations of the Manufacturer or Engineer of Record.

#### 5.0 Coupling Bands

- 5.1 Coupling Bands to be: Semi Corrugated H-12 Hugger Band, or Fully Corrugated 5-C & 10-C Hugger Bands. Band type per Manufacturers Recommendation.
  - 5.1.1 Semi Corrugated Band to be provided with (2) Rubber O-Ring Gaskets per Band.
  - 5.1.2 Fully Corrugated to be provided with (1) Flat Neoprene Gasket per Band.
- 5.2 Coupling Bands to be tightened and secured with Bar Bolt & Strap Assembly.
- 5.3 Coupling bands for shall be made of the same base metal and Polymeric Coating as the CMPC. Coupling Bands to be a minimum of 18 gauge (.052-inches), or not more than one size lower than the wall thickness/gage of the pipe being joined.

#### 6.0 Loading

- 6.1 For Construction Loading (CMPC) will have minimum cover requirement of 3-foot of cover from top of pipe to Road Grade during construction. Cover may be greater if Engineer of Record determines
- 6.2 For Post Construction Loading (CMPC) replacements will have minimum cover requirement of 1-foot of cover.
- 6.3 Cover to be measure from top of CMPC to bottom of stabilized surface course, or from top of CMPC to bottom of asphaltic concrete.

#### 7.0 End Sections

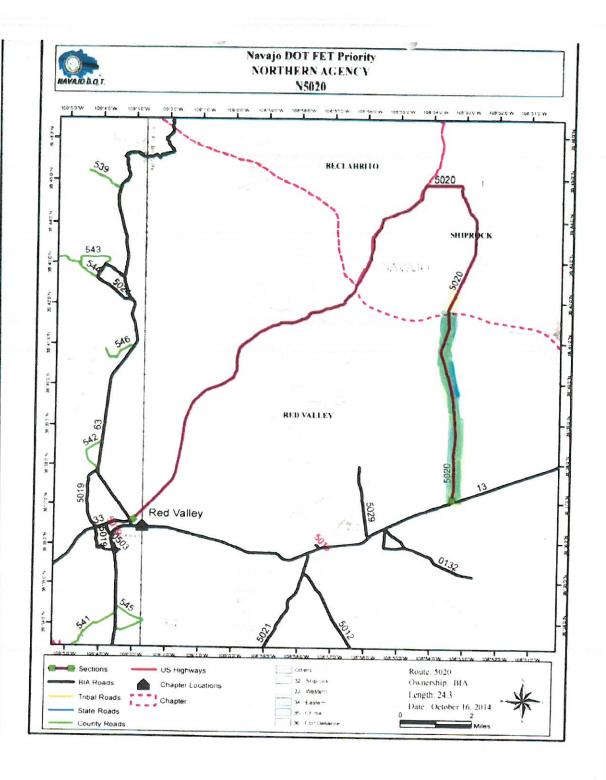
7.1 All End-Sections to be manufactured from Steel with an <u>Aluminized Type-II</u>
<u>Coating</u>

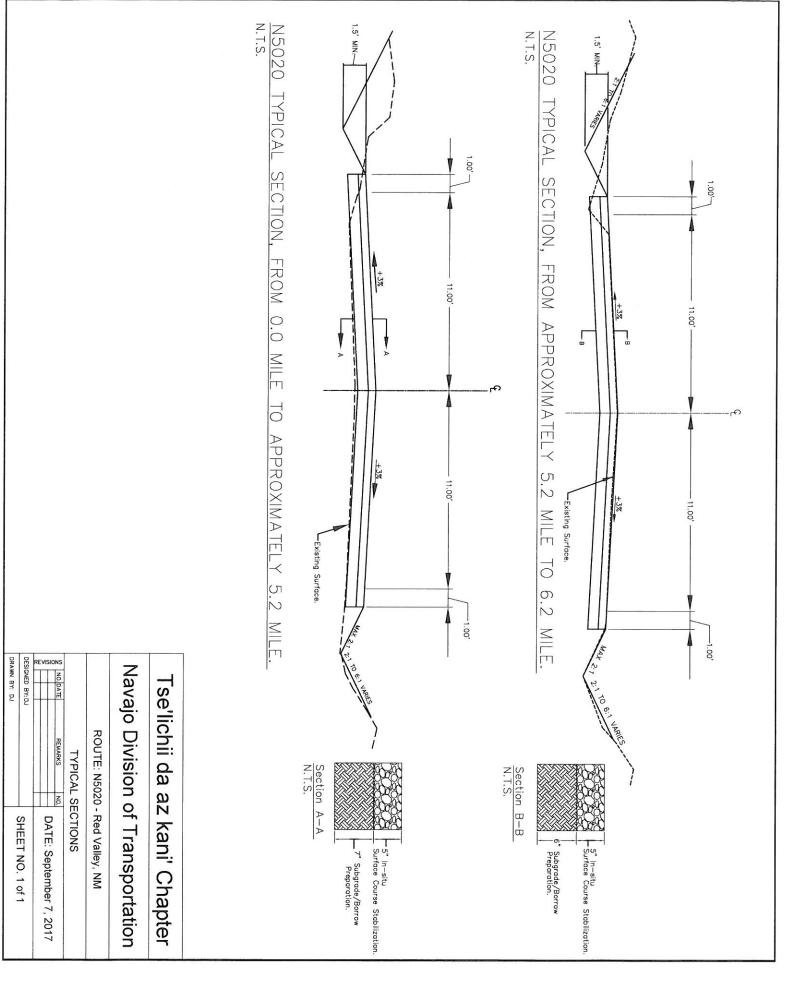
#### 8.0 Handling and Assembly

8.1 Refer to recommendations of the National Corrugated Steel Pipe Association (NCSPA)

#### 9.0 Installation

9.1 The installation shall be in accordance with AASHTO Standard Specifications for Highway and Bridges; and in conformance with the project plans and specifications.





BID SCHEDULE FOR N5020-Red Valley, NM.

		BID SCHEDULE FOR N5020-Red Valley, NM	•			
BID ITEM	FP-14 ITEM	Item Description	Estimated	Unit	Unit Price	Total
NO.	NO.	item bescription	Quantity	Unit	Office Price	TOTAL
NO.	NO.	Mobilization & Demobilization. Note: The				
1	15101	lump sum bid price is not to exceed 10%				
1	15101	of the total Bid Schedule.		1.0		
			1	LS		
2	15201	Surveying: Furnish all materials,				
		equipment, and labor, for construction	4			
		surveying & staking.	1	LS		
3		Contractor Sampling & Testing, and			*	
		Quality Control: Furnish all equipment,				
	15401	labor, and materials to perform all				
		testing, per plans and specifications			nan na	
		complete.	1	LS		
4	20401	Borrow: Furnish unclassified borrow and				
	20401	place.	40,107	CY		
5	20410	Furrow Ditches.	1	LS		
6	21301	Surface Course Stabilization with Soil				
		Sement, 5" Depth.	43,648	SY		
7	21301	Surface Course Stabilization with Soiltac,				
		5" Depth.	43,648	SY		
8	30301	Road Reconditioning.	87,296	SY		
9	62510	Seeding, Dry Method	10	Acre		
10	63301	Signage: Furnish all materials, equipment,				
		and labor to complete roadway signage,				
		per plans and specifications complete.	1	LS		
11	63501	Temporary Traffic Control Plan.	1	LS		
12		Culvert Replacement				
13		24" CMP	170	LF		
14		36" CMP	23	LF	-	
15		48" CMP	48	LF		
16		SUBTOTAL				
17		Navajo Nation Tribal Tax - 5%.				
18		Contingency.				\$200,000
		TOTAL PROJECT COST.				+,
				Spiral State of the State of th		

Note: all equipment, labor, and materials to provide Storm Water Pollution Prevention Plan, BMPs, and maintenance per U.S. EPA - Region 9, and Navajo EPA, is considered incidental cost and is not a pay item.