RESOLUTION OF THE NAABIK'IYATI' COMMITTEE OF THE NAVAJO NATION COUNCIL

23RD Navajo Nation Council---First Year, 2015

AN ACTION

RELATING TO RESOURCES AND DEVELOPMENT COMMITTEE AND NAABIK'ÍYÁTI' COMMITTEE; APPROVING AND AUTHORIZING A CONTRACT ON BEHALF OF THE NAVAJO NATION BETWEEN THE NAVAJO AGRICULTURAL PRODUCTS INDUSTRY (NAPI) AND THE UNITED STATES DEPARTMENT OF THE INTERIOR UNDER 25 U.S.C. § 450 et seq. (P.L. 93-638, AS AMENDED), FOR A FIVE YEAR TERM FOR THE NAPI OPERATION MAINTENANCE AND REPLACEMENT, ON-FARM DEVELOPMENT, AND AGRICULTURAL TESTING AND RESEARCH LABORATORY PROGRAMS; APPROVING AND AUTHORIZING THE FISCAL YEAR ANNUAL FUNDING AGREEMENT AND SCOPE OF WORK FOR THE PERIOD OF THE CONTRACT TERM

BE IT ENACTED:

Section One. Findings

- A. The Resources and Development Committee is the oversight committee for the Division of Natural Resources. 2 N.N.C. §501(C)(1).
- B. The Naabik'íyáti' Committee is authorized to approve contracts with the United States Department of Interior for the implementation of the Indian Self-Determination and Education Assistance Act, 25 U.S.C. §450 et seq. (P. L. 93-638 as amended). 2 N.N.C. §701(A)(12).
- C. It is in the best interest of the Navajo Nation to approve and authorize this contract with the United States Department of Interior for a five year term for the Navajo Agricultural Products Industry Operation Maintenance and Replacement, On-Farm Development, and Agricultural Testing and Research Laboratory Programs as set forth in Exhibit A.

Section Two. Approvals

A. The Navajo Nation hereby approves and authorizes a contract on behalf of the Navajo Nation between the Navajo Agricultural Products Industry and the United States Department of the Interior-Bureau of Reclamation 25 U.S.C. § 450 et seq. (P. L. 93-638, as amended), for a five year term for the Navajo Agricultural Products Industry Operation Maintenance and Replacement, On-Farm Development, and Agricultural Testing and Research Laboratory Programs technical assistance and related activities, as set forth in the documents attached hereto as Exhibit A.

- B. The Navajo Nation hereby approves and authorizes the Annual Funding Agreement and Scope of Work for the Navajo Agricultural Products Industry Operation Maintenance and Replacement, On-Farm Development studies for expansion of NAPI of future site (along the Little Colorado River), and Agricultural Testing and Research Laboratory Programs for the contract term indicated above, as set forth in the documents attached hereto as Exhibit A.
- C. The Navajo Nation hereby authorizes the President of the Navajo Nation to execute and effectuate the Contract, Annual Funding Agreement and Scope of Work, provided the terms and conditions in such documents are substantially similar to those approved by this resolution.

CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Naabik'íyáti' Committee of the 23rd Navajo Nation Council at a duly called meeting in Twin Arrows Casino & Resort, Leupp (Arizona), at which a quorum was present and that the same was passed by a vote of in 18 favor and 0 oppose, this 3^{RD} Day of December, 2015.

Konorable Seth Damon, Pro Tem Chairperson Naabik'íváť Committee

Motion : Otto Tso Second : Dwight Witherspoon

EXHIBIT

CONTRACT NO. A10AV00796 Renewal/Recontract Contract

AGREEMENT BETWEEN THE SECRETARY AND THE NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

(a) AUTHORITY AND PURPOSE -

- (1) AUTHORITY This agreement, denoted a Self-Determination Contract (referred to in this agreement as the "Contract"), is entered into by the Secretary of the Interior (referred to in this agreement as the "Secretary"), for and on behalf of the United States pursuant to Title I of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450 et seq.) and by the authority of the Navajo Agricultural Product Industry (NAPI) (referred to in this agreement as the "Contractor"). The provisions of title I of the Indian Self-Determination and Education and Education Assistance Act (25 U.S.C. 450 et seq.) are incorporated in this agreement.
- (2) PURPOSE Each provision of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450 et seq.) and each provision of this Contract shall be liberally construed for the benefit of the Contractor to transfer the funding and the following related functions, services, activities, and programs (or portions thereof), that are otherwise contractible under section 102(a) of such Act, including all related administrative functions, from the Federal Government to the Contractor:

PROGRAM: Operation Maintenance and Replacement; On-farm Development; and Agricultural Testing and Research Laboratory Programs

(b) TERMS, PROVISIONS, AND CONDITIONS-

- (1) TERM -Pursuant to section 105(c)(1) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450j(c)(1), the term of this contract shall be a Mature Definite Term of Five-Years beginning January 1, 2016, through December 31, 2020 on the basis of Calendar Year. Pursuant to section 105(d)(1) of such Act (25 U.S.C. 450j(d)), upon the election by the Contractor, the period of this Contract shall be determined on the basis of a Fiscal Year, unless the Secretary and the Contractor agree on a different period in the annual funding fiscal year agreement incorporated by reference in subsection (f)(2).
- (2) EFFECTIVE DATE This Contract shall become effective upon the date of the approval and executive by the Contractor and the Secretary, unless the Contractor and the Secretary agree on an effective date other than the date specified in this paragraph.

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(3) PROGRAM STANDARD - The Contractor agrees to administer the program, services, functions and activities (or portions thereof) listed in subsection (a)(2) of the Contract in conformity with the following standards:

Irrigation Operations and Maintenance on Indian Lands: [25 USC 13, 25 USC 450; 31 USC 63; Indian Dams Safety Act of 1994, Pub. L. 103-1560, 108 Stat. 1560; American Indian Agriculture Resource Management, Publ. L. 103-177, 107 Stat 2011, 25 USC 3701; Act of November 4, 1983, Pub. L. 98-140; Pub. L. 103-301, 60 STAT 895, 25 USC 162a; and 76 Stat. 96] The Programs to conserve water and operate and maintain the irrigation water delivery systems on Indian irrigation projects and maintain the dams in a safe economical, beneficial, and equitable manner, including the follows:

- 1. American Society of Agricultural Engineers (ASAE) Standard S-376;
- ASAE Standard 5376;
- 3. North American Proficiency Testing;
- 4. National forage Testing Association;
- (4) FUNDING AMOUNT Subject to the availability of appropriations, the Secretary shall make available to the Contractor the total amount specified in the annual funding agreement incorporated by reference in subsection (f)(2). Such amount shall not be less than the applicable amount determined pursuant to section 106(a) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450j-1).
- (5) LIMITATION OF COSTS The Contractor shall not be obligated to continue performance that requires an expenditure of funds in excess of the amount of funds awarded under this Contract. If, at any time, the Contractor has reason to believe that the total amount required for performance of this Contract or a specific activity conducted under this Contract would be greater than the amount of funds awarded under this Contract, the Contractor shall provide reasonable notice to the appropriate Secretary. If the appropriate Secretary does not take such action as may be necessary to increase the amount of funds awarded under this Contract may suspend performance of the Contract until such time as additional funds are awarded.
- (6) PAYMENT -
 - (A) IN GENERAL Payments to the Contractor under this Contract.
 - (i) be made as expeditiously as practicable; and

(ii) include financial arrangements to cover funding during periods covered by joint resolutions adopted by Congress making continuing appropriations, to the extent permitted by such resolutions.

(B) QUARTERLY, SEMIANNUAL, LUMP-SUM, AND OTHER METHODS OF PAYMENT (i) IN GENERAL - Pursuant to section 108(b) of the Indian Self-Determination and Education Assistance Act, and notwithstanding any other provision of law, for each fiscal year covered by this Contract, the Secretary shall make available to the Contractor the funds specified for the fiscal year under the annual funding agreement incorporated by reference pursuant to subsection (f)(2) by paying to the Contractor, on a quarterly basis, one-quarter of the total amounts provided for in the annual funding agreement for that fiscal year, in a lump-sum payment or as semiannual payments, or any other method of payment authorized by law, in accordance with such method as may be requested by the Contractor and specified in the annual funding agreement.

(ii) METHOD OF QUARTERLY PAYMENT - If quarterly payments are specified in the annual funding agreement incorporated by reference pursuant to subsection (f)(2), each quarterly payment made pursuant to clause (i) shall be on the first day of each quarter of the fiscal year, except that in any case in which the Contract year coincides with the Federal fiscal year, payment for the first quarter shall be made not later than the date that is 10 calendar days after the date on which the Office of Management and Budget apportions the appropriations for the fiscal year for the programs, services, functions, and activities subject to this Contract.

(iii) APPLICABILITY – Chapter 39 of title 31, United States Code, shall apply to the payment of funds due under this Contract and the annual funding agreement referred to in clause (i).

(7) RECORDS AND MONITORING -

- (A) IN GENERAL Except for previously provided copies of tribal records that the Secretary demonstrates are clearly required to be maintained as part of the recordkeeping system of the Department of the Interior, records of the Contractor shall not be considered Federal records for purposes of chapter 5 of title 5, United States Code.
- (B) RECORDKEEPING SYSTEM The Contractor shall maintain a recordkeeping system and, upon reasonable advance request, provide reasonable access to such records to the Secretary.
- (C) RESPONSIBILITIES OF CONTRACTOR The Contractor shall be responsible for managing the day-to-day operations conducted under this Contract and for monitoring activities conducted under this Contract to ensure compliance with the Contract and applicable Federal requirements. With respect to the monitoring activities of the Secretary, the routine monitoring visits shall be limited to not more than one performance monitoring visit for this Contract by the head of each operating division,

departmental bureau, or departmental agency, or duly authorized representative of such head unless--

(i) the Contractor agrees to one or more additional visits; or

(ii) the appropriate official determines that there is reasonable cause to believe that grounds for reassumption of the Contract, suspension of Contract payments, or other serious Contract performance deficiency may exist.

No additional visit referred to in clause (ii) shall be made until such time as reasonable advance notice that includes a description of the nature of the problem that requires the additional visit has been given to the Contractor.

(8) PROPERTY-

- (A) IN GENERAL As provided in section 105(f) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450j(f)), at the request of the contractor, the Secretary may make available, or transfer to the Contractor, all reasonably divisible, real property, facilities, equipment and personal property that the Secretary has used to provide or administer the programs the programs, services, functions, and activities covered by this Contract. A mutually agreed upon list specifying the property, facilities, and equipment so furnished shall also be prepared by the Secretary, with the concurrence of the Contractor, and periodically revised by the Secretary, with the concurrence of the Contractor.
- (B) RECORDS The Contractor shall maintain a record of all property referred to in subparagraph (A) or other property acquired by the Contractor under section 105 (f) (2)(A) of such Act for purposes of replacement.
- (C) JOINT USE AGREEMENTS Upon the request of the Contractor, the Secretary and the Contractor shall enter into a separate joint use agreement to address the shared use by the parties of real or personal property that is not reasonably by divisible.
- (D) ACQUISITION OR PROPERTY The Contractor is granted the authority to acquire such excess property as the Contractor may determine to be appropriate in the judgment of the Contractor to support the programs, services, functions, and activities operated pursuant to this Contract.
- (E) CONFISCATED OR EXCESS PROPERTY The Secretary shall assist the Contractor in obtaining such confiscated or excess property as may become available to tribes, tribal organizations, or local governments.

- (F) SCREENER IDENTIFICATION CARD A screener identification card (General Services Administration form numbered 2946) shall be issued to the Contractor not later than the effective date of this Contractor. The designated official shall, upon request, assist the Contractor in securing the use of the card.
- (G) CAPITAL EQUIPMENT The Contractor shall determine the capital equipment, leases, rentals, property, or services the Contractor requires to perform the obligations of the Contractor under this subsection, and shall acquire and maintain records of such capital equipment, property rentals, leases, property, or services through applicable procurement procedures of the Contractor.
- (9) AVAILABILITY OF FUNDS Notwithstanding any other provision of law, any funds provided under this Contract
 - (A) shall remain available until expended; and
 - (B) with respect to such funds, no further
 - (i) approval by the Secretary, or
 - (ii) justifying documentation from the Contractor shall be required prior to the expenditure of such funds.
- (10) TRANSPORTATION Beginning on the effective date of this Contract, the Secretary shall authorize the Contractor to obtain interagency motor pool vehicles and related services for performance of any activities carried out under this contract.
- (11) FEDERAL PROGRAM GUIDELINES, MANUALS, OR POLICY DIRECTIVES - Except as specifically provided in the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450 et seq.) the Contractor is not required to abide by program guidelines, manuals, or policy directives of the Secretary, unless otherwise agreed to by the Contractor and the Secretary, or otherwise required by law.
- (12) DISPUTES -
 - (A) THIRD PARTY MEDIATION DEFINED For the purposes of this Contract, the term "third-party mediation" means a form of mediation whereby the Secretary and the Contractor nominate a third party who is not employed by or significantly involved with the Secretary of the Interior, the Secretary of Health and Human Services, or the Contractor, to serve as a third-party mediator to mediate disputes under this Contract.

(B) ALTERNATIVE PROCEDURES - In addition to, or as an alternative to, remedies and procedures prescribed by section 110 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450m-1), the parties to this Contract may jointly

(i) submit disputes under this Contract to third-party mediation;

(ii) submit the dispute to the adjudicatory body of the Contractor, including the tribal court of the Contractor;

(iii) submit the dispute to mediation processes provided for under the law, policies, or procedures of the Contractor; or

(iv) use the administrative dispute resolution processes authorized in subchapter IV of chapter 5 of title 5, United States Code.

- (C) EFFECT OF DECISIONS The Secretary shall be bound by decisions made pursuant to the processes set forth in subparagraph (B), except that the Secretary shall not be bound by any decision that significantly conflicts with the interests of Indians or the United States.
- (13) ADMINISTRATIVE PROCEDURES OF CONTRACTOR Pursuant to the Indian Civil Rights Act of 1968 (25 U.S.C. 1301 et seq.), the laws, policies, and procedures of the Contractor shall provide for administrative due process (or the equivalent of administrative due process) with respect to programs, services, functions, and activities that are provided by the Contractor pursuant to this Contract.
- (14) SUCCESSOR ANNUAL FUNDING AGREEMENT -
 - (A) IN GENERAL Negotiations for a successor annual funding agreement, provided for in subsection (f)(2), shall begin not later than 120 days prior to the conclusion of the preceding annual funding agreement. Except as provided in section 105(c)(2) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450j(c)(2) the funding for each such successor annual funding agreement shall only be reduced pursuant to section 106 (b) of such Act (25 U.S.C. 450j-1(b)).
 - (B) INFORMATION The Secretary shall prepare and supply relevant information, and promptly comply with any request by the Contractor for information that the Contractor reasonably needs to determine the amount of funds that may be available for a successor annual funding agreement, as provided for in subsection (f)(2) of this Contract.

(15) CONTRACT REQUIREMENTS; APPROVAL BY SECRETARY-

- (A) IN GENERAL Except as provided in subparagraph (B), for the term of the Contract, section 2103 of the Revised Statutes (25 U.S.C. 81) and section 16 of the Act of June 18, 1934 (48 Stat.987, chapter 576; 25 U.S.C. 476), shall not apply to any contract entered into in connection with this Contract.
- (B) REQUIREMENTS Each Contract entered into by the Contractor with a third party in connection with performing the obligations of the Contractor under this Contract shall --
 - (i) be in writing;

(ii) identify the interest parties, the authorities of such parties, and purposes of the Contract;

(iii) state the work to be performed under the Contract; and

(iv) state the process for making any claim, the payments to be made, and the terms of the Contract, which shall be fixed.

(c) OBLIGATION OF THE CONTRACTOR -

- (1) CONTRACT PERFORMANCE Except as provided in subsection (d)(2), the Contractor shall perform the programs, services, functions, and activities as provided in the annual funding agreement under subsection (f)(2) of this Contract.
- (2) AMOUNT OF FUNDS The total amount of funds to be paid under this Contract pursuant to section 106(a) shall be determined in an annual funding agreement entered into between the Secretary and the Contractor, which shall be incorporated into this Contract.
- (3) CONTRACTED PROGRAMS Subject to the availability of appropriated funds, the Contractor shall administer the programs, services, function, and activities identified in this Contract and funding through the annual funding agreement under subsection (f)(2).
- (4) TRUST SERVICES FOR INDIVIDUAL INDIANS -
 - (A) IN GENERAL To the extent that the annual funding agreement provides funding for the delivery of trust services to individual Indians that have been provided by the Secretary, the Contractor shall maintain at least the same level of service as the Secretary provided for such individual Indians, subject to the availability of appropriated funds for such services.

- (B) TRUST SERVICES TO INDIVIDUAL INDIANS For the purposes of this paragraph only, the term 'trust services for individual Indians' means only those services that pertain to land or financial management connected to individually held allotments.
- (5) FAIR AND UNIFORM SERVICES The Contractor shall provide services under this Contract in a fair and uniform manner and shall provide access to an administrative or judicial body empowered to adjudicate or otherwise resolve complaints, claims and grievances brought by program beneficiaries against the Contractor arising out of the performance of the Contract.

(d) OBLIGATION OF THE UNITED STATES -

- (1) TRUST RESPONSIBILITY -
 - (A) IN GENERAL The United States reaffirms the trust responsibility of the United States to *NAPI* to protect and conserve the trust resources of the Indian tribe(s) and the trust resources of individual Indians.
 - (B) CONSTRUCTION OF CONTRACT Nothing in this Contract may be construed to terminate, waive, modify, or reduce the responsibility of the United States to the tribe(s) or individual Indians. The Secretary shall act in good faith in upholding such trust responsibility.
- (2) GOOD FAITH -To extend that health programs are included in this Contract, and within available funds, the Secretary shall act in good faith in cooperating with the Contractor to achieve the goals set forth in the Indian Health Care Improvement Act (25 U.S.C. 1601 et seq.).
- (3) PROGRAMS RETAINED As specified in the annual funding agreement, the United States hereby retains the programs, services, functions, and activities with respect to the tribe(s) that are not specifically assumed by the Contractor in the annual funding agreement under subsection (f) (2).

(e) OTHER PROVISIONS -

- (1) DESIGNATED OFFICIALS Not later than the effective date of this Contract, the United States shall provide to the Contractor, and the contractor shall provide to the United States, a written designation of a senior official to serve as a representative for notices, proposed amendments to the contract, and other purposes for the Contract.
- (2) CONTRACT MODIFICATIONS OR AMENDMENT
 - (A) IN GENERAL Except as provided in subparagraph (B), no modifications to this Contract shall take effect unless such modification is made in the

form of a written amendment to the Contract, and the Contractor and the Secretary provide written consent for the modification.

- (B) EXCEPTION The addition of supplemental funds for programs, functions, and activities (or portions thereof) already included in the annual funding agreement under subsection (f)(2), and the reduction of funds pursuant to section 106(b)(2), shall not be subject to subparagraph (A).
- (3) OFFICIALS NOT TO BENEFIT No Member of Congress, or resident commissioner, shall be admitted to any share or part of any contract executed pursuant to this Contract, or to any benefit that may arise from such contract. This paragraph may not be construed to apply to any contract with a third party entered into under this Contract if such contract is made with a corporation for the general benefit of the corporation.
- (4) COVENANT AGAINST CONTINGENT FEES The parties warrant that no person or selling agency has been employed or retained to solicit or secure any contract executed pursuant to this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business.

(f) ATTACHMENTS -

(1) APPROVAL OF CONTRACT - Unless previously furnished to the Secretary, the resolution(s) of *NAPI* authorizing the contracting of the programs, services, functions, and activities identified in this Contract as <u>Attachment A.</u>

(2) ANNUAL FUNDING AGREEMENT

(A) IN GENERAL - The annual funding agreement under this Contract shall only contain --

(i) terms that identify the programs, services, functions, and activities to be performed or administered, the general budget category assigned, the funds to be provided, and the time and method of payment; and

(ii) such other provisions, including a brief description of the programs, services, functions and activities to be performed (including those supported by financial resources other than those provided by the Secretary), to which the parties agree.

(B) INCORPORATION BY REFERENCE - The annual funding agreement is hereby incorporated in its entirety in this Contract and attached to this Contract as <u>Attachment B</u>

Attachment A

Tribal Resolution(s)

Attachment B

Annual Funding Agreement

UNITED STATES DEPARTMENT OF THE INTERIOR * * * BUREAU OF INDIAN AFFAIRS * * * NAVAJO REGION

ANNUAL FUNDING AGREEMENT

FOR

PROGRAM

WITH THE

NAVAJO AGRICULTURAL PRODUCTS INDUSTRY (NAPI)

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CONTRACT NO. A10AV00796

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SECTION A

DEFINITION OF TERMS

SECTION A

DEFINITION OF TERMS

A-1 Definitions.

The following terms shall have the meaning set forth below throughout this contract:

- Act. Means Public Law 93-638, The Indian Self-Determination and Education Assistance Act of 1975, as amended (25 USC 450, 88 Stat. 2203).
- 2. Annual Funding Agreement. Means a document that represents the negotiated agreement between the Awarding Official and the Contractor to fund, on an annual basis, the programs, functions, services, or activities (or portion thereof) transferred to a tribe or tribal organization under the Act.
- 3. Annual Financial Audit. Means an organization-wide audit as required by Public Law 104-156-Chapter 75, The Single Audit Act Amendments of 1996, as implemented through Office of Management and Budget (OMB) Circular A-133.
- 4. Approving Official. Means Bureau line officers (i.e. Regional Director or Acting Regional Directors) who, by appointment or delegation in accordance with applicable regulations, have the authority to approve or decline contract proposals/application to enter into contracts under the Act.
- 5. Awarding Official. Means any person, other than an Approving Official, who, by appointment or delegation in accordance with applicable regulations, has the authority to enter into and administer contracts on behalf of the United States of America and make determinations and findings with respect thereto. Pursuant to the Act, this can be any Federal official, including but not limited to, Contracting Officers.
- 6. Awarding Official's Technical Representative (AOTR). Means any person authorized to represent the Awarding official in contract administration. The Awarding Official Technical Representative shall designate the AOTR. Designation of an Awarding Official's Representative and/or Subordinate Awarding Official's Technical Representative (SAOTR) must be in writing from the Awarding Official. The Memorandum of Designation must clearly define the duties, authorities and responsibilities of each representative. A copy of such designation shall be made available to the contractor.
- 7. **Contract.** Means a self-determination contract (or grant or cooperative agreement utilized in lieu of a contract under Section 9 of the Act) entered into under Title I of the Act between a tribal organization and the Secretary for the planning, conduct and administration of the programs or services which are otherwise provided to Indian Tribes and their members pursuant to Federal Law: Provided, That except as provided in the last proviso in section 105(a) of the Act, no contract (or grant or cooperative agreement utilized under Section 9 of this Act) entered into under Title I of this Act shall be construed to be a procurement contract.
- 8. **Contractor.** Means the recipient of a contract.

- 9. **Contract Modification.** Means a written change to the contract document, which has been mutually agreed to by the Awarding Official and the contactor.
- **10. Contract Records.** Means records maintained to support activity under the contract. Contract records shall include, but not be limited to, the following:
 - (a.) The contract award documents;
 - (b.) Any and all modifications to the contract;
 - (c.) Financial records; and,
 - (d.) Records created or maintained as a result of the contract.
- 11. Days. Means, unless otherwise specified in this contract, calendar days.
- **12. Declination.** Means written notification by a Bureau Approving Official not to enter into a self-determination contract.
- **13. Indirect Costs.** Means costs incurred for a common or joint purpose benefiting more than one cost objective, or which are not readily assignable to a specific cost objective.
- **14. Indirect Cost Rate.** Means the rate arrived at through negotiation between an Indian tribe or tribal organization and the appropriate Federal agency (National Business Center).
- **15. Mature Contract.** Means a contract that has been continuously operated by a tribal organization for three or more years, and for which there are no significant and material audit exceptions in the most recent annual financial audit of the tribal organization. A mature contract may be for a definite or an indefinite term as requested by the tribe or, to the extent not limited by tribal resolution, by the tribal organization.
- **16. Program Records.** Means records created or maintained to support activity within the contracted program. Program records shall include, but not be limited to, the following:
 - (a.) Application for assistance under the specified program;
 - (b.) Case files, student files, etc.,
 - (c.) Correspondence;
 - (d.) Financial records; and
 - (e.) Any other records established under the P.L. 93-638 contract.
- 17. Reassumption. Means the taking back of a program or function by the Secretary.
- **18. Recontracting.** Means the renewal of a contract with a tribal organization for the same program.

- **19. Retrocession.** Means the return of a program or function to the Secretary where a tribe determines that it no longer desires to operate the program or function under a contract.
- **20. Secretary.** Means the Secretary, the Under Secretary, and Assistant Secretary, or any other head or assistant head of the Department of the Interior or his authorized representative(s); and the term "his duly authorized representative" means any person or board (other than the Contracting Officer) authorized to act for the Secretary.

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SECTION B

PROGRAM AND BUDGET

PROGRAM AND BUDGET

B-1. Program(s).

The contractor shall perform those portions of the Bureau of Indian Affairs' Operation, Maintenance & Replacement, On-Farm Development, Agricultural Testing and Research Laboratory Programs, described herein in accordance with the terms, provisions and conditions of this contract.

B-2. Contract Budget

The budget for the services provided under the contract reflects the agreements reaching during contract negotiations. The contract budget includes both direct and indirect costs.

- a. The Contractor shall request prior approval for budget revision whenever:
 - (1.) The budget revision results from changes in the scope or objective of the program;
 - (2.) The revision requires additional funding;
 - (3.) The revision causes a change in the amount of indirect cost for the contract; or,
 - (4.) The revision pertains to the addition of items requiring approval of the Bureau of Indian Affairs.
- **b.** All other budget revisions do not require approval.

B-3. Contract Amount.

The Bureau of Indian Affairs will provide under this Agreement for Fiscal Year 2016 the amount		
of \$10,180,422.00 As follows:	Operation & Maintenance	\$8,279,233
	On-Farm	\$1,271,189
	ATRL	\$630,000

B-4. Contract Supports Funds.

The Bureau of Indian Affairs shall provide Contract Support Funds, subject to availability of funding, according to the Indirect Cost Negotiation Agreement between the Contractor and the National Business Center, and according to Bureau of Indian Affairs policies and procedures pertaining to the distribution of Contract Support Funds.

B-5. Availability of Funds.

The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability by the Government for any payment may arise until funds are made available to the Awarding Official for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Awarding Official.

SECTION C

DESCRIPTIONS/SPECIFICATIONS/WORK STATEMENT

DESCRIPTIONS/SPECIFICATIONS/WORK STATEMENT

C-1. Scope of Bureau Program(s) to be Performed.

Purpose: To state the terms, conditions, and work to be performed under the contract and the rights and responsibilities of each party, to enable the Contractor to acquire and utilize all resources made available by the Bureau of Indian Affairs (BIA) for the delivery of services and programs specified herein, pursuant to the P.L. 93-638, as amended, and other applicable Federal Laws.

- **a.** The Contractor shall obtain from the BIA all such funds and other resources made available for the benefit of the tribe for all programs to be operated and services to be delivered by the Contractor through this contract on behalf of the BIA, except for "Trust" and executive functions of the BIA considered non-contractible.
- **b.** The BIA shall transfer to the Contractor all such funds and other resources made available for the benefit of the Tribe through his contract in the most expeditious manner authorized by law, and shall provide technical support and assistance at the request of the Contractor and as provided herein.
- **c.** The Contractor shall exercise full discretion over the funds made available subject only to the provisions of this contract and Federal Law.

C-2. <u>Scope of Work</u>.

The Contractor shall administer the program under this agreement in accordance with its own laws and policies, which are incorporated herein by references. The provisions of applicable Federal Regulations shall apply, unless the Secretary has waived such regulations. Such regulations are incorporated in this agreement by reference.

The Navajo Agricultural Products Industry (Contractor) is entering into this agreement with the Bureau of Indian Affairs (BIA) to provide all necessary qualified personnel, facilities, equipment and materials required by this contract to perform: See Attachment Numbers 1, 2, and 3.

C-3 <u>Non-Contracted Portion of Bureau Program(s)</u>.

The Government, through the BIA, will:

- **1.** Provide, to the greatest possible, administrative and technical assistance, to assist the Contractor to successfully operate the program and enable it to avoid retrocession.
- 2. Monitor the submission of contract required narrative reports.
- **3.** Provide monitoring services to ensure compliance with the terms of this contract and that work is performed in accordance with the goals and objectives. This monitoring function will include, but not limited to, the following:

- a. One annual evaluation (Monitoring Session) by the Navajo Region, Branch of Indian Self-Determination Office and designated AOTR. This visit shall be scheduled in advance before such visit takes place as prescribed in Section b. (7)(C) of the 108 Model Agreement or as requested by the Contractor.
- **b.** The Navajo Region, Branch of Indian Self-Determination and the Branch of Navajo Indian Irrigation Program (AOTR) will review records, speak to NAPI Operations and Maintenance Manager and staff, and inspect premises to determine compliance with this contract.
- c. One or more additional visits as requested by the Contractor or when the Awarding Official determines that there is reasonable cause to believe that grounds for reassumption of the contract, suspension of contract payments, or other serious contract performance deficiency may exist. See Section b. (7)(C) of the 108 Model Agreement.

C-4. Fair and Uniform Services.

The Contractor agrees that any service or assistance provided to Indians under the contract shall be provided in a fair and uniform manner.

SECTION D

DELIVERIES OF PERFORMANCE

1

SECTION D

DELIVERIES OF PERFORMANCE

D-1. <u>Contract Period</u>.

The contract will be determined on the basis of **Calendar Year** (CY) and shall commence from <u>January 1, 2016</u>, and will expire <u>December 31, 2020</u>, a "*Mature Contract*" will definite Term of five years.

The Contract (funding period) for CY 2016 Annual Funding shall be from <u>January 1, 2016</u>, and ending <u>December 31, 2016</u>.

D-2. <u>Submission of Reports</u>.

- a. Financial Status Report (SF-269A). The Contractor agrees to submit an original report to the Awarding Official, through the designated Awarding Official's Technical Representative (AOTR). This report shall be used to monitor expenditures incurred during quarterly operations. Included with the SF-269A shall be the itemized breakdown of costs incurred. The reports shall be submitted within <u>30 days</u> after the dates shown below; Also, the Final SF-269A shall be submitted with the Annual Report (See Annual Report):
- CY 2015 March 31 June 30 September 30 December 31
- **b.** Annual Reports. The brief Annual Report shall be submitted <u>90 days</u> after closure of each contract funding period (Year 2016, 2017, 2018, 2019, and 2020). The report shall entail the conduct of program and activities in:
 - (1.) Accomplishments of the project.
 - (2.) Description of any significant problems encountered.
 - (3.) Any changes required to the contract.
- c. Report to the members of NAPI's Board of Directors. The contractor shall make available a report to members of Navajo Nation and NAPI Board of Directors, an accounting of the amounts and purpose for which the contract funds were expended during the previous month in the following manner:
 - (1.) By delivering a report to the NAPI Board of Directors Meeting, putting a notice in the newsletter, or posting a notice in a conspicuous place readily accessible to the members of the Navajo Nation, or
 - (2.) By such other means as is mutually agreed to by the NAPI and the BIA.
- d. <u>Other Reports</u> as requested by Central Office, Office of Management and Budget (OMB) or Congress, including Government Performance Result Act (GPRA) and Program Assessment Rating Tool (PART).

The AOTR will notify the Contractor of delinquent report(s) and suggest the due date that the BIA must receive the delinquent report(s). If the Contractor fails to submit the overdue report(s) by the established deadline, the AOTR will notify the Awarding Official and recommend some corrective action. The Awarding Official will than take appropriate action to ensure that the Contractor complies with the terms, conditions and general contract provisions of the contract. All reports shall be sent directly to the AOTR at the Navajo Regional Office, NIIP, 304 North Auburn Avenue, Suite B, Farmington, New Mexico 87401.

GPRA: The Contractor agrees to provide applicable data and information to the Bureau of Indian Affairs, Navajo Regional Office pursuant to the Government Performance Result Act (GPRA) of 1993 (Pub. L. 103-62). Before providing such information, the Contractor will work with Awarding Official's Technical Representative, who will work with Regional Office/GPRA Coordinator to determine applicable data and information needed to meet the requirements pursuant to the GPRA of 1993 (Pub. L. 103-62).

D-3. <u>Character Investigation</u> required by Pub. L. 101-630, Section 408. Indian Child Protection and Family Violence Prevention Act

The Contractor shall:

- **a.** Conduct an investigation of the character to each individual who is employed or is considered for employment in this grant when it has been determined that their duties and responsibilities involve regular contact with, or control over, Indian children.
- **b.** Ensure those persons must meet the standard of character of not having been found guilty of, or entered a pleas of nolo contendere or guilty of any offense under Federal, state, or tribal law involving crimes of violence, sexual assault, molestation, exploitation, sexual or prostitution, or crimes against persons.
- **c.** The results of the background investigations should become a part of the employee's personnel file and should be available for review by the Awarding Official or his/her designated representative.
- **d.** All information shall be confidential and maintained in accordance with the rules and regulations of the Privacy Act.

D-4. <u>Audit Requirements (Single Audit Act)</u>.

e. The Contractor agrees to arrange for, participate fully in, and respond promptly and fully to the recommendation of an annual single organization-wide audit as prescribed by the Single Audit Act Amendment of 1996 in the current Office of Management and Budget (OMB) Circular A-128, Circular 1-133 and in Title 43 Code of Federal Regulations Part 12. The costs of such audits are allowable charges only if made according to Circular provisions. Small and minority business audit firms shall be afforded maximum practicable opportunity to participate in awardee contract to fulfill the requirements herein. The preference requirements of Section 7(b), Public Law 93-638, shall apply and are to be enforced.

- f. If the Contractor fails to comply with the requirements for obtaining audits according to the Single Audit Act Amendment of 1996, the Bureau of Indian Affairs may take one or more of the following actions as appropriate in the circumstances:
 - (1.) Temporarily withhold cash payments, indirect cost and/or contract support funds pending correction of the deficiency by the awardee or more severe enforcement actions by the Bureau;
 - (2.) Disallow (that is, deny use of funds) all or part of the cost of the activity or actions not in compliance;
 - (3.) Wholly or part suspend the current award for the awardees program; or
 - (4.) Take other remedies that may be legally available.
- g. The Contractor may appeal the BIA decision for sanctions under the Dispute Clause of the contract.
- **h.** If the Contractor spends more than \$500,000 in total Federal financial assistance from all sources, the following submission requirement apply:
 - i. To fulfill Single Audit Act Requirement.
 - (1.) Send one copy of the audit report with Form SF-SAC (Data Collection Form)to the Federal Audit Clearinghouse:

Federal Audit Clearinghouse U.S. Bureau of the Census 1201 East Tenth Street Jeffersonville, IN 47132

- (2.) Submit one additional copy of the report to the Clearinghouse for <u>each</u> funding agency that has a finding, either current or prior year, related to the grants/contracts provided them.
- ii. The contractor must send two copies of its Single Audit Reports to the Office of Internal Evaluations and Assessment to meet the reporting requirements of the Indian Self-Determination and Education Assistance Act. The address is:

Office of Internal Evaluations and Assessment U.S. Department of the Interior 2051 Mercator Drive Reston, VA 20191

D-5 Monitoring and Records Review.

1. The Contractor shall maintain books, records, documents, and other evidence and accounting procedures and practices; sufficient to reflect property all direct and indirect costs of whatever nature claimed to have been incurred and anticipated and to be incurred for the performance of this contract. The foregoing constitutes "records" for the purposes of this clause.

- 2. The Contractor's facilities or such part thereof as may be engaged in the performance of this contract, and these records shall be subject at all reasonable times to inspection and audit by the Awarding Official or his or her authorized representatives.
- 3. The Contractor shall preserve and make available his records:
 - (a.) Until the expiration of three years from the date of final payment under this contract, or of the time period for the particular records specified in 25 CFR, Chapter V, Part 900, Subpart F, Subsection 900.41 (a-d), whichever expires earlier; and,
 - (b.) For such longer period, if any, as is required by applicable statute, or by other clauses of this contract, or by (1) or (2) below:
 - (1.) If the contract is complete or partially canceled, the records relating to the work terminated shall be preserved and made available for a period of three years from the date of any resulting final settlement.
 - (2.) Records which relate to (A) appeals under the "Disputes" clause of this contract, (B) litigation or the settlement of claims arising out of the performance of this contract, or (C) costs and expenses of this contract as to which exception has been taken by the Awarding Official or any of this duty authorized representatives, shall be retained until such appeals, litigation, claims or exceptions have been disposed of.
- 4. The Contractor shall insert the substance of this clause, including the whole of this paragraph 4, in each subcontract hereunder that is not firm-fixed-price or fixed-price with escalation. When so inserted, changes shall be made to designate the higher-tier subcontractor at the level involved in place of the Contractor; to add "of the Government prime contract" after "Awarding Official", and to substitute "the Government prime contract" in place of "this contract" in (2) of paragraph 3 (b) (2) above.
- D-6 Examination of Records. (This clause is applicable if the contract exceeds \$10,000.)

(a.) (1) The contractor agrees to maintain books, records, documents and other evidence pertaining to the costs and expenses of this contract (hereinafter collectively called "records") to the extent and in such detail as will properly reflect all net costs, direct and indirect, of labor, materials, equipment, supplies and services, and other costs of whatever nature for which reimbursement is claimed under the provisions of this contract.

(2) The contractor agrees to make available at the office of the contractor at all reasonable times during the period set forth in subparagraph (4) below any of the records for inspection, audit or reproduction by any authorized representative of the Comptroller General, the Secretary of Interior and the Awarding Official.

(3) If the Comptroller General or any of his duly authorized representatives determine that his audit of the amounts reimbursed under this contract as transportation charges will be made at a place other than the office of the contractor, the contractor agrees to deliver, with the reimbursement voucher covering such charges or as may be otherwise specified within 2 years after reimbursement of charges covered by any such voucher, to such documentary evidence in support of transportation costs as may be required by the Comptroller General or any of his authorized representatives.

(4) Except for documentary evidence delivered by the Government pursuant to subparagraph (3) above, the contractor shall preserve and make available his records;

(i) Until expiration of 3 years after final payment under this contract; and

(ii) For such longer period, if any, as is required by applicable statutes, by any other clause of this contract, or by (A) or (B) below:

(A) If this contract is completely or partially terminated, the records relating to the work terminated shall be preserved and made available for a period of 3 years from the date of any resulting settlement.

- (B) Records which relate to:
 - (i) Appeals under the disputes clause of this contract;
 - (ii) Litigation or the settlement of claims arising out of the performance of this contract; or

(iii) Costs and expenses of this contract to which exception has been taken by the Comptroller General, Secretary of the Interior or the contracting officer, or any of their dully authorized representatives, shall be retained by the contractor until such appeals, litigation, claims or exceptions have been disposed of.

(5) Except for documentary evidence delivered pursuant to subparagraph (3) above, and the records described in subparagraph (4)(ii)(B) above, the contractor may in fulfillment of his obligation to retain his records as required by this clause substitute photographs, microphotographs, or other authentic reproductions or such records, after the expiration of 2 years following the last days of the month of reimbursement to the contractor of the invoice or voucher to which such records relate, unless a shorter period is authorized by the awarding official (contracting officer) with the concurrence of the Comptroller General or his duly authorized representative.

D-7 <u>Effect on Existing Rights</u>.

- (A) Nothing in this contract shall be construed as
 - (1) Affecting, modifying, diminishing, or otherwise impairing the sovereign immunity from suit enjoyed by an Indian tribe; or,
 - (2) Authorizing or requiring the termination of any existing trust responsibility of the United States with respect to the Indian people.

D-8. Motor Vehicle Safety Policy

The Navajo Agricultural Products Industry certifies that it will self-administer a motor vehicle policy that promotes the safe and prudent operations of a motor vehicle while performing duties to implement the terms of the agreement. The Navajo Agricultural Products Industry's policy is either as stringent as or more stringent than the May 3, 2006 Motor Vehicle Operators Policy for the Bureau of Indian Affairs (BIA) issued by the Associate Deputy Secretary.

D-9. Records Management.

The Tribe Agrees to:

- (a) Preserve, protect and manage all fiduciary trust records, created and/or maintained by the Tribes during their management of trust programs in their Title I agreements. (A fiduciary trust record is any document that reflects the existence of an Indian trust asset and was used in the management of an Indian trust asset. An Indian trust asset refers to lands, natural resources, monies or other assets held in trust at a particular time by the Federal Government for a Tribe, Alaska natives or that are or were a particular time restricted against alienation, for individual Indians. Management includes actions that influence, affect, govern, or control an Indian trust asset. The following are examples not considered to be fiduciary trust records: general administrative, personnel or travel records; education records; law enforcement records; health records; law making unrelated to Indian trust assets; tribal council resolutions and laws unrelated to Indian trust assets; and tribal elections.
- (b) Make available to Secretary all fiduciary trust records maintained by the Tribe, provided that the Secretary gives reasonable oral or written advance request to the Tribe. Access shall include visual inspection and at the expense of the Secretary the production of copies (as agreed upon between the parties) and shall not include the removal of the records without tribal approval; and
- (c) Store and permanently retain all inactive fiduciary trust records at the Tribe or allow such records to be removed and stored at the American Indian Records Repository (AIRR) in Lenexa, Kansas at no cost to the Tribe.

The Secretary agrees to:

- (a) Allow the tribe to determine what records it creates to implement that trust program assumed under its Title I agreement, except that the Tribe must create and maintain the information required by the statue and regulation. No additional record keeping requirements are required by this agreement.
- (b) Store all inactive fiduciary trust records at AIRR at no cost to the Tribe and when the Tribe no longer wishes to the keep the records. Further, the Tribe will retain legal custody and determine access to these records and such records shall not be treated as Federal records and purposes of chapter 5 of Title 5 of the United States Code unless expressly agreed by the Tribe:
- (c) Create and manage a single tribal storage and retrieval system for all fiduciary trust records stored at AIRR (No records will be accepted at AIRR until such retrieval system exists); and
- (d) Provide file equipment and technical assistance for Tribes in preserving, protecting and managing their fiduciary trust records from available funds appropriate for this purpose.

SECTION E

CONTRACT ADMINISTRATION

<u>SECTION E</u>

CONTRACT ADMINISTRATION DATA

E-1. Cognizant Contract Administration.

All information or questions concerning this contract should be referred to:

Indian Self-Determination Specialist/Awarding Official Bureau of Indian Affairs – Navajo Regional Office P. O. Box 1060 Gallup, New Mexico 87305 Telephone No. (505) 863-8228/8401 Fax No. (505) 863-8461

E-2. Contract Administration.

Designate a person whom we may contact for prompt contract administration.

Name: Lionel Haskie Title: Operations and Maintenance Manager

Telephone No.: <u>(505) 566-2600 ext. 2636</u>

Alternate: Tsosie Lewis _____ Title: Chief Executive Officer

Telephone No.: (505) 566-2600

E-3. Designation of Awarding Official's Technical Representative.

Michael Howe, Civil Engineer, Acting NIIP Project Manage, Navajo Regional, is designated as the authorizing Awarding Official's Technical Representative (AOTR).

E-4. Designation of Subordinate Official's Technical Representative.

There is no Designation of Subordinate Official's Technical Representative.

E-5. <u>Contract Payment.</u>

For performing this contract, the Contractor shall be reimbursed for its allowable direct and indirect costs, not to exceed the total budgeted amount of this contract. The total budget amount of this contract is stated in item 14 of the SF-30, Amendment of Solicitation/Modification of Contract.

- Contract payment shall be made to the Contractor through the Bureau of Indian Affairs P-638 Automated Clearing House (ACH) Payment System.
- 2. Notwithstanding any other provisions by law, Contract Payment shall be made in advance on a quarterly, semiannual, or lump sum basis. Each quarterly payment shall be

made on the first day of each quarter of each fiscal year, the first semiannual payment shall be made on the first day of the first quarter of the contract year, the final semiannual payment shall be made on the first day of the third quarter of the contract year, the lump sum payment shall be made on the first day of the first quarter of the contract year, except that in any case in which the contract year coincides with the Federal fiscal year, payment for the first quarter shall be made no later than the date that is ten (10) calendar days after the date on which the Office of Management and Budget apportions the appropriations for the fiscal year for the programs, services, functions, and activities subject to this contract.

- 3. Check one of the following:
 - () Quarterly Payments
 - () Semi-Annual Payments
 - (X) Annual Payments (Lump Sum)
 - (X) Other Payment Methods.

E-6. Use of Funds Advanced.

Funds advanced to the Contractor shall be used only for purposes authorized under this contract. The funds advanced cannot be used for any purpose other than an authorized Bureau program expenditure, even on a temporary basis. Further, funds advanced pending disbursement for a purpose authorized under this contract shall not be transferred to tribal accounts, lent to such tribal accounts, or expended for programs or purposes not specifically authorized under this contract. Funds advanced, pending expenditure under this contract, shall be placed in appropriate savings, checking, or investment accounts. Such funds when invested or deposited shall be in compliance to Clause F-8. Investment of Funds.

E-7. Sanctions.

Failure to maintain the integrity of contract funds shall result in imposition of one or mor of the following sanctions:

- **a.** Pursuant to Section 5(d) of Pub. L. 93-638, as amended (25 USC 450c(d)), funds paid to the Contractor and not used for the purposes for which they were paid shall be repaid to the Treasury of the United States; and,
- **b.** Cancellation of Advance Payment methodology and invocation of "other payment methodologies" as provided in E-5. Contract Payment, above.
- **c.** Sanction shall remain in place until the Contractor provides assurance that the impropriety which resulted in the imposition of sanction, has been rectified and will not reoccur.

E-8 Submission of Invoices.

For performing this contract, the Contractor shall accept to maintain expenditures within the budgeted line item amount. The Financial Status Report (SF-269A) shall be required quarterly in assisting the Awarding Official's Technical Representative (AOTR) in monitoring progress of the contracts.

- a. At any time or times prior to final payment under this contract, the Awarding Official may cause to be made such audits of the invoices or vouchers and statements of costs as shall be deemed necessary. Each payment made before that time shall be subject to reduction to the extent that amounts included in the related invoice or vouchers and statement of cost are found by the Awarding Official not to constitute allowable cost, and shall also be subject to reduction for overpayment or to increase for underpayment on receding invoices or vouchers.
- b. On receipt and approval of the voucher or invoice designated by the Contractor as the "Final voucher" or "Final invoice" and statement of costs, which the Contractor as promptly shall submit as may practicable following completion of the work under this contract, but by ninety (90) days or such longer periods as the Awarding Official may in his or her discretion, approved in writing from the date of such completion, and following compliance by the Contractor with all provisions of this contract; the Government shall, as promptly as may be practicable, pay to the Contractor any balance of allowable costs.
- **c.** Any cost incurred by the Contractor under the terms of this contract that would constitute allowable cost under the provisions of this clause shall be included in determining the amount payable under this contract; notwithstanding any provisions contained elsewhere in this contract by reference, designating services to be performed or materials to be furnished by the Contractor at its expense or without cost to the Government.

E-9. Contract Revision or Amendment.

- 1. This contract may be revised or amended as required to carry out the purpose of the program, project or function being contracted. The Contractor shall submit proposed revisions through Awarding Official's Technical Representative to the Awarding Official. The Contractor (if other than the tribal governing body) shall also send copies of the proposed revision to the designated representative of the tribal governing body at the same time as they are sent to the Awarding Official. The Awarding Official shall process and review the proposed revision according to Section 102(B) of the Act, 25 CFR Part 900, Subpart E.
- 2. When the Awarding Official recommends declination of a Contractor's request to amend the contract, the matter shall be resolved as prescribed in P.L. 93-638, as amended (Section 102B of Act and accordance with CFR 900, Subpart B).

E-10. Pre-Contract Costs.

Any costs the contractor incurs before the award date or effective date of this contract may be reimbursed if the Awarding Official determines such costs, to be allocable, allowable, reasonable, and necessary to delivery of program services. The contractor is advised that incurrence of the pre-contract costs is made at its own risk.

E-11. Negotiated Indirect Cost Rate.

a. The allowable indirect costs under this contract shall be obtained by applying negotiated indirect costs rate to bases agreed upon by the parties, as specified below.

- **b.** Negotiation of indirect cost rates by the Contractor and the cognizant audit agency shall be undertaken as promptly as practicable after receipt of the Contractor's indirect cost proposal.
- c. Allowability of costs and acceptability of cost allocation methods shall be determined according to OMB Circular A-87.
- **d.** The results of each negotiation shall be set forth in an Indirect Cost Negotiation Agreement, such agreement shall become a part of this contract by reference. The agreement shall specify:
 - (a) The agreed indirect cost rate(s);
 - (b) The base to which the rate(s) apply;
 - (c) The periods for which the rate(s) apply; and
 - (d) The specific items treated as exclusion or any changes in the items previously agreed to be treated as exclusions.
- e. The Contractor is to be reimbursed for all allocable and allowable indirect costs incurred in performance of this contract, subject to any statutory limitations applicable.
- f. Any failure by the parties to agree on any indirect cost rate(s) or applicability of the rate(s) to the bases under this provision shall be considered as dispute concerning a question of fact for decision by the Awarding Official within the meaning of the clause of this contract entitled "Disputes."

E-12. Billing for Indirect Cost.

The Contractor shall bill for indirect cost earned on this voucher\invoice showing the following, for the period covered by the voucher\invoice:

- 1. Total direct cost expenditures.
- 2. Less Exclusions.
- 3. Times Indirect Cost Rate.
- 4. Indirect Cost earned for the period covered.

 $(1) - (2) \times (3) = (4).$

E-13. <u>Disputes</u>.

This contract is subject to the 25 CFR, Chapter V, Part 900, Subpart N.

- 1. All disputes arising under or relating to this contract shall be resolved under Subpart N, "Post-Award Contract Dispute."
- 2. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Awarding Official.

E-14. Payment of Interest on Contractor's Claims.

If an appeal is filed by the contractor from a final decision of the Awarding Official under the disputes clause of this contract, denying a claim arising under the contract, simple interest on the amount of the claim finally determined owed by the Government shall be payable to the contractor. The procedures specified in 25 CFR, Charter V, Subpart N, Subsection 900.228 shall be followed:

- 1. Interest shall be applied only from the date payment was due, if such date is later than the filing of appeal, and
- 2. Interest shall not be paid for any period of time that the Awarding Official determines the contractor has unduly delayed in pursuing this remedies before a board of contract appeals or a court of competent jurisdiction.

E-15. <u>Retrocession</u>.

The Contractor agrees to comply with the provisions of section 105(e) of the Act, as amended, and be guided by the procedures in 25 CFR Part 900, Subpart P in the event of retrocession.

E-16. <u>Reassumption</u>.

The Contractor agrees to comply with the provisions of section 109 of the Act, as amended, and be guided by the procedures in 25 CFR Part 900, Subpart P in the event of reassumption.

SECTION F

SPECIAL CONTRACT REQUIREMENTS

SPECIAL CONTRACT REQUIREMENTS

F-1. Management Systems.

The BIA, Navajo Regional Office has, on file, the most recent versions of the following management systems Policies and Procedures Manual:

- a. Personnel Management.
- b. Travel Policy.
- c. Property Manual.
- d. Procurement Manual.

F-2. Finance System Certification

Certification by a licensed accountant that the bookkeeping and accounting procedures that the tribal organization presently uses meets the standards of 25 CFR Part 900, Subpart F. In place of the certification; the tribal organization may submit written agreement to establish a bookkeeping and accounting system that meet the standards of 25 CFR Part 900, subpart F, and to have the bookkeeping and accounting system certified before the Bureau of Indian Affairs disburses any funds under a contract awarded as a result of this funding agreement. The bookkeeping and accounting system shall provide for the accumulation of costs throughout the contract term or performance period in such a manner as to facilitate audit or review of the financial records.

The Navajo Agricultural Products Industry has submitted the certification and is on file at the Bureau of Indian Affairs, Navajo Regional Office.

F-3. <u>Recordkeeping</u>

The Contractor agrees to keep such records as required pursuant to Sec. 108(c)(b)(7)(A) of the Act, as amended, to make reports required by Sec. 5(a)(1) and (2), of the Act, as amended, and to make such information and reports available to the Indian clients as required by Sec. 5(c), of the Act, as amended. The Contractor shall be required to maintain a recordkeeping system that will allow for the maintenance of records to facilitate retrocession or reassumption. Such a records system, as a minimum, shall:

- 1. Unless otherwise required by law, the Bureau shall not place restrictions on tribal Contractors that will limit public access to the tribal Contractor's records except when records must remain confidential.
- 2. The Contractor shall make all reports and information concerning the Contract available to the Indian people that the Contractor serves or represents.
- 3. A request to inspect or copy records and information shall be in writing and must be reasonably described in the reports and information requested. The request may be delivered or mailed to the Contractor. Within ten (10) working days after receiving the request, the Contractor shall determine whether to grant or deny the request. The requester shall be notified immediately of the determination.

4. The time for making a determination may be extended up to an additional (10) working days for good reason. The requester shall be notified in writing of the extension, reasons for the extension, and the date on which the determination is expected to be made.

F-4. Privacy Act Requirements.

When a tribal Contractor operates a system of records to accomplish a Bureau function, the contractor shall comply with Subpart D of 43 CFR Part 2 that implements the Privacy Act (5 U.S.C. 552a).

F-5. Freedom of Information.

- 1. Unless otherwise required by law, the Bureau shall not place restrictions on tribal Contractors that will limit public access to the tribal Contractor's records except when records must remain confidential.
- 2. The Contractor shall make all reports and information concerning the Contract available to the Indian people that the Contractor serves or represents.
- 3. A request to inspect or copy records and information shall be in writing and must be reasonably described in the reports and information requested. The request may be delivered or mailed to the Contractor. Within ten (10) working days after receiving the request, the Contractor shall determine whether to grant or deny the request. The requester shall be notified immediately of the determination.
- 4. The time for making a determination may be extended up to an additional ten (10) working days for good reason. The requester shall be notified in writing of the extension, reasons for the extension, and the date on which the determination is expected to be made.

F-6. <u>Drug-Free Workplace</u>

In the performance of this contract, the Contractor shall certify to a drug-free workplace pursuant to the Drug-Free Workplace Act of 1988 (Pub. L. 100-689), for all contracts in excess of \$25,000.00

F-7. Indian Preference Requirements.

This contract requires, and any subcontract shall require, that to the greatest extent feasible:

- (a) Preference and opportunities for training and employment in connection with the administration of the contract or subcontract shall be given to Indians.
- (b) Preference in the award of a subcontract, contract, or subgrant in connection with administration of the contract shall be given to Indian organization and economic enterprises.
- (c) The Contractor may develop its own Indian preference requirements to the extent that such requirements are not inconsistent with the purpose and intent of the Paragraphs (a) and (b).

F-8. Investment of Funds

- a. Advanced funds not immediately spend for program activities may be invested only in obligations of the United States or in obligations or securities that are guaranteed or insured by the United States.
- b. If not invested, advanced funds must be deposited into accounts that are insured by an a agency or instrumentality of the United States or must be fully collateralized to ensure protection of the funds.
- c. Interest and investment incomes that accrue on any funds provided for by contract become the property of the contractor/grantee.

F-9. Federal Tort Claims Act (FTCA).

- 1. <u>FTCA Coverage</u>. For purpose of FTCA coverage, the Contractor and its employees (including individuals performing personal service contracts with the Contractor to provide health care services) are deemed to be employees of the Federal government while performing work under this contract. This status is not changed by the source of the funds used by the Contractor to pay the employee's salary and benefits unless the employee receives additional compensation for performing covered services from anyone other then the Contractor.
- 2. <u>FTCA Liaison</u>. In accordance with the requirement in 25 CFR, Part 900, Subpart L, subsection 900.188(a) the Contractor agrees to designate an individual to serve as tort claims liaison with the Federal government. The tort claims liaison shall provide the assistance specified in 25 CFR, Part 900, and Subpart L. subsection 900.188(c).

F-10. Insurance Coverage.

Insurance Coverage must be obtained from an insurance provider that is licensed by the State Insurance Commission or State Insurance Board in the state in which the contractor is located and where the work is to be performed. The Contractor's direct or indirect costs associated with the purchase of insurance shall be <u>disallowed</u> if the insurance is purchased from an unlicensed insurance carrier and paid for with Federal funds.

F-11. SUBCONTRACT ADMINISTRATION for On-Farm Projects

- 1. The Contractor shall maintain a contract administration system that ensures each subcontractor performs in accordance with the terms and conditions of its subcontract, including maintaining records with sufficiently detail the significant history of a subcontract.
- 2. The Contractor has ultimate responsibility for the construction project and is not relieved of such responsibility by authorizing performance of the work by a subcontractor or BIA. Such responsibility includes but is not limited to:
 - a. Providing adequate supervision, inspection, and materials testing to ensure that the project is completed in conformance with approved plans and specifications;

- b. Efficiently and effectively administering subcontract through the application of sound management practices and business judgment including:
 - (i) Ensuring that program funds have been expended and accounted for consistent with underlying agreements and program objectives;
 - (ii) Assuming responsibility for employing whatever form of organization and management this necessary to assure proper and efficient administration;
 - (iii) Obtaining all access rights, licenses, and permits when the project is located on lands where the Contractor does not have legal jurisdiction or when special conditions warrant. In such instances, the Contractor will be relieved form overall project responsibility and should coordinate with the entity have jurisdiction to perform the work with its own forces or by subcontract; and
 - (iv) Settling all contractual and administrative issues arising from procurement. These issues include, but are not limited to source evaluation, protests, disputes and claims. The Contractor will have protest procedures to handle and resolve disputes relating to its subcontracts and shall disclose information regarding the protest to the Awarding Official.
- c. Processing regular progress payments to subcontractors as work is accomplished. The Contractor is not authorized to make advance payments to subcontractors unless otherwise negotiated.

F-12. <u>RECORDS AND MONITORING for On-Farm Projects.</u>

- 1. The Contractor shall be responsible for managing the day-to-day operations conducted under this Contract and for monitoring activities conducted under this Contract to ensure compliance with the Contract and applicable Federal requirements. With respect to the monitoring activities of BIA, the monitoring visits and or inspection shall include those jointly determined to be necessary to ensure compliance with the contract, including structural integrity of the project and compliance with safety, health, and environmental standards or requirements. Prior to beginning of construction the Contractor and BIA will agree upon BIA process for monitoring the project activities.
- 2. The Contractor shall maintain on the job-site or project office, and make available to AOTR during monitoring visits:
 - a. Contracts.
 - b. Major subcontracts
 - c. Modifications
 - d. Construction documents.
 - e. Change orders
 - f. Shop drawings
 - g. Inspection reports,
 - h. Testing reports, and
 - i. Current redline drawings, and
 - j. Progress Reports.

F-13. OTHER PROVISIONS - On Farm Projects

CHANGES – BIA will oversee and direct technical changes to the plans or specifications under this contract upon obtaining the concurrence of the Contractor. Changes that require an increase to the negotiated contract budget or an increase in the negotiated performance period or are a significant departure from the scope or the objective of the project shall require approval of the BIA through the Awarding Official.

F-14. SUSPENSION OF WORK - On Farm Projects

The Secretary through BIA can require the Contractor to suspend work under a contract in accordance with this clause. The BIA may suspend a contract for no more than 30 days unless the tribal organization has failed to correct the reason(s) for the suspension that cannot be resolved through either the efforts of the BIA or the Contractor:

- a. The BIA may suspend work for the following reason(s) under a Self-Determination contract for construction:
 - Differing site conditions encountered upon commencement of construction activities that impact health and safety concerns or shall require an increase in the negotiated project budget;
 - (ii) The BIA discovers materially non-compliant work;
 - (iii) Funds allocated for the project that is the subject of this contract are rescinded by Congressional action; or
 - (iv) Other Congressional actions may occur that materially affects the subject matter of the contract.
- b. If the BIA wishes to suspend the work, the BIA shall first provide written notice and an opportunity for the Tribal Organization to correct the problem. The BIA may direct the Tribal Organization to suspend temporarily work under a contract only after providing a minimum or 5 working days advance written notice to the Tribal Organization describing the nature of the performance deficiencies or imminent safety, health or environmental issues which are the cause for suspending the work.
- c. The Tribal Organization shall be compensated for reasonable costs, including but not limited to overhead costs, incurred due to any suspension of work that occurred through no fault of the Tribal Organization.
- d. Disputes arising as a result of a suspension of the work by the BIA shall be subject to the Contract Dispute Act or any other alternative dispute resolution mechanism as negotiated between and agreed by the parties and contained in the contract.

F-15. <u>TERMINATION OF WORK FOR CAUSE</u> - On Farm Projects

The Secretary through the BIA can terminate the project for cause in the event non-compliant work not corrected through suspension process specified in F-14 above and in paragraph 11 of 900.131(b).

F-16. <u>TERMINATION FOR CONVENIENCE</u> - On Farm Projects

The Secretary through the BIA retains the authority to terminate the project for convenience for the following reasons:

- a. Termination for Convenience (T for C) is requested by the Contractor and agreed to by the Indian Tribe or Tribal Organization.
- b. Funds allocated for the project that is the subject of contract are rescinded by Congressional action;
- c. Other Congressional actions take place that affect the subject matter of the contract .
- d. If the BIA terminates a self-determination construction contract for convenience, the BIA shall provide the Tribal Organization 21 days advance written notice of intent to terminate a contract for convenience; or
- e. The Tribal Organization shall be compensated for reasonable costs incurred due to termination of the contract.

F-17. MATERIALS AND WORKMANSHIP - On Farm Projects

All equipment, materials and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. All work under this contract shall be performed in a skillful and workmanlike manner.

F-18. <u>USE OF EXCESS FUNDS</u> - On Farm Projects

In accordance with 25 CFR 450e-2, Use of excess funds, where the actual costs of construction projects under self-determination contracts, compacts, or grants, are less than the estimated costs thereof, the Secretary through BIA shall determine the use of resulting excess after consulting with the Contractor, in making this determination.

F-19. FEDERAL ACQUISITION REGULATIONS CONSTRUCTION CLAUSES – On Farm Projects

The Contractor agrees that the clauses in Attachment 6 are made a part of this contract and will also be utilized by the Contractor for subcontracting.

SECTION G

LIST OF DOCUMENTS AND OTHER ATTACHMENTS

- **G-1.** The following documents are hereby incorporated and made integral part of this contract:
 - ATTACHMENT 1 Scope of Work for Operations, Maintenance & Replacement
 Budget
 - ATTACHMENT 2 Scope of Work for On-Farm Development Budget
 - ATTACHMENT 3 Scope of Work for Agricultural Testing & Research Laboratory Budget
 - ATTACHMENT 4 Federal Acquisition Regulations (FAR)
 - ATTACHMENT 5 Wage Determinations: Department of Labor Davis Bacon Act Wage Rates
 - ATTACHMENT 6 DI-137, Release of Claims Form
 - ATTACHMENT 7 Navajo Indian Irrigation Project Current Critical Issues
 - ATTACHMENT 8 Navajo Agricultural Products Industry Organizational Structure
- **G-2.** The following documents are hereby incorporated by reference and made an integral part of this contract:
 - a. NAPI Organizational Chart
 - b. Board of Directors Listing
 - c. NIIP Information Map
 - d. Position Description(s)
 - e. Schedule of Key Personnel

ATTACHMENT 1

Scope of Work for Operations, Maintenance, and Replacement



SCOPE OF WORK For Operations, Maintenance & Replacement

Calendar Year 2016

Navajo Indian Irrigation Project

Public Law 93-638 Contract Number

Lionel Haskie, P.E. Operations & Maintenance Manager

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SCOPE OF WORK

SECTION ONE

1 INTRODUCTION

The Scope of Work for the Navajo Indian Irrigation Project as authorized by the United States Congress on June 13, 1962 (76 Stat. 96) sets out the magnitude of the operation, maintenance and replacement (OM & R) functions, in terms of the infrastructure that has been installed that must, therefore, be operated and maintained.

The narrative description of the NIIP portrays the magnitude of the facilities that have been constructed and that require proper maintenance to not only safeguard the federal investment but also to insure the longevity of the facilities to insure safe and reliable delivery of irrigation water to the farm and any other ventures that maybe located and built on the NIIP.

The CY 2015 STATEMENT OF WORK that follows the project description provides a general description of the activities involved in OPERATION, MAINTENANCE, REPLACEMENT and GENERAL AND ADMINISTRATION. These in turn provide the CY 2015 budget framework and the basis for the work schedules.

1.1 NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

The Advisory Committee of the Navajo Tribal Council by Resolution ACAP-123-70, enacted on April 16, 1970, and subsequent amendatory resolutions thereto, approved the Plan of Operation for the Navajo Agricultural Products Industry (NAPI) and establish NAPI as a tribal enterprise.

Navajo Agricultural Products Industry Management Board has authority and responsibility for the management, operation and maintenance of the Navajo Indian Irrigation Project, including the authority to enter contracts. 5 NNC Section 1604 (A) (16) states the authority as:

"To enter into, make, perform, and carry out, or cancel, or rescind contracts for any lawful purposes set forth in 5 NNC § 1603 and to delegate so much of this authority as may be advisable to the Chief Executive Officer of the Industry, or to the Chairman of the Board of Directors. ..."

1.2 PROJECT DESCRIPTION

The Navajo Indian Irrigation Project (NIIP) and the surrounding area are shown in its entirety on the Information Map, Exhibit A, prepared by the Bureau of Reclamation, Department of Interior. The NIIP project does not change from year to year, except as construction of additional infrastructure is completed or as replacements and/or repairs are made to various components. A narrative description of the various components, including their relative locations on the map, follows.

The NIIP lands consist of some 216,842 acres, as authorized by the Congress of the United States and as defined by the Federal Register. The annual allowable diversion is up to 508,000 acre-feet and the irrigable lands include the 110,630 acres to be irrigated and other lands, including class 6, which makes up the total. One of the key components of the NIIP is the water storage system. This includes a shared portion of Navajo Dam and Reservoir of the Upper Colorado River Storage Projects, the NIIP Headworks at Navajo Dam for releasing water into the NIIP water delivery system, Cutter Dam and Reservoir, and future on-site storages. The only year-round storage is the conservation pool in Cutter Reservoir or that portion of the water level lower than the spillway crest or the radial gate that controls water releases into the Main Canal.

The CARRIAGE SYSTEM is 92.2 miles consists of 62.3 miles concrete lined canals, 12.9 miles of tunnels, 17.0 miles of siphons. Headwork and other system components currently installed between Navajo Dam Headworks and the termini of the Main, Gravity Main, Coury Lateral, Amarillo Canals, and Burnham West and Reach 1 Laterals. Specific components are:

The NIIP Headworks at Navajo Dam, station 2+00 to 7+22.28 Tunnel 1 from station 7+22.28 to station 113+03, siphon and open canal from station 113+03 to station 128+00, Tunnel 2 from station 135+00 to 393+20, unlined canal from station 393+70 to 426+20, Cutter Reservoir and Dam from station 426+20 to 469+16, used to regulate the releases of water into the NIIP main canal system. The main canal includes siphons (8.9, Largo, 16.7, 17.9, Armenta, and Kutz Siphons), open canal, and tunnels (Tunnel 3, 3A, and 4) from Cutter Radial Gate station 469+16 to Check Structure1554+38.

The water levels are adjusted with six check structures on the Main Canal between Cutter Radial Gate and Kutz Pumping Plant at stations 563+02, 718+53, 945+37, 1065+95, 1222+40, and 1397+61. At station 1554+38 the water level is adjusted so that Kutz Pumping Plant fills the 66 inch diameter pipeline from Kutz Pumping Plant to the Coury Lateral (station 79+90 to station 296+75) and (2) lifts adequate water for the Block 5 required volume.

From MC station 1554+38 to station 1922+50, water travels by open canal, siphon (West Kutz and Horn Siphons), and tunnel (Highway 551 crossing), water is delivered to ten (10) pumping plants in North Blocks 1 & 4(County Road 7010 and North). North Block 1 pumping plants are: MC33.3R, MC34.9R, MC36.3R, Individual plants I-07, I-08, and I-10. One (1) individual gas plants I-15 was deleted from service per the 2001/2002 Block 1 Redevelopment. North Block 4 pumping plants are: MC33.1L, MC33.8L, MC34.3L, and MC36.3L.

From 1922+50 to station 2259+40, open canal, water is delivered to thirteen (13) pumping plants in part of South Block 4 and all of South Block 1. Partial South Block 4 pumping plants consist of: MC39.3L, MC41.6LA, MC41.6LB, and MC41.6LC. South Block 1 pumping plants are: MC38.8R, MC40.3R, Individual plants I-26, I-33, I-51, I-54, and I-55A/B/C. Two individual gas plants, I-19 and I-41, were deleted from service per the 2001/2002 Block 1 Redevelopment.

From station 2259+40 to station 2457+25, siphon (East and West Gallegos Siphons) and open channel, water is delivered to the remaining four pumping plants. The balance of South Block 4 pumping plants consist of: MC43.8L, MC45.7LA, MC45.7LB, MC45.7LC. Pumping Plant MC45.6LC was never constructed.

Gravity Main Canal starts station -1+12.45 to station 38+00, open canal, excess water can be discharged by means of the Gallegos waste-way gate structure at station 26+25 and 35+50. This pool regulates water for Gallegos Pumping Plant at station 34+00, which serves Burnham Laterals (West and Reach 1), Block 8 fields, and Block 9 (Total Fields 28) 9-34, 9-38A/B, 9-39, 9-46, 9-47A/B, 9-51, 9-53A/B, 9-54A/B, 9-59, 9-60, 9-61, 9-62A/B, 9-63A/B, 9-64, 9-66, 9-78A/B, 9-80A/B/C, and future Blocks 9, 10, 11.

From station 38+00 to station 393+98, open canal, Road 7100 siphon and 361+50 waste-way, water is regulated to serve one pumping plant (GM7.5LA) which feeds two inline booster plants (GM7.5LC, GM7.5LE).

From station 393+98, water continues to flow through Tunnel 5, open canal to the Bifurcation station 517+35, check structure station 517+57 on the Gravity Main canal and check structure station 1+50 on the Amarillo canal. These two radial gate check structures regulate water into the two respective canals.

Gravity Main canal station 517+57 to station 624+00, Highway 371 and open canal, water is regulated to serve four pumping plants (GM11.1L, GM11.3L, GM11.4R, and GM11.4L) in Block 6.

Station 624+00 to station 763+14, two siphons (Road 4060 and Highway 3003 siphons), open canal and excess water can be discharged by means of the waste-way at station 762+39, water is regulated to serve the remaining eight pumping plants (GM12.0R, GM12.2L, GM12.6L, GM12.9L, GM13.3L, GM13.4R, GM14.1R, GM14.3R) in Block 6. GM12.0R, GM12.9L, and GM14.1R have been taken out of service. Station 763+14 also is Block 2 (GM14.5R) pumping plant has four gas driven vertical pumping units for distribution the water enters an 84 inch diameter gravity pipe and into Block 2.

Amarillo canal starts at station 0+96.54 to station 45+96, 1+50 check structure, 371Hwy siphon and open canal, water is regulated to serve two pumping plants (A0.6R, A0.8L) in Blocks 6/7. Station 45+96 to station 246+70, Road N4055 bridge crossing and open canal, water is regulated to serve eight (8) pumping plants (A0.9R, A1.5R, A2.1R, A3.1R, A3.2R, A3.7R, A4.2R, and A4.5R) in Blocks 6/7. This section includes is a siphonic waste-way at station 245+50. Station 246+70 to station 436+00, Road N4065 bridge crossing and open canal, water is regulated to serve five (5) pumping plants (A4.9R, A5.4R, A5.9R, A6.4R, and A6.9R) in Block 7. Station 436+00 to station 604+50, consist of open lined and unlined canal, water is regulated to serve Block 3 A10.9L pumping plant and Gravity Lateral A11.2AH a 72 inch diameter pipeline, distributes water to remaining balance of Block 3. This section includes is an overflow waste-way at station 604+00.

Burnham Lateral West station 289+90.39 to station 396+00, 371 Hwy siphon and N4055 and open canal, water is regulated to serve three (3) pumping plants in operation (B2.1R, B3.1C, and B3.1AH) and Gravity Lateral B3.1G a 48 inch diameter pipeline distributes water to remaining balance of Block 8, and Block 9 has (2) pumping plants in operations (B1.0Land B2.9L)

Burnham Lateral Reach 1 station 5+15 to station 255+00, county road 7030 bridge and open canal, water is regulated to serve two (2) pumping plant in Block 9 (B0.1R and B0.6R currently not in use, stage 2 and 3 are in design process and statistics are unknown), This section includes an overflow waste-way at station 140+00.

The carriage system terminates at the end of Gravity Main canal (station 763+14) and Amarillo canal (station 604+50) and Burnham West lateral (station 396+00) and Burnham Reach 1 (station 255+00).

The DISTRIBUTION SYSTEM includes the Kutz, Gallegos, and (future Chaco & Moncisco) lift pumping and/or pressurization plants and the underground pipelines and laterals that convey water from the canals to the farm delivery units. There are currently 64 pressurized/gravity pumping plants in Blocks 1 - 7. In Blocks 8 - 9 there are currently 5 pressurized/gravity pumping plants.

The Drain System includes 349.2 miles of collector drains to handle 10- and 25-years frequency storm runoff and irrigation return flow. These drains are trapezoidal, with 2:1 side slope. The slope of the drain is designed to provide a maximum 3 feet per second to prevent erosions. They are unlined with base widths ranging from 4 to 10 feet.

1.3 BLOCK BY BLOCK DESCRIPTION

1.3.1 BLOCK ONE

There are 12 pumping and/or booster plants with a total of 38 pumps requiring 2,871 horsepower. Of these, (5) are multi-unit plants with four, five or six natural gas engines, driving vertical pumps. The multiunit plants also, each, use one electric driven vertical pump to fill the lateral pipelines systems at the beginning of each irrigation season or during the season if a pumping plant goes down, resulting in a drainage of the lateral pipeline. In addition, these pumps are continuously used to pump water to wash debris from the traveling water screens, thus serving to keep the irrigation water as clean as possible. Pumping plants MC33.3R, MC34.9R MC36.3R, MC38.8R and MC40.3R all have elevated tanks; bowl size ranging from 30,000 to 100,000 gallons. The power for the five TWS electric spray pumps and the automatic controls hardware in the pumping plants is supplied from the Gallegos Substation, located some ten miles southeast of NAPI HQ next to County Road 7100. The electric service is by overhead cable, along with canal. Each of multi-engine plants has a transformer and switching. Power and energy is supplied by Western Area Power Administration (WAPA) through the Public Service Company of New Mexico (PNM substation) on the south side of Gallegos Substation, with distribution by the NIIP high-lines. The invoicing to NAPI O&M for NIIP power is through WAPA. Pumping plants MC33.3R, MC34.9R, MC36.3R, MC38.8R and MC40.3R gas engines are powered by natural gas supplied by New Mexico Gas Company.

Also in Block 1 are (7) plants with an electric driven vertical or centrifugal water pumps. Originally, there were (11) natural gas driven pumping units, but during the 2001/2002 Block 1 Redevelopment Project, initiated by BIA NIIP, they were replaced with single electric motors and abandoned. These gas engines had a twelve-volt Murphy control panel, with storage batteries and alternators. The M36.3R Gravity lateral system, serving six field delivery units (13, 18, 24, 25, 28 and 29), operates on gravity pressure from the elevated canal system. The Block 1 lateral pipelines vary from 36 to 6 inches in size, steel, mortar coated inside and out or asbestos cement pipes, 102,960 ft. of pipeline. The (33) delivery pumps and the (5) spray pumps create a total of (38) pumps for Block 1.

In Block 1 there are 77 farm units and these units add up to 7,898 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
33.3R	1	Gas (G)	Vertical (V)	2205	170	82	122	E/V – 1		238	233	20
	2	G	V	2205	170	82	122					
	3	G	V	1125	170	84	63					
	4	G	V	1125	170	84						
34.9R	1	G	V	2115	83	83	58	E/V – 1		238	233	20
	2	G	V	2115	83	83	58					
	3	G	V	1035	83	82	28					
	4	G	V	1035	83	82	28					
36.3R	1	G	V	3276	169	83	179	E/V – 1		238	233	20
	2	G	V	1638	169	82	90					
	3	G	V	1638	169	82	90					
	4	G	V	1638	169	82	90					
38.8R	1	G	V	5850	110	83	207	E/V – 1		238	233	20
	2	G	V	5850	110	83	207					
	3	G	V	5850	110	83	207					
	4	G	V	2925	110	80	107					
	5	G	V	1485	110	82	55					
	6	G	V	1485	110	82	55					
40.3R	1	G	V	3366	161	84	180	E/V – 1		238	233	20
	2	G	V	3366	161	84	180					
	3	G	V	3366	161	84	180					
	4	G	V	1683	161	84	90					
	5	G	V	1683	161	84	90					
-7	1	Electric I	Centrifugal I	647	105		25					
I-8	а	Е	С	716	161		40					
	b	Е	С	580	64		15					
I-10	Deleted											
I-15	Deleted											
I-18	Deleted											
I-19	Deleted											
I-26	1	Е	С	535	142		25					
I-33	1	Е	V	1307	208	80	100					
I-41	Deleted											
I-51	1	Е	V	594	125		25					

Table 1 – Block 1 Gas & Electric Powered Pumping Plants

I-54 I-55	1 a b	E E E	V C C	1275 607 607	162 135 122	75 30 30				
	с	E	С	424	120	20				
TOTALS	33	23-G 15-E	31-V 7-C	65351 GPM	2037 TDH	2871 HP	5	1190	233	100

1.3.2 BLOCK 2

This block has (1) multi-stage pumping plant with four natural gas engines requiring 900 total horsepower, driving vertical pumps. The Plant serves (9) field delivery units, with the balance of (70) field delivery units satisfied by G14.5AH gravity lateral feed. The plant has three electric drive vertical pumps: (1) is a jockey pump that is tied into the lateral line and (2) TWS spray pumps are for pressurizing water to wash debris from the three traveling water screens. The Block totals are seven pumps, four gas engines and three electric motors, for maintenance considerations.

The Block 2 laterals are steel, mortar coated inside and out or asbestos cement pipe, sized 84 and 6 inches, 209,088 ft. of pipeline. The power line to Block 2 plant is from Gallegos Sub-station to the tap structure near the bifurcation of Gravity Main and Amarillo Canal overhead distribution line. GM14.5R gas engines are powered by natural gas supplied by New Mexico Gas Company.

In Block 2 there are 81 farm units and these units add up to 8,660 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
G14.5R	1	Gas (G)	Vertical (V)	3406	137	83	225		E/V - 1	449	137	20
	2	G	V	3406	137	83	225	E/V - 1		288		20
	3	G	V	3406	137	83	225	E/V - 1		288		20
	4	G	V	3406	137	83	225					
TOTALS	4	4 - G	4 - V	13624	137		900	2	1	1025	137	60

Table 2 - Block 2 Gas Powered Pumping Plants

1.3.3 BLOCK 3

This block also has (1) multi-unit pumping plant with three natural gas engines driving vertical pumps. The pumps require 675 horsepower and they service eleven field delivery units. The plant includes an electric jockey pump also provides a constant pressure on the lateral line when it is full. For maintenance scheduling, the total are six pumps, three gas engines and three electric motors.

The remaining 59 field delivery units are gravity fed by a lateral that starts at station 604+50, at the terminus of Amarillo Canal. Station 604+50 consists of a structure with two electric drive traveling water screens, an electric pump for debris wash water and a Remote Transmitting Unit. The power line is overhead, originating from the Gallegos Substation. A10.9L gas engines are powered by natural gas supplied by Navajo Tribal Utility Authority (NTUA). Lateral pipe sizes are from 72 down to 6 inches in size, steel, mortar coated inside and out or asbestos cement type, 172,656 ft. of pipeline.

In Block 3 there are 73 farm units and these units add up to 7,795 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
A10.9L	1	Gas (G)	Vertical (V)	3667	126	82	225		E/V - 1	449	126	20
	2	G	V	3667	126	82	225	E/V - 1				25
	3	G	V	3667	126	82	225					
604+50	3	G						E/V - 1		301		
TOTALS	3	3	3-V	11001	126 ·		675	2	1	449	126	45

Table 3 - Block 3 Gas Powered Pumping Plants

1.3.4 BLOCK 4

There are (10) multi-unit pumping plants and (1) single plant with a total of 38 pumps requiring 14,968 horsepower. (7) Of the (11) plants have from two to eight electric drive motor, vertical pumps. Also, each plant has a vertical water pump, six to eight stages, that are used with the traveling water screens. (3) of the (11) plants have from two to six electric drives, centrifugal pumps that are double suction, single stage configuration. These are connected on both sides by pipeline and thus could be classified as booster pumps. The pumps and motors total (46) each, all requiring maintenance. Pumping Plants that are equip with Hydro Tank (MC33.1L, MC34.3L, MC36.3L, MC41.6LA MC45.7LA has two hydro tanks, and 45.7LB), the hydro tank is a barrier between the air and water, which prevents water logging, it can also provide cushion to maintain necessary pressure in the lateral. Pumping plants MC36.3L, MC41.6LA, MC45.7LA, and MC45.7LB all have elevated tanks; bowl size ranging from 200,000 to 350,000 gallons. The lateral lines are of three types, sized from 48 to 6 inches, steel, mortar coated inside and out, reinforced plastic mortar and asbestos cement pipe, 153,120 ft. of pipeline.

In Block 4 there are 76 farm units and these units add up to 9,026 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
33.1L	1	Electric (E)	Vertical (V)	1791	329	75	200		E/V - 1	112	261	15
	2	E	V	615	329	72	75					
	3	E	V	283	329	70	40					
33.8L	1	Е	V	2356	345	78	250					
34.3L	1	E	V	1503	260	74	125		E/V -1	112	209	10
	2	E	V	848	260	74	75					
36.3L	1	E	V	6292	365	81	700	E/V – 1		251	234	20
	2	E	V	3433	365	77	400					
	3	E	V	1782	365	77	250					
	4	E	V	1782	365	77	250					
39.3L	1	E	V	2123	311	74	200		E/V - 1	112	247	15
	2	E	V	1037	311	74	125					
41.6LA	1	E	V	7181	441	80	1000	E/V -1		314	234	25
	2	E	V	7181	441	80	1000					
	3	E	V	7181	441	80	1000					
	4	E	V	3694	441	78	600					
	5	E	V	1894	441	78	300					
	6	E	V	1894	441	76	300					
41.6LB	1	E	Centrifugal (C)	1275	18	53	15					
	2	Е	С	1275	18	53	15					
41.6LC	1	E	С	1225	35	78	15					
	2	E	С	521	35	60	7.5					
43.8L	1	Е	V	1225	288	78	125		E/V - 1	112	224	10
	2	E		848	288	73	100					
45.7LA	1	E	V	6391	405	81	800	E/V -1				
	2	Е	V	6391	405	81	800					
	3	E	V	6391	405	81	800					

Table 4 - Block 4 Electric Powered Pumping Plants

	4	E	V	6391	405	81	800					
	5	E	V	6391	405	81	800					
	6	E	V	3191	405	78	400					
	7	E	V	1764	405	78	250					
	8	Е	V	1764	405	78	250					
45.7LB	1	E	С	6014	273	79	700	E/V - 1		314	234	25
	2	E	С	6014	273	79	700					
	3	E	С	6014	273	79	700					
	4	E	С	3097	273	85	400					
	5	E	С	1589	273	72	200					
	6	Е	С	1589	273	72	200					
TOTALS	38	38	26-V	122230	3070		14967.5	4	4	1327	1643	120
			12-C	GPM	TDH		HP					

1.3.5 BLOCK 5

This block has (12) booster plants, with the exception one that is not in use (C0.9L). In addition to the Kutz Lift Pumping Plant there are a total of (43) motors, and pumps requiring 19,190 horsepower. Kutz using 5 4160 volt synchronous motors coupled to horizontal, centrifugal-type pumps with hydraulically operated cone-type discharge valves, pulls water from the NIIP Main Canal into a 66 inches diameter pipeline and lifts into the Coury Lateral an open channel lateral, which provides water to the lateral pumping plants in Block 5. Kutz is controlled by manual operation. Power is supplied to Kutz from the Kutz Substation via an overhead line constructed in 1994; transformer is located in the pumping plant switchyard. Plant power usage at Kutz include four large evaporative coolers, an overhead crane, the remote transmitting system, automatic controls in the plant and cable from the switchyard to the Main Canal station 1554 + 39, a radial gate check structure.

Along the Coury Lateral, the first pumping plant has three variable speed motors driving vertical water pumps. Also, an eight stage jockey pump for filling the lateral lines and an eight stage jockey pump for filling the lateral line and an eight stage spray water pump for the traveling water screen. Pumping Plants that are equip with Hydro Tank (C0.9R, C4.4A, and C4.4B), the hydro tank is a barrier between the air and water, which prevents water logging, it can also provide cushion to maintain necessary pressure in the lateral.

(8) of the Coury plants are multi-unit with single-speed motor with vertical turbine pump. (3) of the Coury plants are single-speed motors with vertical turbine pumps. (1) of the Coury plant has multi-units with variable adjustable speed motors with vertical turbine pumps. (2) of the Coury plants are single speed motors with horizontal-split case pumps. C0.9R and C4.4A have jockey pumps to fill the lateral and to remove debris. Pumping plants C2.0R, C2.7L, and C4.4B all have elevated tanks; bowl size ranging from 200,000 to 250,000 gallons. Pumping Plants that are equip with Hydro Tank (Kutz, C0.9R, C2.7L, C4.4A, & C4.4B), the hydro tank is a barrier between the air and water, which prevents water logging, it can also provide cushion to maintain necessary pressure in the lateral. This booster plant supplies one field delivery unit. The lateral lines are from 42 to 6 inches in size, steel; mortar coated either sides or asbestos cement pipes, 125,664 ft. of pipeline.

Kutz Substation supplies electrical power to Block 5 pumping and booster plants with transformers and switching at each plant. A control cable is buried along some of the lateral, between the elevated water tanks and the plants, for feedback and control circuits.

In Block 5 there are 54 farm units and these units add up to 8,460 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
Kutz	1	Electric (E)	L	23248	370	83	3000					
	2	E	L	23248	370	83	3000					
	3	E	L	23248	370	83	3000					
	4	E	L	12252	370	81	1500					
	5	E	L	12252	370	81	1500					
C0.9L	1	Е	Vertical (V)	480	216	71	40					
C0.9R	1	E	V	1795	174	76	100	E/V - 1		157	234	15
	2	E	V	1795	174	77	100		E/V -1	120	175	7.5
	3	E	V	1795	174	78	100					
C1.2R	1	E	V	1248	163	75	75					
C2.0R	1	E	V	6400	139	75	350	E/V - 1		189	234	20
	2	E	V	6400	139	75	350					
	3	E	V	6400	139	74	350					
	4	E	V	6400	139	73	350					
	5	E	V	6400	139	74	350					
	6	E	V	3294	139	73	150					
	7	E	V	1692	139	78	75					
	8	E	V	1692	139	75	75					
C2.4R	1	E	V	1728	166	75	100					
	2	E	V	1728	166	75	100					
C2.7L	1	E	V	7244	377	78	1000	E/V -1		220	234	20
	2	E	V	3725	377	77	450					
	3	E	V	1912	377	76	250					
	4	E	V	1912	377	76	250					
C2.9R	1	Ε	V	1512	154	73	75					
	2	E	V	1512	154	73	75					
C3.2R	1	E	V	1055	148	75	50					
C4.4A	1	E	V	1872	213	78	125	E/V - 1		238	234	20
	2	E	V	1297	213	78	100		E/V - 1	112	192	10
	3	E	V	960	213	72	75					
C4.4B	1	E	Centrifugal (C)	6373	260	78	600					
	2	E	С	1885	260	78	600					
	3	Е	С	3258	260	76	300					
	4	Е	С	1696	260	75	200					
	5	E	С	1695	260	75	200					
C4.4C	1	E	С	1800	143	78	100					
C4.4D	1	Е	V	1391	157	70	75					
TOTALS	37	37	26-V 6-C 5-L	184594 GPM	2680 TDH		19190 HP	4	2	1036	1303	92.5

Table 5 - Block 5 Electric Powered Pumping Plants

1.3.6 BLOCK 6

This block consist of 19 booster plants with 40 electric motors and vertical pumps with the exception (4) that are not in use (G12.0R, C12.9L, G14.1R, & G14.3L). The remaining (10) plants are single motor/pump units, of 20 to 75 horsepower. On this block, the Bureau of Reclamation modified the multiunit pumping plant designs to eliminate the requirement for spray pumps and jockey pumps. This was accomplished by teeing off the manifold inside the plants of unit #1 and connected to the TWS. A trash screen remains as part of the design, but the total number of pumps is reduced. The G13.3L plant retains the jockey and spray pump configuration, as this plant was one of the first to be constructed on Block 6. Pumping Plants equip with TWS are G7.5LA, G13.3L, & G14.3R. Pumping Plant equip with Hydro Tank (GM13.4R), the hydro tank is a barrier between the air and water, which prevents water logging, it can also provide cushion to maintain necessary pressure in the lateral. There are 40 delivery pumps and motors and two auxiliary pumps and motors that require maintenance scheduling. Pumping plants GM7.5LA, GM13.3L, and GM13.4R all have elevated tanks; bowl size ranging from 200,000 to 75,000 gallons. Pumping Plants that are equip with Hydro Tank (G7.5LA, G13.3L & G13.4R), the hydro tank is a barrier between the air and water, which prevents water logging, it can also provide cushion to maintain necessary pressure in the lateral. Three large plants are all in automation. There is 83,952 ft. of laterals lines, from 33 to 6 inches in size, Poly Vinyl Chloride or asbestos cement pipe. Power source for Block 6 comes from Gallegos Substation to the tap structure near the bifurcation of the Gravity Main Canal and Amarillo Canal through 45,091.2 ft. of overhead high lines.

In Block 6 there are 43 farm units and these units add up to 7,028 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
G7.5L	1	Electric (E)	Vertical (V)	6530	344	75	800					
	2	E	V	6530	344	75	800					
	3	E	V	6530	344	75	800					
	4	E	V	6530	344	75	800					
	5	E	V	6530	344	75	800					
	6	E	V	3366	344	76	350					
	7	E	V	1723	344	74	200					
	8	E	V	1723	344	74	200					
G7.5LC	1	E	Centrifugal (C)	1571	63	72	40					
	2	E	С	1122	63	73	30					
G7.5LE	1	Е	С	1468	69	76	60					
	2	Е	С	1167	69	73	30					
	3	Е	С	494	69	64	15					
G11.1L	1	E	V	942	169	74	60					
	2	E	V	718	169	75	20					
G11.3L	1	E	V	1257	155	73	75					
	2	E	V	494	155	69	30					
G11.4R	1	E	V	896	233	75	75					
G11.4L	1	E	V	1032	181	73	75					
G12.0R	1	E	V	269	167	72	20					
G12.2L	1	E	V	494	190	72	30					
G12.6L	1	E	V	673	148	40	74					
G12.9L	1	E	V	494	174	71	30					
G13.3L	1	E	V	4784	170	71	250	E/V - 1		283	234	25
	2	E	V	4784	170	71	250		E/V - 1	238	130	
	3	E	V	4784	170	71	250					
	4	E	V	2827	170	74	150					
	5	E	V	1436	170	73	75					
	6	E	V	718	170	71	40					
G13.4R	1	E	V	3115	361	75	350					
	2	Е	V	1598	361	72	200					
	3	E	V	1598	361	72	200					
G14.1R	1	E	V	806	197	74	60					
G14.3L	1	E	V	404	152	70	25					
G0.6R	1	E	V	583	179	73	40					
	2	Е	V	449	179	72	30					
A0.9R	1	Е	V	628	148	72	40					
A1.5R	1	E	V	1436	156	72	75					
A2.1R	1	Е	V	1436	169	72	100					
	2	E	V	1436	169	72	100					
TOTALS	40	40	35-V	85375	3425		7649	1	1	521	364	25
			5-C	GPM	TDH		HP					

Table 6 - Block 6 Electric Powered Pumping Plants

1.3.7 BLOCK 7

This block consist of (11) booster pumping plants located along the Amarillo Canal with a total of (31) electric motors and vertical turbine pumps. Pumping Plant A0.8L serves as a lift and booster plant. The eleven plants have the combined maximum capacity to deliver 87,912 gallons per minute of irrigation water to the fields with a total horsepower of 6,295. (3) of the plants (A3.2R, A3.7R, and A4.2R) are single units motor/pump combination whereas (5) plants are dual units (A4.9R, A5.4R, A5.9R, A6.4R and A6.9R). (3) pumping plants (A3.1R, A0.8L, and A4.5R) are multi-units with six electric drive motors and pumps in each plant. Pumping Plant equip with Hydro Tank (A0.8L), the hydro tank is a barrier between the air and water, which prevents water logging, it can also provide cushion to maintain necessary pressure in the lateral. Pumping plants A0.8L, A3.1R, and A4.5R all have elevated tanks; bowl size ranging from 250,000 to 100,000 gallons.

The laterals and sub-laterals are off A0.8L, A4.5R, and A3.1R. Plant A3.1R has welded steel pipe varying in size from 42 inches diameter to 16 inches and 12 inches diameter PVC pipe. Plant A0.8L has welded steel pipe varying in diameter from 36 to 30 inches and PVC pipe varying in diameter from 27 to 10 inches. Laterals A4.5R and A0.8L have welded steel pipe varying in diameter from 42 to 27 inches and PVC pipes of 10, 15, 18, 20, and 24 inches diameter. The total length of the laterals and sub-laterals is 82,896 ft. In Block 7 there are 45 farm units and these units add up to 8,890 acres of land capable of being irrigated from the NIIP facilities.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency	Horse- power	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
A0.8L	1	Electric (E)	Vertical (V)	5854.88	361	75	700	E/V - 1				
	2	E	V	5854.88	361	75	700					
	3	E	V	5854.88	361	75	700					
	4	E	V	2917.2	361	72	350					
	5	E	V	1481.04	361	70	200					
	6	E	V	1481.04	361	70	200					
A3-1R	1	E	V	5520.24	147	73	300	E/V - 1		346	75	
	2	E	V	5520.24	147	73	300					
	3	E	V	5520.24	147	73	300					
	4	E	V	3612.84	147	73	200					
	5	Е	V	1525.92	147	73	100					
	6	E	V	1525.92	147	73	100					
A3.2R	1	E	V	753.984	161	68	50					
A3.7R	1	E	V	1319.47	178	70	100					
A4.2R	1	E	V	1319.47	183	70	100					
A4.9R	1	E	V	1077.12	168	70	60					
	2	E	V	1077.12	168	70	60					
A4.5R	1	E	V	7225.68	154	74	300	E/V - 1		346		15
	2	E	V	7225.68	154	74	300					
	3	E	V	7225.68	154	74	300					
	4	E	V	3884.65	154	72	200					
	5	E	V	1795.2	154	73	100					
	6	E	V	1795.2	154	73	100					
A5.4R	1	E	V	1319.47	175	70	100					
	2	E	V	1077.12	175	70	75					
A5.9R	1	E	V	1319.47	173	70	100					
	2	E	V	753.984	173	68	50					
A6.4R	1	E	V	1319.47	180	70	100					
	2	E	V	753.984	180	68	50					
A6.9R	1	E	V	1319.47	180	70	100					
	2	E	V	753.984	180	68	50					
TOTALS	31	31	31-V	87912	1880		6295	3		692	75	15
				GPM	TDH		HP					

Table 7 - Block 7 Electric Powered Pumping Pla	nts
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1.3.8 BLOCK 8

Transferred in 2011/2012, this block was has one booster pumping plant (B2.1R) located along the Burnham West lateral with a total of five electrical motors and vertical turbine pumps. The B2.1R pumping plant maximum capacity delivers 16,947 gallons per minute of irrigation water to the fields with a total horsepower of 1,055. The laterals and sub-laterals are off B2.1R and B3.1G. Laterals B2.1R and B3.1G has welded steel pipe and PVC pipe varying in diameter from 48 to 8 inches. Pumping plants B2.1R, B3.1C, and B3.1AH all have elevated tanks; bowl size ranging from 250,000 to 100,000 gallons

The B3.1AH pumping plant maximum capacity delivers 43,200 gallons per minute of irrigation water to the fields with a total horsepower of 1,793. The B3.1C pumping plant maximum capacity delivers 43,200 gallons per minute of irrigation water to the fields with a total horsepower of 3,190. The B3.1AH and B3.1C plants have Fill pumps to fill the lateral at the start-up. Laterals B3.1AH and B3.1C has welded steel pipe and PVC pipe varying in diameter from 48 to 8 inches.

B2.1R, B3.1G, B3.1AH, and B3.1C pumping plants are located on the Burnham Lateral and consist of 18 electrical motors and vertical pumps.

In Block 8 there are 129 farm units and these units add up to 12,573 acres of land capable of being irrigated from the NIIP facilities. The total length of the laterals and sub-laterals is 186,384 ft.

Plant	Unit	Driver	Pump	GPM	TDH	Efficiency*	Horse- power*	Spray Pump	Jockey Pump	GPM	TDH Rated	Horse- power
B2.1R	1	Electric(E)	Vertical (V)	5570	192	77	350					
	2	E	V	5570	192	77	350	E/V - 1				
	3	E	v	2863	192	79	175					
	4	E	V	1472	192	79	90					
	5	E	V	1472	192	79	90					
	1	E	V	8100	122	84	350	S/E/V				30
B3.1AH												
	2	E	v	8100	122	84	350	N/E/V				30
	3	E	v	8100	122	84	350					
	4	Е	V	8100	122	84	350					
	5	Е	v	3300	123	82	125					
	6	E	V	3300	123	82	125					
	7	E	V	3300	123	82	125					
	Fill	E	V	900	60	77	18					
	1	Е	v	8100	213	85	600					
B3.1C												
	2	Е	V	8100	213	85	600					
	3	Е	V	8100	213	85	600					
	4	Е	V	8100	213	85	600					
	5	Е	V	3300	214	83	250					
	6	Е	v	3300	214	83	250					
	7	E .	v	3300	214	83	250					
	Fill	Е	V	900	120	79	40					
TOTALS	21	21-E	21-V	86,400	2,531		4,983					

*Estimated

1.4 WATER DELIVERY UNIT TURNOUTS

The NIIP water delivery system terminates at delivery units (DU). There are (2) types DUs, there some that are constructed on concrete slabs above ground or in concrete pits below the ground surface. Major components of a DU: shutoff valves use to perform maintenance, upstream 2" Air valve functions, release/admit air during filling/drainage and release air while in operations(prevents line breaks from high pressure air bubbles), pressure gauge measure pressure in PSI (pounds per square inches), flow meter

measures in GPM, used for recording the amount of water delivered from each farm unit, main valve (PRV) diameters ranges from 6 inches to 16 inches, and solenoid an electrical current that allows main valve to open and operate normally. The delivery units (DU) are as follows: Block 1 has (77) DUs, Block 2 has (81) DUs, Block 3 has (73) DUs, Block 4 has (76) DUs, Block 5 has (54) DUs, Block 6 has (43) DUs, Block 7 has (45) DUs, and Block 8 has (129) DUs.

There is (28) DUs in Block 9 that are currently delivering water and (14) that are in construction status.

1.5 ELECTRICAL SYSTEM

An integral part of the NIIP facilities is a network of electrical power distribution system consists of substations and transmission lines supplying power and energy to operate the various pumping plants to deliver irrigation water to the fields. The (3) substations are Gallegos, Kutz, and Pinabete, also includes (1) capacitor. From Gallegos substation t Kutz substation transmission line is 77,616 ft., and from Burnham tap on PNM's 230 kV line to Pinebete substation is 15,312 ft.

NIIP, as a participating project of the Colorado River Storage Project (CRSP) receives firm federal power through a contract with the Department of Energy, Western Area Power Authority (WAPA). The Contract was renewed on March 31, 2010 and the contract period is from April 1, 2010 through March 31, 2020, with Contract No. 10-SLC-0649 (see Exhibit B). WAPA delivers the power and energy to the Four Corners Plant of the Public Service Company of New Mexico (PNM). PNM, via their tap off the 230 KV Ambrosia-Four Corners line delivers the power to the NIIP at Gallegos Substation. The wheeling by PNM is accomplished in accordance with Interagency Agreement No. 87-SLC-0014.

The NIIP power system consists of the Gallegos, and Kutz substations and transmission lines operated at 115 kilovolts (kV) for Blocks 4 through 7 and Pinabete 230 kV for Blocks 8 through 11. The Kutz Substation serves the Kutz Lift Station and the Block 5 pumping plants. Gallegos Substation serves the Blocks 1, 2, 3, 4, 6, and 7 pumping plants. The Pinabete Substation (In construction status) serves the Blocks 8 (totally transferred to BIA in FY2013/2014) and 9 (construction status). The pumping plants are served by overhead distribution lines along the canal embankments. The distribution lines, providing power form the substations, are operated at 34.5 kV for the lateral pumping plants in blocks 4 through 7, and for auxiliary equipment in Blocks 1, 2, and 3; and at 13.8 kV for the lateral pumping pants in Blocks 8 through 11. Electrical service to the upper end of the main canal, Navajo and Cutter Dams and the upper (6) check structures are served by the City of Farmington.

Gas Pipelines provides Blocks1, 2, and 3, natural gas to power the natural gas engines at the pumping plants. The natural gas pipelines serving the gas engines extend for the existing gas pipelines. New Mexico Gas Company supplies natural gas to (5) large pumping plants is Block 1 and in Block 3 pumping plant (A10.9L).

In Block 2 Navajo Tribal Utility Authority (NTUA) supplies natural gas to the pumping plant (G14.5R).

1.6 ROADS AND DRAINAGE

The NIIP canal system has open drainage and a dual road system that parallel the canals the entire length from Navajo Dam to the ends of the canals. The canal drain is a safety feature, to prevent damage from accidental overflows and to carry seepage away from the system. The roads, earthen in most instances, are for observation and maintenance of the canals and for access to the various pumping plants. There are (38) drainage systems along the canals and (52) culvert. In addition to the canals drain, there is an unlined 10 year flood system of surface collector drains 1,843,776 ft. installed in Blocks 1, 2, 3, 4 and 5. These drains also serve the purpose of minimizing and controlling the water table, in the event that it is raised due to irrigation.

1.7 BUILDINGS 371 DUTY STATION AND IRRIGATION SHOP

There are (5) significant installations on the NIIP that are related to NIIP Operation and Maintenance. These are the 371 Duty Station, the Supervisory Control and Acquisition Data Control Center, O&M Administration, Block 6 Shop and Warehouse at the corners of Highways N3003 and 371. These facilities are for the purpose of supporting activities related to water delivery and maintenance of facilities. The 371 Duty Station has offices and a warehouse for the various maintenance sections, supply yard and shift change location for NIIP O&M employees who operate the water delivery system and who maintain its components. GSA Vehicles are based there, plus minor maintenance functions are performed to maintain yards. At the NAPI Main Office: the canal automated system is located in the control center; the O&M dispatcher's monitors and communicates with the NIIP canal system. Water orders are received and entered into daily water orders for operators. A system library is maintained for maintenance reference. The offices for O&M Administrations are located on the southeast of the NAPI Main office.

The Block 6 Shop and Warehouse facilities were built by the BIA with irrigation construction funds to ultimately provide the NIIP with an Irrigation O&M Shop. At present, a space utilization agreement is in effect that authorizes the Navajo Area/BIA Roads Department to base its Force Account operations at this facility. NAPI O&M is using four half-bays for repair of gas engines, gear hands, valves and heavy equipment. At a future date, NIIP O&M expects to utilize all the Shop and Warehouse facilities.

SECTION TWO

2 STATEMENT OF WORK

The individual narrative statements that follow have their corresponding budgets as presented in EXHIBIT D, CHART 3.

2.1 OPERATIONS

The Operational functions, cost codes 2950, 2954, 2960, 2964, 4910, 5920, 5945, 5975, 8905, 8910, 8915, 8920, 8925 include two major categories, which are:

2.1.1 **POWER**

(Electric and Natural Gas) - NAPI procures electrical power and energy from Department of Energy, Western Area Power Administration under a long-term contract for the NIIP Operations. NIIP, as a participating project of the Colorado River Storage Project, has entitlement to federal power and energy. The reserved federal power is currently 75 megawatts. NAPI also buys electric energy from the City of Farmington to serve facilities at Navajo Dam Headworks, Cutter Dam and the six check structures located between Cutter Dam and Kutz Pumping Plant.

NAPI procures natural gas from Navajo Tribal Utility Authority to operate the gas engine driven pumps in Blocks 3, A10.9L pumping plant. Natural gas is also purchased from New Mexico Gas Company to operate all multi-unit gas pumping plants in Blocks 1 and 2.

2.1.2 LABOR, MATERIALS AND EQUIPMENT

The labor, materials and equipment required to perform the operation functions are accomplished by the Operations Division of the NAPI Operation and Maintenance Department and are dependent upon funding. The Branches within the Operations Division include Region I Operations, Region II Operations, and Control Center Operations. The tasks performed include:

- Operations of Navajo Dam Headworks, Cutter Dam, and filling and draining the water conveyance and distribution systems each year.
- Regulating the flow of irrigation water into the system from Navajo Reservoir to Cutter Reservoir and from Cutter into the conveyance canal and monitoring the water levels within the canals.
- Erecting and removing barricades at each siphon for the protection of wildlife and the general public.
- Monitor along the canals including observation of unusual occurrences such as embankment cracks or movement of structures.
- Operate the lift stations pressurization and booster pumping plants (67) in use, with a total of 191 pumps driven by electric motors and natural gas engines.
- Read, record and maintain meter readings at each turnout and prepare monthly water reports showing the amount released from Navajo and Cutter dams, conveyance losses, amount delivered to the fields and any other uses.
- Evaluate and/or design all computerized, automated supervisory control and data acquisition systems, install equipment and monitor its operation and fine tuning the system.
- Adjust all pressure reducing valves (PRV) for proper rates of flow (Q) and pressure per square inches (PSI) delivered to the individual field units during the irrigation season and in close cooperation with Farm Operations. Total DUs in Blocks 1 to 8 is 578.

- Dependent upon funding, sub-contracting the monitor and adjustment for proper operation all of the installed cathodic protection systems including the removal, replacement and winterization of the equipment during the off-irrigation season.
- The maintenance of the electrical transmission and distribution systems (115kv and 34.5kv respectively) are accomplished by certified NAPI high voltage electricians and by service & maintenance contracts with the City of Farmington and Western Area Power Administration.

2.1.3 CUTTER DAM MONITORING & SEEPAGE

Monitoring seepage and clearing vegetation from Cutter Dam embankment or foundation is the responsibility of N.N. Safety of Dams, which is performed monthly.

2.2 MAINTENANCE

In accordance to the Standard Operating Procedures (SOP) handbook, periodic inspections of the electrical, mechanical, cathodic protection and SCADA equipment are performed to determine their condition. Scheduled maintenance and repairs of electric motors, natural gas engines, turbine and centrifugal pumps, motor operated valves and gates, traveling water screens, gearheads, elevated water towers, electrical equipment, such as switches, transformers, underground cables and overhead lines, power supply and motor control cabinets and all other ancillary equipment, and the repair of the underground pipelines or laterals of various sizes and types of pipe materials is conducted depending on the periodic inspections. The Maintenance functions, under cost codes 2952, 2954, 2962, 2964, 4905, 4915, 5950, 5985, include four sub-functions and they are:

2.2.1 CANAL

The activities dependent upon funding are related to the maintenance of the Main, Gravity Main, Amarillo, Coury and Burnham West and Reach 1 (canal laterals recently transferred in FY2012 from construction status to BIA O&M status involve:

- Inspection of the canals, siphons and tunnels annually or other scheduled basis by O&M personnel and, if required, with the assistance of the Bureau of Reclamation.
- Based upon inspections conducted, schedule repair work required to replace broken canal linings, sealing joints and cracks, replacing safety ladders and repairing concrete barrels or structures.
- A weed and algae control program either by a commercial service contract or NAPI department using chemical or mechanical means on a monthly basis during irrigation season.
- Tumbleweed and other debris blown into the canals are removed by hand or mechanical means and burned or otherwise disposed of.
- At the end of irrigation and subsequent to the inspection, sections of the canal system are cleaned by removal of sandbars and other debris through the use of excavators, backhoe, front-end loaders, dump trucks and other equipment.
- Signs and markings are installed, replaced and maintained to warn the public of the hazards along the 84.6 miles of canals, and at tunnels and siphons. Included also are signs and markings at check structures and all pumping plants.
- Rights-of-way fences are inspected in conjunction with daily operations and repairs made along the canals, pumping plants and electrical substations.

2.2.2 DISTRIBUTION SYSTEM

The distribution system consists of all facilities that deliver water from the canal to the field turnout or delivery units and are dependent upon funding. The tasks performed include:

- A noxious weed control program is initiated each spring, by application of soil sterilant in the yard of each pumping plant and electrical substation.
- Disassembly of all pressure reducing valves, inspection and repair or replacement at the end of each irrigation season. The water flowmeters are also inspected, replaced or repaired and calibrated annually. Before the start of irrigation each spring, the units are reinstalled.
- Dependent upon funding, sub-contracting preventative maintenance, troubleshooting and repairs on all existing cathodic protection system equipment and components.
- Perform cathodic protection-required remedial procedures identified as a result of operational monitoring, special tests, surveys, procedures, evaluations and designs.
- Install cathodic protection system and component replacements, modifications, add-ons, additions, upgrades and improvements necessary for CP system maintenance and corrosion prevention on recognized structures in need.
- Provides for keeping the various components of the automated SCADA systems in proper operating condition.
- The SCADA Branch installs, configures, programs and maintains the host station computers, the PLCs and their associated Input/Output (I/O) cards and the spread spectrum radio equipment.
- The SCADA Branch determines the design of the automated systems, evaluates need for improvements, schedules upgrades and provides training of other department personnel in the use of the automated systems.
- MAXIMO software is checked daily for work orders that are generated from 800 dispatch for any corrective maintenance needed for demand water delivery.

Gas Engine Pumping Plants

- There are 27 Caterpillar gas engine online with 225 HP with turbo charger and 150 HP without turbo charger, and 4 Arrow gas engine online with 90 HP that are maintained throughout the year.
- Gas engine compression testing performs at end of season to determine performance of cylinder head. Any low reading cylinder head is removing for recondition.
- Preventive Maintenance Service (PMS) on all gas engines with more than 1000 hours running time from last oil change hour reading is performed.
- Initiate MAXIMO work order for tracking and performing routine maintenance (such as oil and filter changes) on engines, pumps, right angle gear head, pumps, heat exchangers and batteries.
- PMS on gas engines drive shaft performed monthly, which includes adding grease to U-joints, and flange inspections.
- Replacement of cracked and aged gas line hose connected from main line source.
- Antifreeze is utilized on gas engines to keep the engine cooling system with heat exchangers. Routine checks performed daily on coolant level on reservoir.

- For Traveling Water Screens (TWS), PMS is performed on link belt reduction gear boxes by changing oil with 90 Wt. gear oil, grease couplings, link belt chain connection, inspect trays and bolts, re-torque if needed, idle sprockets, grease and inspect end lifting hubs.
- TWS structure with chronic failure during season is schedule for removal after season and perform tear down inspection and overhaul. Some fabrication is performed and replacement parts.
- Vertical pumps are inspected daily on lubrication on tension nut, sight glass valve on oil dripping, which is set at every 15 seconds to lubricate pump head shaft bushings, and inspect oil level on bulk tank.
- Vertical Pumps are inspected at start of season for any vibrations, and PMS is performed on adding grease, re-adjust pump if needed, and inspect pump tension nut.
- Jockey Pumps in Region 2 Blocks 2 & 3 pumping plants are utilized for filling and to keep pumping plant lateral maintain pressure when center pivot field are shut down. The jockey pumps are inspected as priority for maintenance to keep online.
- Pumps that are tagged during the irrigation season are schedule for removal at end of season for reconditions. 3 quotes are obtained from machine shop for recondition to perform complete overhaul.
- Pump shaft tension nut failure during operation season is removed for repair and get re-sleeve by machine shop. This is urgent when pumping plants are on demand for water delivery.
- Performed PMS on gas engines pumping plant with right angle gear drive by removing oil and replacing with clean 90 wt. oil from the start of season.
- Check cooling system on gear drive making sure it has a circulation for cooling system on pump gear drive.
- Check valve inspection performed beginning of season by replacing O-ring on end shaft. Open top inspection covers to inspection butterfly valve, seat, and seal.
- Inspect air valve and do corrective maintenance with leaking water from pressure relief area, change out gasket cover gaskets if needed.
- Inspection performed on transmitting pressure for correct downstream pressure.
- Inspection on safety shut down components for low coolant level, low oil pressure, high temp shut down and vibration shut down, visual lights shown on panel indication unit on line, engine alternator indicator working on charging system, and engine batteries voltage meters.

Electrical Pumping Plants

- Perform inspections on vertical pumps at the beginning of irrigation season. Pump base and motor bolts re-torqued or replace bolts if necessary.
- Perform inspection on vertical pumps at start of season for any vibrations, and perform PMS by adding grease, re-adjust pump if needed, and inspect pump tension nut.
- Pumps schedule for removal end of season by machine shop. Vender to submit tear down
 inspection report with work scope on complete overhaul.

- Schedule for inspecting pump shaft couplings, pump bearings, motor bearings, pump mechanical seals, pump base and motor mount bolts, re-torqued if necessary.
- Schedule for inspection at start of irrigation season on pressurize hydraulic valve system, check
 for hydraulic line for any oil leaks, test speed control valves, service oil filters on changing out
 replacing filter element, and test valve if necessary on circulating oil through system.
- Hydraulic cone valves schedule for removal at end of season if necessary. Obtaining 3 quotes for complete overhaul alone with work scope.
- PMS performed on hydraulic cone valves before start up by changing oil and oil filters.
- Inspect compressor units by checking valves, belts, and pipe line connection to air chamber.
- PMS performed on hydro tank air compressors before start up on changing oil and filters.
- Hydro tank air compressor units inspected on pipe connection to air chamber, check valves, compressor belts, and tested with oil pressure at 20 psi. (adjustments made if necessary)
- Inspect air inlet at top of hydro tank units. Change out valve fitting if necessary, 2" valves, and air pressure relief valve.
- PMS performed on TWS at beginning of Irrigation season. Gear box sprocket change out if necessary, link belt bolts connection to be re-torqued and rotation check with water circulating.
- Elevated tanks are annual inspected by Operation Maintenance (O&M) Mechanical Department
- O&M Department performing routine preventive maintenance service on elevated tanks. Inspection covers gaskets check for water leaks, water leaks on water inflow pipe and over flow return line pipe.
- Total of 77 Pumping Plant sumps are schedule annually for cleaning at end of irrigation season after canal is dewatered. Outside contractor is hired with vacuum truck service on cleaning sumps with O&M Mechanical Department finishing labors. Vacuum service is performed 3 to 4 weeks 8 hours per day.

2.2.3 ELECTRICAL NETWORK & COMPONENTS

The electrical network and components consist of electrical motors, control panels, control components, high lines, and substations. The maintenance on these items is dependent upon funding. The tasks performed include:

Navajo Dam and Gate Structures

Simi Annual Inspection:

Visual inspections of the condition of the electrical equipment on the controls are performed when the system is energized. The electrical components include relays, timers, switches, and meters. Any urgent repairs will be cleared with 800 Dispatch, and materials are ordered for replacement. Time and dates are set to de-energize the controls for repairs.

Annual Inspection:

For annual inspections, the electrical system is de-energized, and testing on the control equipment is performed. Control equipment include: relays, timers, switches, contact blocks, coils on the controls, raceway, seals on cabinets, breakers in distribution panel, area and internal lighting, and receptacles on 120/240/480 volt plugs.

Preventive Maintenance:

Semiannual and Annual Inspections are used for the repairs and maintenance. For repairs and maintenance routines, materials are ordered for replacement and repairs on all relays, motor starters, timers, point to point on wires connections, and termination connections. All the exterior panel doors are inspected for leaks, broken locks and latches. The heaters and lights are the only electrical equipment that should be running during the non-irrigation season.

Pumping Plants

Simi Annual Inspection:

Pumping Plant inspections are performed on incoming line fuse cutouts, surge arrestors, transformers, service disconnect, MCC, and incoming voltage and current on all three phase.

Pumping plant unit information is recorded. Information includes running time, start counter, running/off status, current on all three phases, push buttons, selector switches, oil dippers, electric motor oil on the upper and lower bearing, and winding temperature. The condition of the motor vents on both top and bottom, and motor raceway are visually inspected.

Auxiliary Controls inspections are performed on the condition of the lamp test switches for the indicators, fixtures, push buttons, selector switches, and panel meters.

Annual Inspection:

The Pumping Plants incoming line is de-energized, and switches are opened, lock and tagged out for visual inspection. During inspection, all the wire connections are checked, torque and marked, surge arrestors, the 34.5/4160/2400 volt transformers, and connections to the bus of the MCC are checked. Unit cabinets are cleaned out, and all the stabs are cleaned and coated with grease. Insulation tests are done on the feeders to the motors, and the stress cones are tested both in the cabinet and at the motor.

Preventive Maintenance:

All the switches from the incoming line to transformers, MCC and out to the motors are all checked, torqued and marked at the connections. Unit controls, relays, timers and overloads are checked and tested, all the control connections are tighten, and the contacts cleaned and marked.

High Line

Aerial Line Inspection:

Aerial Line Inspections are done by Western Area Power Authority (WAPA). Inspection is performed at least once a year. When it's completed the reports are forwarded to Electrical Department for review.

Ground Inspection:

Ground Inspections are completed by both WAPA and OM Electrical Department with the line energized. All the inspections are done visually.

Preventive Maintenance:

The high lines are de-energized, switches are opened and tagged out, and cleared with WAPA Phoenix Dispatch. Each pole structure hardware is tightened, which includes the cross arms, cross braces, insulators, post substation and bell insulators.

Isolation switches and re-closers are used to isolate sections of the line for repairs. Adjustments are made for all the contacts when seats are closed, set on the line and the load side of the line.

The fuse cutouts, surge arrestors, transformers and disconnect switch are service entrance equipment for the pumping plants. When the cutouts are replaced, the connections are covered with bird guards, and the jumpers are insulated.

2.2.4 DRAINAGE & ROADS

The major category of costs includes personnel, equipment, vehicles, fuel, materials and supplies to perform the maintenance tasks related to drainage and roads. The activities dependent upon funding are;

- Periodically inspect the canal maintenance road system, develop a maintenance schedule, and perform grading and other improvements such as placement of road base material along problem areas and well-traversed sections of the system. The NIIP canals and access to pumping plants consist of about 160 miles of roads that needs to be graded and maintained.
- Cattle guards and gates for access onto the NIIP right-of-ways are maintained to exclude livestock and the public from gaining unauthorized entry to the canals and equipment that operate automatically and pose a hazard, if not controlled and also to safeguard the equipment from vandalism.
- Throughout the project, there is a system of open drain collectors designed and constructed to convey 10-year floodwaters off the project safely. These drains and stabilization structures need to be inspected periodically and a maintenance plan and work schedule developed to remove debris and trees, reshape the drain prism and repair the stabilization structures. Annually, some portions of the drains will go through a maintenance program.

2.2.5 CATHODIC PROTECTION (CP)

Costs include labor, tools, materials and equipment required to maintain all CP systems and components in optimum performance condition, prolong equipment and component effective operational lives to maximum levels, and extend corrosion protection to all structures in need. CP systems, both impressed and galvanic, are providing some degree of corrosion protection on various structures throughout the project, including column and suction piping on pumps, traveling water screens, plant inlet grating, ladders, fences, discharge manifolds, water tower tanks and risers, check structure gates, canal drain gates, trash rack grating and lateral piping. Many lateral lines, and some siphons, have facilities for performing structure-to-electrolyte potential and corrosion surveys to guard pipe integrity. Other corrosion prevention techniques, such as the use of coatings and appropriate materials selection, are also being utilized, to some degree, to increase the efficiency of cathodic protection. Tasks and activities performed to maintain these facilities are dependent upon appropriated funding and include, but are not limited to the following:

- Perform preventive maintenance, troubleshooting and repairs on all existing system equipment and components.
- Perform required remedial procedures identified as a result of operational monitoring, special tests, surveys, procedures, evaluations and designs.

- Install system and component replacement, modification, add-ons, additions, upgrades and improvements necessary for CP system maintenance and corrosion prevention on recognized structures in need.
- Submit an annual report assessing the current state of the cathodic protection system and report on completed tasks.

2.2.6 SUPERVISORY CONTROL & DATA ACQUISITION

The Supervisory Control & Data Acquisition (SCADA) provides for keeping the various components of the automated systems in proper operating condition. Currently, there are three separate areas of functionality, 1) the Canal SCADA System, 2) the Pumping Plant monitoring system, 3) the Pumping Plant Programmable Logic Controllers (PLCs), and 4) the Elevated Tank Pressure Transducers. The SCADA Branch install, configures, programs, and maintains the host station computers through PLCs and their associated Input/Output (I/O) cards and the spread spectrum equipment. The SCADA branch also determines the design of the automated system and prescribes the need for improvements and schedules upgrades and provides training of other department personnel in the use of the automated systems. The three subsystems are:

<u>Canal SCADA System:</u> The Canal System consist of a computerized host station, located at the Supervisory Control Center, and (23) Remote Terminal Units (RTUs) located at the check structures along the entire length of the canals also at the Navajo Dam Headwork and Cutter Dam. There are also (3) repeater sites. The RTUs are used to monitor and control the radial gate positions and monitor water level elevations at the check structures. This data is also transmitted back to the Control Center where it is displayed both graphically and alpha-numerically.

<u>Pumping Plant Monitoring System</u>: The Pumping Plants and Elevated Tank Monitoring System consist of a computerized host station, located at the Supervisory Control Center, and (23) RTUs located at the large pumping plants and 26 individual pumping plants on the project. The RTUs gather pumping plant operational data and transmit it back to the Control Center where the pumping plant status is displayed both graphically and alpha-numerically, for total of (49) plants that can be monitored

<u>Pumping Plant Control PLCs</u>: The Pumping Plant PLCs are a stand-alone unit which controls the operation of the multi-unit plants on the project. Currently, there are (16) plants operating under local automatic PLC control. The PLCs control the operation of the individual pumping units to provide the appropriate water pressure to the fields.

2.2.7 FACILITIES

Cost Code 5134 provides for the activities related to the NIIP facilities consisting of 67 pumping plant buildings in Blocks 1 through 8, 371 Duty Station and Block 6 Shop and Warehouse facilities. By joint-use agreement between the BIA and NAPI, the latter joint-use Block 6 Shop and warehouse facilities are maintained by the BIA.

The 371 Duty Station is the focal point for all O&M equipment storage, warehouse for supplies, repair and/or replacement parts storage, vehicle staying and storage, minor repair facilities for electrical equipment, electronics, meters and valves.

All maintenance personnel, security person, warehouseman and clerk and administrative specialist for the Maintenance Division are assigned to the Duty Station as their official duty station.

At the Block 6 Shop and Warehouse, a joint use facility with BIA, the O&M Departments houses two branches. One of these branches performs maintenance and repair of heavy equipment as well as some minor equipment such as portable generators, welders and water pumps. The other branch handles the repair of all mechanical equipment such as natural gas engines, pumps, gearheads, plant compressors,

motor operated or hydraulic operated valves and most of the hydraulic systems. In order to accommodate the expanding need for space, a Joint Use Agreement has been developed and presented to the Contracting Officer for inclusion in the PL 93-638 Contract between NAPI and BIA.

The Gallegos Pumping Plant is expected to be transferred in the FY 2016. The recommended budget for the Operation & Maintenance from the Bureau of Reclamation is \$1.4 million. (See attached Memorandum, Subject: Request for Fiscal Year (FY) 2016 Operation and Maintenance (O&M) Budget Estimate for Gallegos Pumping Plant (Telephone Conversation Request for September 2013))

2.2.8 MAINTENANCE BACKLOG

The BIA proposes the following and are subject to negotiation:

The BIA installed MAXIMO software for tracking costs and backlog of deferred maintenance at the NIIP site. Upon installation and training of key personnel are completed, the software will assist O&M to keep track of costs, inventory data, budgets, reporting status, issues and performance costs and provide historical data needed to develop five year deferred maintenance and capital improvement plans.

For many years, the BIA O&M funding for the Navajo Indian Irrigation Project has been lagging substantially under the actual need. These budgets have been substantially less than the amounts requested and have not kept pace with continuing development of the project. These shortages of O&M funds have resulted in a large backlog of uncompleted (deferred) maintenance, estimated in 1999 to be \$7.3 million.

Much of the preventive maintenance required to keep NIIP facilities in good working order and to maintain the full service life of the facilities has not been accomplished due to insufficient funding and lack of documentation. The OM & R Budget Plan includes, by Fiscal Years, funds for performing the required preventative maintenance, for completing the most critical items of the maintenance backlog, and for replacing worn out pumps in Blocks 2 and 3. Details of the "Requested Calendar Year Budgets" are shown on tables attached as EXHIBIT B.

2.3 REPLACEMENTS

The BIA proposes the following and are subject to negotiation:

Cost Code 5142. Most project facilities are aged and some of the equipment's are approaching the end of their expected service life. The pumps in Blocks 1, 2, and 3 are nearly 40 years old and were scheduled for replacement of worn out units beginning in 1998. Blocks 4, 5, 6, and 7 mechanical and electrical parts are going obsolete and are harder to repair when motors and pumps brake down. Worn pumps have reduced energy efficiency and are subject to sudden failures during the irrigation season. The funding required for schedule equipment replacements will increase considerably in future years as additional equipment wears out.

In addition to the scheduled replacement of NIIP project equipment, much of NAPI's heavy equipment and other maintenance equipment are aged and worn to the point of becoming uneconomical to operate. Replacement of this equipment is essential to NAPI's ability to successfully operate and maintain the project. Equipment that needs to replace are 320 Excavator, (2) skid-steers, Case Backhoe, John Deer Backhoe, Dump Trunk (Green), Case Frontend Loader, and CAT 936 Frontend Loader.

The BIA installed MAXIMO software for tracking costs and backlog of deferred maintenance at the NIIP site. Upon installation and training of key personnel are completed, the software will assist O&M to keep track of costs, inventory data, budgets, reporting status, issues and performance costs and provide historical data needed to develop five year deferred maintenance and capital improvement plans.

2.4 SYSTEM MANAGEMENT AND ADMINISTRATIVE

The cost code 5151; provides for the NIIP O&M management team consisting of the O&M Manager, Administrative Specialist, Engineering and Technical Support and others that maybe assigned to Management. The O&M Management Office is housed in the NAPI Headquarters.

NAPI Headquarters is the main office complex for the Chief Executive Officer and his/her Managers and support operations including Finance and Accounting, Purchasing, Human Resources Management, Management Information System, and other administrative support functions.

Also, primarily in the winter season, O&M personnel attend training as determined by Management. The cost includes the salary of personnel attending training, their travel and tuition expenses to provide a well-trained and efficient work force. Training topics normally include both technical and management/administrative courses in supervision, equipment management and operation, safety, water management, pumping plant operations, electronics, mechanics, computer and software operations, substation switching and clearance, interpersonal relations, work productivity and new technology that have application to the work requirements.

2.5 WORK SCHEDULES

The statement of work activities is scheduled to occur in accordance with the operational requirements of NAPI. From a historical perspective, the operational mode during water delivery is mid-March to late October, about seven months of round the clock activity, every day. The maintenance cycle is continuous, with major work performed from November through March and operational maintenance during the water delivery period. Heavy equipment maintenance is a continuous activity.

Each O&M Division develops its own work schedule based upon factors as the inspection of the NIIP facilities, operational problems that may have been experienced during the operational mode, the life cycle of the equipment, manufacturers recommend maintenance cycle of equipment, vibration analysis that indicate a need to do maintenance on equipment and emergency repairs when equipment fail.

SECTION THREE

3 CONTRACT COST HISTORY

The following statements describe the extent to the NIIP OM & R budget history, deferred maintenance backlog, and anticipated budget requests for new facilities transferred.

3.1 CONTRACT COST REVIEW

The SCOPE OF WORK for this contract is a continuation of the management effort assumed by NAPI in October 1985 (FY86) for the operation, maintenance and replacement of the NIIP facilities that have been transferred from Bureau of Reclamation Construction to Bureau of Indian Affairs for OM & R. The NIIP facility begins with Navajo Dam Headworks and ends at the canals and laterals termini on the various blocks of the NIIP. The term OM & R is set out in the Act, Public Law 87-483.

As used in this contract, OM & R includes the personnel, vehicles, electrical and gas supplies, materials and supplies, services, management and other incidentals necessary to operate, maintain and replace the constructed NIIP. The various features of the NIIP vary in age from new to more than fifty years, when tunnel one was completed in 1963.

3.2 BACKGROUND

The following statements were extracted from the previous contract number CTN00X10213.

From October 1985, to the present, the amount of funds provided by the Bureau of Indian Affairs for the operation, maintenance and replacement of the Navajo Indian Irrigation Project has been at \$3.8 million except for FY97 and FY98 when \$1.4 million and \$1.0 million were added to the contract. The actual funding amounts have been substantially less than the amounts requested for a proper OM & R program and the appropriated amounts have not kept pace with continuing development of the project. These shortages of OM & R funds have resulted in a large backlog of uncompleted (deferred) maintenance, estimated in 1999 to be \$7.3 million. Presently, the B2.1R pumping plant and laterals, B3.1G/B3.1AH/B3.1C laterals, and the Burnham Reach 1 and West laterals have been transferred in FY 2012. The B3.1AH/B3.1C/B3.1G pumping plant is expected to be transferred by FY 2015.

Much of the preventative maintenance required to keep the NIIP facilities in good operational condition and to maintain the full service life of the facilities has not been accomplished due to insufficient funding. The requested FY99 and future years OM & R budgets include funds for performing the required preventative maintenance, for completing the most critical items of the maintenance backlog through the Fiscal Year 2003, and for replacing worn out natural gas engines and pumps in Block 1, 2 and 3. Details of the Fiscal Year budgets are shown on the OM & R BUDGET CHARTS, attached hereto as EXHIBIT C of the APPENDIX.

EXHIBIT D reflects the annual O&M funding history. Charts D-1 and D-2 give O&M Budget needs requested to BIA, request versus actual allocation.

3.3 PREVENTIVE MAINTENANCE

The following statements were extracted from the previous contract number CTN00X10213.

Examples of routine preventive maintenance which has been deferred includes repairing and sealing cracks in concrete canal linings; routine inspections and minor repairs of electric motors, transformers and other electrical equipment; maintenance and repairs to pumping plant equipment and buildings; maintenance and repairs to valve systems and cathodic protection; and maintenance and repairs to hydraulic surge tanks and traveling water screens. The reduced level of preventive maintenance has

resulted in some equipment failures and has likely reduced the service life of other equipment; the effect of which is increased funding requirements for major repairs and early replacement.

Chart C-1 shows funding requirements for FY 98 and FY 99 of \$614,000 and \$690,000, respectively, which are needed to address the deferred maintenance. FY 00 and into FY 04 will require \$760,000 to \$920,000 annually to provide an adequate preventive maintenance program.

3.4 BACKLOG

The following statements were extracted from the previous legacy contract number CTN00X10212. The funding amounts to complete these backlogs items were never allocated as of CY2005.

During the fall of 1996, representatives from the Bureau of Indian Affairs, Bureau of Reclamation and NAPI performed a complete and detailed inspection of the Block Five NIIP facilities. The purpose of the inspection was to: 1) determine the condition of the equipment; 2) whether or not the equipment could be operated in a safe manner; 3) identify any safety or maintenance deficiencies; 4) develop a maintenance program and budget to address the shortcomings; 5) develop strategies and budgets to project maintenance costs for the other remaining blocks until those equipment are inspected. The OM & R BUDGET CHARTS, Chart C-1, shows the funding needs for FY 99 and FY 2000 at \$750,000 and \$1,460,000, respectively. In order to catch up with the backlog, future-funding requirements will increase to \$1.8 million and then go back to zero. Chart C-3 shows that the deficit will spiral if adequate funds are not provided to take care of the deferred maintenance.

CHART C-2 displays by fiscal years the required OM & R funds, what was actually provided by BIA, actual expenditures, annual OM & R deficit and the cumulative OM & R deficit.

3.5 REPLACEMENTS

The following statements were extracted from the previous legacy contract number CTN00X10213. The funding amounts to complete these replacement items were never allocated as of CY2005.

Most project facilities are now aged and some of the equipment's are approaching the end of their expected service life. The pumps and natural gas engines in Blocks 1, 2 and 3 are over 30 years old and are scheduled for replacement of worn out units beginning in 1998. Worn pumps and gas engines have reduced energy efficiency and are subject to sudden failures during the irrigation season. The funding required for scheduled equipment replacements will increase considerably in future years as additional equipment wear out.

In addition to the scheduled replacement of project equipment, most of the O&M heavy equipment and other maintenance equipment are aged and worn to the point of becoming uneconomical to operate. Replacement of this equipment is essential to NAPI's ability to successfully operate and maintain the Navajo Indian Irrigation project.

APPENDIX

The appendix includes those exhibits, which are subject to change including items as:

EXHIBIT A: NIIP Information Map

EXHIBIT B: Copy of WAPA Service & Maintenance Agreement

EXHIBIT C: OM & R Budget Charts

- Chart C-1
- Chart C-2
- Chart C-3

EXHIBIT D: Operation & Maintenance Budget Status History Charts

- Chart D-1
- Chart D-2
- Chart D-3

EXHIBIT E: 2012 Operation & Maintenance Organizational Chart

O & M Manager Job Description

Exhibit A

NIIP Information Map

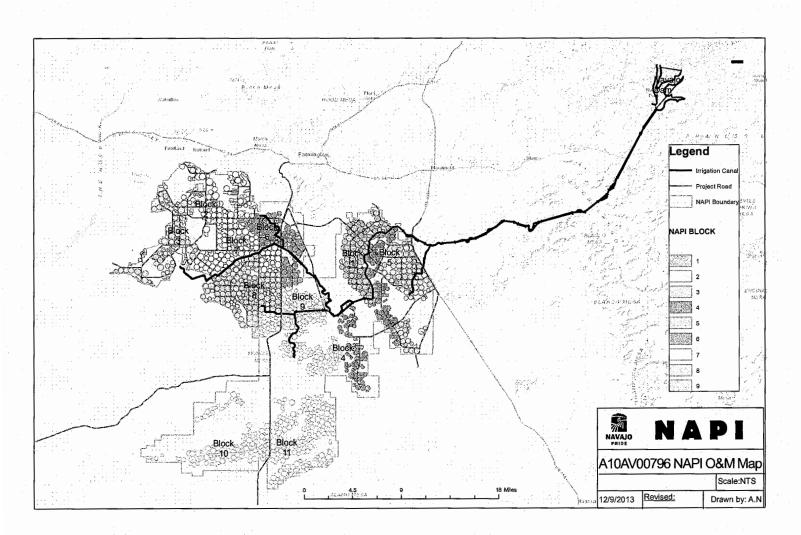


Exhibit B

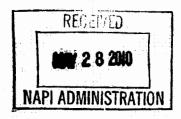
WAPA Service and Maintenance Agreement



Department of Energy

Western Area Power Administration 150 East Social Hall Avenue, Suite 300 Salt Lake City, UT 84111-1580

MAY 26 2010



Mr. Leonard Scott Chief Operating Officer Navajo Agricultural Products Industry P.O. Drawer 1318 Farmington, NM 87499

Dear Mr. Scott:

Enclosed is one fully executed original of Contract No. 10-SLC-0649 between Western and NAPI for Operation and Maintenance support. This became effective April 1, 2010, and will continue through March 31, 2020. This new contract provides a continuation of services that had been provided to NAPI under Contract No. 98-SLC-0395.

The services provided by Western to NAPI are set forth in the Exhibit A. Western will maintain, at NAPI's expense, the Kutz Substation and related pumping plant switchyard, the Gallegos Substation, and will also patrol NAPI's transmission system by ground and air. Exhibit B sets forth maintenance NAPI will provide at those same facilities.

Western will provide NAPI with an estimated work plan and cost estimate each March for the next two upcoming fiscal years. We have not completed the estimate for fiscal years 2011 and 2012, but will soon be providing this information.

Western is pleased to be able to extend this contract with NAPI. We look forward to continuing the successful relationship we have had over the years.

If you have any questions, please telephone Brent Osiek at (801) 524-5495.

Sincerely,

Brent Quick

Burt Hawkes. Power Resources and Contracts Manager

Enclosure

Γ		REGUIVED	
	- 1	MAY 2 8 2010	
	N/	PI ADMINISTRATI	ON

UNITED STATES

DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

COLORADO RIVER STORAGE PROJECT

CONTRACT

FOR

SERVICE AND MAINTENANCE WITH

THE NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

UNITED STATES DEPARTMENT OF ENERGY WESTERN AREA POWER ADMINISTRATION COLORDAO RIVER STORAGE PROJECT CONTRACT FOR SERVICE AND MAINTENANCE WITH THE NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

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UNITED STATES DEPARTMENT OF ENERGY WESTERN AREA POWER ADMINISTRATION COLORAO RIVER STORAGE PROJECT CONTRACT FOR SERVICE AND MAINTENANCE WITH THE NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

PREAMBLE

1.

THIS CONTRACT, made this 31 day of March 2010, pursuant to the Acts of Congress approved June 17, 1902 (32 Stat. 388); April 11, 1956 (70 Stat. 105); June 13, 1962 (76 Stat. 96); August 4, 1977 (91 Stat. 565); and Acts amendatory thereof or supplementary to the foregoing Acts; between the UNITED STATES OF AMERICA, acting through the Administrator, Western Area Power Administration, United States Department of Energy, hereinafter called "Western," represented by the officer executing this Contract or a duly appointed successor, hereinafter called the Contracting Officer; and the NAVAJO AGRICULTURAL PRODUCTS INDUSTRY, an enterprise of the Navajo Nation, hereinafter called "NAPL," represented by the Chief Executive Officer, a duly appointed successor, or a duly authorized representative; Western and NAPI, each sometimes hereinafter called "Party," and all sometimes hereinafter collectively called the "Parties."

1

2. EXPLANATORY RECITALS

- 2.1 The Act of June 13, 1962, Public Law 87-483, authorized and directed the Secretary of Interior to construct, operate, and maintain the Navajo Indian Irrigation Project (NIIP); the purpose of which is to provide irrigation water for lands held in trust by the Secretary of the Interior for the benefit of the Navajo Nation.
- 2.2 The Secretary of the Interior, acting through the Bureau of Indian Affairs (BIA) and Bureau of Reclamation, is responsible for the funding, design, construction, operation, maintenance, and replacement of NIIP facilities.
- 2.3 Since October 1, 1985, NAPI has operated and maintained the NIIP facilities on behalf of the Secretary of the Interior pursuant to the authority of Public Law 87-483, and Public Law 93-638, the Indian Self-Determination and Educational Assistance Act, as amended.

2.4 The Parties entered into Contract No. 98-SLC-0395, on August 21, 2001, under

which Western provided certain maintenance services. Western and NAPI agree that this arrangement has been beneficial and have agreed to modify certain provisions and enter into a revised and restated maintenance agreement.

2.5 The Parties desire to provide long-term Operation and Maintenance (O&M) services for the electrical facilities associated with NIIP and each party is willing to provide O&M services for such facilities under the terms and conditions provided herein.

3. <u>CONTRACT</u>

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

4. <u>TERM OF CONTRACT</u>

4.1 This Contract shall become effective upon execution, and shall remain in effect until midnight the last day of March 2020.

4.2 The date of initial service hereunder shall be April 1, 2010. This Contract may be extended for four consecutive periods of five (5) years each by mutual consent of

(2) years' advanced written notice.

LICENSE TO WESTERN

5.

- 5.1 NAPI, under the terms and conditions specified herein, grants at no cost to Western and its authorized employees, agents, and subcontractors, a license to enter rightsof-way and associated facilities listed in the Exhibits attached hereto, to accomplish the work provided for in this Contract and for the purpose of emergency O&M.
- 5.2 NAPI and Western shall notify the other Party of all operation, maintenance, replacement, and removal of facilities under this license to eliminate or minimize any interference with the O&M of the transmission system or facilities of others.

6. OPERATIONS AND MAINTENANCE

- 6.1 Facilities to be Operated and Maintained: The facilities to be maintained include all substation equipment and control facilities located in Kutz and Gallegos Substations, and other substation or transmission facilities that may be added in the future and agreed upon by the Parties in writing. A description of maintenance and frequency of service to be provided by the Parties is provided in the Exhibits to this Contract. All O&M performed by Western, under this Contract, will be at the expense of NAPI.
- 6.2 <u>Maintenance Plan</u>: Facilities which Western will maintain for NAPI are similar to the facilities of the Colorado River Storage Project. Western will perform periodic maintenance of the NIIP facilities as listed in the Exhibits. All maintenance and inspections will be performed to Western standard criteria and frequency of service as set forth in the Exhibits to this Contract.
- 6.3 <u>Operations Plan</u>: NAPI facilities will be operated under the authority of Western's Division of Power Operations. All operation of substation controls, switches, disconnects, breakers, and any other power system or auxiliary equipment will be accomplished under the direction of Western's Power System Dispatcher. Planned

maintenance will be coordinated between the Parties and scheduled with Western's Division of Power Operations as soon as possible and at least three (3) days prior to the time the work is to begin for equipment rated under 100 kV. Switching to remove equipment from service for maintenance will be coordinated among the Parties. Also, if emergency switching has to be performed; the Party to perform the switching will obtain clearance from Western's system dispatcher prior to the time work is to begin.

6.4 Environmental, Health, Safety, and Security Compliance: The Parties agree to comply with the environmental, health, safety, and security requirements set forth in the Exhibits and Articles 28 through 30 of the General Power Contract Provisions dated September 1, 2007, attached hereto and made a part hereof. Federal and Navajo regulations will govern all activities within the perimeter of the Kutz and Gallegos Substations and other facilities set forth in Exhibits to this Contract. All costs associated with bringing NAPI facilities up to Federal and Navajo environmental, health, safety, and security regulations shall be at NAPI's expense.

If NAPI does not comply with this subsection in a timely manner, and the deficiencies in environmental, safety, health, and security pose a danger to Western employees, Western may elect to correct any deficiencies in environmental, safety, health, or security at NAPI's sole expense, not to exceed one thousand dollars

(\$1,000) per occurrence. Further, Western may, as its sole discretion, elect not to perform service described under the terms of this Contract; <u>Provided</u>, That if Western elects not to perform services, NAPI shall be relieved of its O&M charges during this period.

6.5 <u>Replacement and Additions</u>: Western will perform services and make replacements and additions while performing routine O&M activities listed in the Exhibits. Services, replacements, and additions made during routine maintenance will be included as part of the maintenance costs and will be billed in accordance with Articles 7 and 8 of this Contract. Extraordinary maintenance, major replacements, and major additions are those which cost more than ten thousand dollars (\$10,000) each and will be accomplished through written notification and after consultation with and approval by NAPI.

7. PROGRAM AND BUDGET

On or before March 31 of each year, Western will prepare and submit to NAPI for review and approval, an estimated budget for O&M to be provided to NAPI for the following two fiscal years. The estimates shall cover services to be performed from October 1 of that year to September 30, two (2) years later. The budget will cover all estimated costs, including routine O&M and inspection service, replacements, additions, and administrative and general expenses. During each operating year (October 1 to September 30), Western will keep NAPI advised of any unanticipated costs, such as emergency maintenance or replacements, so that necessary funding can be provided by NAPI as soon as practicable.

8. PAYMENT FOR SERVICE, OPERATION, AND MAINTENANCE

Upon execution of this Contract and beginning November 1 of each subsequent year, for O&M provided under this Contract NAPI shall pay Western in advance the annual estimated cost of providing the services, including administrative and general expenses. At the end of each fiscal year, an adjustment will be made to the final monthly billing to reflect any difference between the estimated and actual costs expended. Extraordinary or emergency maintenance shall be billed separately within thirty (30) days following completion of the work. Western will provide NAPI a quarterly accounting of year-to-date expenditures.

9. OPERATION AND MAINTENANCE REVIEW

Every two (2) years, beginning in 2012, Western and NAPI will make a joint inspection, at NAPI's expense, of all facilities covered by this Contract to ascertain that O&M is being performed to conform to the safety, health, security, environmental, maintenance, and operations requirements of this Contract and associated Exhibits. Following this review, and at the request and expense of NAPI, Western will provide a line crew, for up to two (2) weeks, to correct deficiencies that were identified on the transmission lines.

8

10. CONTINGENT UPON APPROPRIATIONS

Where activities provided for in the Contract extend beyond the current fiscal year, continued expenditures by the Parties are contingent upon Congress making the necessary appropriation required for the continued performance of the Parties' obligations under the Contract. In case such appropriation is not made, the Parties hereby release the Party or Parties not receiving such appropriation from its contractual obligations and from all liability due to the failure of Congress to make such appropriation.

11. NAVAJO NATION PREFERENCE LAWS

- 11.1 Preference shall be given to members of the Navajo Nation in employment and in the acquisition of goods and services required by this Contract in accordance with the laws of the Navajo Nation.
- 11.2 NAPI is an entity of the Navajo Nation and is immune from suit. Any waiver of NAPI's immunity must be made explicitly by contract recommended by NAPI Board of Directors and approved by the Navajo Nation Council.
- 11.3 NAPI shall purchase liability insurance to cover up to five hundred thousand dollars (\$500,000) in damages per occurrence for injuries to property or persons that occur as a result of work performed under this Contract. The insurance policy shall contain a provision that the insurance carrier shall waive any right it may have to raise as a defense the Tribe's sovereign immunity from suit, but that such waiver shall extend only to claims the amount and nature of which are within the coverage and limits of the policy and shall not authorize or empower such insurance carrier to waive or otherwise limit NAPI's sovereign immunity outside or beyond the coverage and limits of the policy of insurance.

10

12. WESTERN'S PARTICIPATION

Western is an agency of the United States Department of Energy and, as such, is immune from suit except as otherwise provided in Federal law. Notwithstanding any other provision of this agreement to the contrary, Western's participation in this agreement is subject in all respects to the United States Constitution, statutes, treaties, court decisions, and lawful and valid regulations established hereunder.

13. GENERAL POWER CONTRACT PROVISIONS

The General Power Contract Provisions effective September 1, 2007, attached hereto, are hereby made a part of this Contract the same as if they had been expressly set forth herein; <u>Provided</u>, That Articles 2 through 9, 11, 12, 15 through 23, and 27 shall not be applicable hereunder; <u>Provided further</u>, That wherever the word Agreement is used, it shall mean Contract.

14. EXHIBITS

Inasmuch as certain provision of this Contract may change during the term hereof, they will be set forth in exhibits from time to time agreed upon by the authorized representatives of the Parties. The initial Exhibits and all future exhibits shall be attached hereto and made a part hereof, and each shall be in force and effect in accordance with its terms unless superseded by a subsequent exhibit. IN WITNESS WHEREOF, the Parties hereto have caused this Contract and attached Exhibits A

and B to be duly executed the day and year first written above.

U.S. DEPARTMENT OF ENERGY WESTERN AREA POWER ADMINISTRATION

By: P Manager CRS

CRSP Management Center Western Area Power Administration Salt Lake City, UT

NAVAJO AGRICULTURAL PRODUCTS INDUSTRY

By: Chief Executive Officer Drawer 1318 Farmington, NM 87499

EXHIBIT A

SCHEDULED SERVICES TO BE PROVIDED AND MAINTENANCE TO BE PERFORMED BY WESTERN

This Exhibit A made this 31 day of March, 2010, to be effective under and as part of Contract No. 10-SLC-0649, dated April 1 2010, hereinafter called the "Contract" shall be come effective on the date of its execution and shall remain in effect until superseded by another Exhibit A; <u>Provided</u>, That this Exhibit A or any superseding Exhibit A shall be terminated by the expiration of the original Contract.

2. It is the intent of this Contract that Western shall have the responsibility for substation and building electrical equipment maintenance requirements as follows:

1000	1	• •	
	1		. •

1.

Kutz Substation/Kutz Pumping Plant Switchyard Description of Service and/or Maintenance Provided

Test all 115-kV relays that would affect Annually PNM and Western's systems except pumping plants

Test other relays as requested by NAPI for pumping plants served from Kutz Substation

Maintain oil circuit breaker and motor operated interrupter

Maintain battery bank

Maintain two transformers at pumping Annually and major plant and four single-phase transformers every 5 years at substation

Test and maintain revenue meter

Perform oil tests on transformers

Annually

Every 3 years

Annually

Frequency of Service

Annually and major

every 5 years

Every 6 months

Perform safety, health, security, Every 2 years, with environmental, maintenance, and NAPI and as operations inspection requested Perform routine electrical equipment Monthly inspections Provide copies of monthly inspection Monthly and test reports Provide annual equipment test reports Annually Perform switching school Annually Weed spraying Annually Spray for rodents and insects in control Quarterly room Test all 115-kV relays that would affect Annually PNM and Western's systems except pumping plants Test other relays as requested by NAPI Annually for pumping plants served from **Gallegos Substation** Witness PNM meter test Every 3 years Maintain battery bank Every 6 months Perform safety, health, security, Every 2 years and as requested; major environmental, maintenance, and every 5 years operations inspection Maintain two three-phase transformers Every 6 years and one single-phase station-service transformer Perform routine electrical equipment Monthly inspections Provide copies of monthly inspection Monthly and test reports Provide annually equipment test reports Annually Perform switching school Annually

Gallegos Substation

Maintain 34.5KV breakers

Weed spraying

Spray for rodents and insects in control room

Transmission System

Patrol via Air

Patrol via Ground

Schedule high priority line work

Annually and major every 5 years

Annually

Quarterly

Every 6 months

Annually

Annually with NAPI

EXHIBIT B SCHEDULED SERVICES TO BE PROVIDED AND MAINTENANCE TO BE PERFORMED BY NAPI

- This Exhibit B made this 31 day of March, 2010, to be effective under and as part of Contract No. 10-SLC-0649, dated April 1 2010, hereinafter called the "Contract" shall be come effective on the date of its execution and shall remain in effect until superseded by another Exhibit B; <u>Provided</u>, That this Exhibit B or any superseding Exhibit B shall be terminated by the expiration of the original Contract.
- It is the intent of this Contract that NAPI shall have the responsibility for all general substation yard and building maintenance requirements and Western shall have the responsibility for all substation and building electrical equipment maintenance requirements.

Facility

Description of Service and/or Maintenance Provided

Frequency of Service

Monthly

Perform routine inspection and general building maintenance

Perform routine inspection and general Monthly yard maintenance

For minor emergency work NAPI will inform Western

Perform a general facilities safety, health, security, environmental, maintenance, and operations inspection

Perform routine inspections

16

Perform routine inspection and general M building maintenance

Perform routine inspection and general Monthly yard maintenance

Every 2 years with Western

Western will respond

Monthly

Monthly

Kutz Substation/Kutz Pumping Plant Switchyard

Gallegos

1.

2.

For minor emergency work NAPI will inform Western

Perform a general facilities safety, health, security, environmental, maintenance, and operations inspection

Perform routine inspection and general building maintenance

Perform routine inspection and general yard maintenance

For minor emergency work NAPI will inform Western

Perform a general facilities safety, health, security, environmental, maintenance, and operations inspection

Maintenance of battery bank

Provide a reliable DC power source

Schedule high priority line work

Western will respond

Every 2 years with Western

Monthly

Monthly

Western will respond

Every 2 years with Western

Every 6 months

On-going

Annually with Western

Gallegos Pumping Plant Substation

Transmission System

Exhibit C

Operation, Maintenance & Replacement Charts

- Chart C-1
- Chart C-2
- Chart C-3

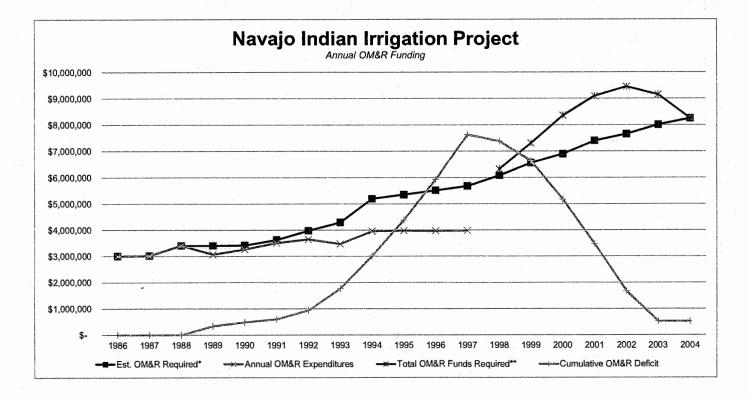


Exhibit C Chart C-2

Year	_	st. OM&R Required*		BIA O&M Funding		nual OM&R penditures		Fotal OM&R Funds Required**	A	nnual OM&R Deficit	-	umulative M&R Deficit
1986	\$	3,000,000	\$	3,000,000	\$	3,000,000			\$		\$	-
1987	\$	3,014,000	\$	3,014,000	\$	3,014,000			\$	-	\$	-
1988	\$	3,400,000	\$	3,400,000	\$	3,400,000			\$	-	\$	-
1989	\$	3,400,000	\$	3,062,000	\$	3,062,000			\$	338,000	\$	338,000
1990	\$	3,412,000	\$	3,250,000	\$	3,260,000			\$	152,000	\$	490,000
1991	\$	3,622,500	\$	3,505,000	\$	3,505,000			\$	117,500	\$	607,500
1992	\$	3,975,000	\$	3,500,000	\$	3,642,400			\$	332,600	\$	940,100
1993	\$	4,293,000	\$	3,200,000	\$	3,465,230			\$	827,770	\$	1,767,870
1994	\$	5,193,000	\$	3,800,000	\$	3,954,300			\$	1,238,700	\$	3,006,570
1995	\$	5,350,000	\$	3,800,000	\$	3,974,308			\$	1,375,692	\$	4,382,262
1996	\$	5,510,000	\$	3,800,000	\$	3,964,136			\$	1,545,864	\$	5,928,126
1997	\$	5,675,000	\$	5,206,775	\$	3,974,308			\$	1,700,692	\$	7,628,818
1998	\$	6,076,000	\$	4,800,000			\$	6,326,000	\$	(250,000)	\$	7,378,818
1999	\$	6,556,000					\$	7,306,000	\$	(750,000)	\$	6,628,818
2000	\$	6,896,000		10.111			\$	8,356,000	\$	(1,460,000)	\$	5,168,818
2001	\$	7,397,000					\$	9,097,000	\$	(1,700,000)	\$	3,468,818
2002	\$	7,652,000					\$	9,451,000	\$	(1,799,000)	\$	1,669,818
2003	\$	8,007,000					\$	9,149,000	\$	(1,142,000)	\$	527,818
2004	\$	8,247,000					\$	8,247,000	\$	-	\$	527,818
*Does not in starting in 1			mpl	etion of deferred	d mai	intenance for p	rior		sch	eduled equipme	nt re	
		a for completic	n of	deferred mainte	enand	ce from prior ve	ars	beginning in 19	98.			
										sing the OM&R	defic	it and the
Note: Continued funding at current levels will result in further deferment of maintenance, increasing the OM&R deficit and the chances of catastrophic equipment failure.												

Exhibit C Chart C-3

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Exhibit D

Operations & Maintenance Budget Status

History Charts

- Chart D-1
- Chart D-2
- Chart D-3
- Chart D-4

	Operations & Maintenance						
Budget Status History							
Fiscal Year	Amount Requested	Actual Amount Received					
1994	\$5,193,000	\$3,954,300					
1995	\$5,193,000	\$3,800,000					
1996	\$6,112,000	\$3,800,000					
1997	\$6,112,000	\$5,206,775					
1998	\$6,326,000	\$4,789,854					
1999	\$6,507,200	\$5,200,000					
2000	\$7,345,500	\$5,452,492					
2001	\$9,097,000	\$4,300,000					
2002	\$9,451,000	\$4,805,000					
2003	\$9,149,000	\$4,805,000					
2004	\$4,000,000	\$4,000,000					
2005	\$5,425,000	\$4,000,000					
2006	\$7,901,250	\$3,671,000					
2007	\$8,356,000	\$3,732,000					
2008	\$9,856,000	\$4,632,000					
2009	\$10,477,000	\$4,815,619					
2010	\$12,642,400	\$4,698,221					
2011	\$12,050,500	\$4,082,000					
2012	\$12,937,285	\$3,852,000					
2013	\$6,000,000	\$3,732,000					
2014	\$6,900,000	\$3,852,000					
2015	\$6,738,138	\$3,852,000					

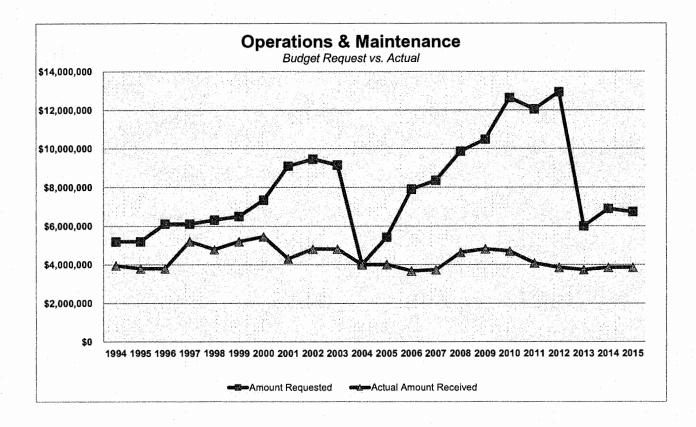


Exhibit D Chart D-2

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION	BUDGET		
5110	Storage			
2950	Operations Labor	\$	16,500	
2952	Maintenance Labor	\$	11,000	
2954	Management Labor	\$	-	
2956	Training Labor	\$	-	
2960	Operations Burden & Beneftis	\$	_	
2962	Maintenance Burden & Benefits	\$	2,475	
2964	Management Burden & Benefits	\$	1,650	
2966	Training Burden & Benefits	\$	-	
4910	Operations Tools, Materials & Supplies	\$	1,000	
4915	Maintenance Tools, Materials & Supplies	\$	1,000	
5945	Operations Outside Serv., Sub-Cont., Consl.	\$	-	
		\$	33,625	
5121	Carriage			
2950	Operations Labor	\$	225,123	
2952	Maintenance Labor	\$	250,585	
2954	Management Labor	\$	-	
2956	Training Labor	\$	5,000	
2960	Operations Burden & Benefits	\$	33,768	
2962	Maintenance Burden & Benefits	\$	37,588	
2964	Management Burden & Benefits	\$	-	
2966	Training Burden & Benefits	\$	1,000	
3995	Programmable Logic Controls	\$	3,400	
4910	Operations Tools, Materials & Supplies	\$	35,000	
4915	Maintenance Tools, Materials & Supplies	\$	3,500	
5915	Heavy Equipment	\$	12,000	
5950	Maintenace Operations Outside Serv., Sub-Cont., Consl.	\$	37,000	
5975	Operations Transportation/GSA	\$	5,000	
5985	Maintenance Transportation/GSA	\$	52,900	
8905	City of Farmington (Electricity)	\$	-	
		\$	701,864	
5122	Distribution - Region 1			
2950	Operations Labor	\$	297,000	
2952	Maintenance Labor	\$	155,250	
2954	Management Labor	\$	_	
2956	Training Labor	\$	2,250	
2960	Operations Burden & Benefits	\$	44,550	
2962	Maintenance Burden & Benefits	\$	23,288	
2964	Management Burden & Benefits	\$	-	

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION		BUDGET		
5122	Distribution - Region 1		State States		
2966	Training Burden & Benefits	\$	375		
3905	Check Valve	\$	-		
3910	Electric Motors	\$	44,000		
3920	Gas Engines	\$	64,000		
3925	Gear Heads	\$	40,000		
3960	Safety Personnel Protection	\$	2,400		
3965	Meter-Water Flow	\$	76,000		
3970	Motor Control Switches	\$	14,000		
3985	Pressure Reducing Valves	\$	24,000		
3995	Programmable Logic Controls	\$	52,240		
4900	Pumps	\$	20,000		
4905	Maintenance Pumps	\$	60,000		
4910	Operations Tools, Materials & Supplies	\$	60,000		
4915	Maintenance Tools, Materials & Supplies	\$	60,000		
4920	Transformers	\$	36,000		
4925	Underground Lateral Valves	\$	40,000		
4930	Valves	\$	32,000		
5915	Heavy Equipment	\$	4,400		
5920	Operations Vehicle-Fule, Lub, Maintenance	\$	-		
5925	Fuel	\$	15,360		
5940	Maintenance Agreement	\$	-		
5945	Operations Outside Serv., Sub-Cont., Consl.	\$	10,000		
5950	Maintenance Outside Serv., Sub-Cont., Consl.	\$	50,000		
5970	Elevated Tanks	\$	-		
5975	Operations Transportation/GSA	\$	26,000		
5985	Maintenance Transportation/GSA	\$	52,000		
5990	Traveling Water Screens	\$	12,000		
5991	Natural Gas Engine CAT	\$	-		
8905	City of Farmington (Electricity)	\$	12,000		
8910	Distribution Power	\$	12,000		
8915	NTUA	\$	31,600		
8920	NM Gas Company	\$	90,800		
8925	WAPA Electric Service	\$	640,000		
		\$	2,103,513		
5122	Distribution - Region 2	12 1.23%			
2950	Operations Labor	\$	264,000		
2952	Maintenance Labor	\$	138,000		
2954	Management Labor	\$	-		

.

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION	BUDGET
5122	Distribution - Region 2	
2956	Training Labor	\$ 2,000
2960	Operations Burden & Benefits	\$ 39,600
2962	Maintenance Burden & Benefits	\$ 20,700
2964	Management Burden & Benefits	\$ -
2966	Training Burden & Benefits	\$ 375
3905	Check Valve	\$ -
	Electric Motors	\$ 55,000
3920	Gas Engines	\$ 16,000
3925	Gear Heads	\$ 10,000
	Safety Personnel Protection	\$ -
3965	Meter-Water Flow	\$ 76,000
3970	Motor Control Switches	\$ 14,000
3985	Pressure Reducing Valves	\$ 24,000
3995	Programmable Logic Controls	\$ 52,240
4900	Pumps	\$ 20,000
4905	Maintenance Pumps	\$ 60,000
4910	Operations Tools, Materials & Supplies	\$ 60,000
4915	Maintenance Tools, Materials & Supplies	\$ 60,000
4920	Transformers	\$ 36,000
4925	Underground Lateral Valves	\$ 40,000
4930	Valves	\$ 32,000
	Heavy Equipment	\$ 4,400
5920	Operations Vehicle-Fule, Lub, Maintenance	\$ _
	Fuel	\$ 15,360
5940	Maintenance Agreement	\$ -
5945	Operations Outside Serv., Sub-Cont., Consl.	\$ 10,000
5950	Maintenance Outside Serv., Sub-Cont., Consl.	\$ 50,000
5970	Elevated Tanks	\$ -
5975	Operations Transportation/GSA	\$ 26,000
5985	Maintenance Transportation/GSA	\$ 52,000
5990	Traveling Water Screens	\$ 12,000
5991	Natural Gas Engine CAT	\$ -
8905	City of Farmington (Electricity)	\$ 12,000
8910	Distribution Power	\$ 12,000
8915	NTUA	\$ 31,600
8920	NM Gas Company	\$ 90,800
8925	WAPA Electric Service	\$ 640,000
		\$ 1,976,075

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION	B	BUDGET		
5122	Distribution - Region 3				
2950	Operations Labor	\$	99,000		
2952	Maintenance Labor	\$	51,750		
2954	Management Labor	\$	_		
2956	Training Labor	\$	750		
2960	Operations Burden & Benefits	\$	14,850		
2962	Maintenance Burden & Benefits	\$	7,763		
2964	Management Burden & Benefits	\$	-		
2966	Training Burden & Benefits	\$	_		
	Electric Motors	\$	11,000		
3925	Gear Heads	\$	-		
	Safety Personnel Protection	\$	1,200		
3965	Meter-Water Flow	\$	38,000		
3790	Motor Control Switches	\$	7,000		
3985	Pressure Reducing Valves	\$	12,000		
3995	Programmable Logic Controls	\$	26,120		
4900	Pumps	\$	10,000		
4905	Maintenance Pumps	\$	30,000		
4910	Operations Tools, Materials & Supplies	\$	30,000		
4915	Maintenance Tools, Materials & Supplies	\$	30,000		
4920	Transformers	\$	18,000		
4925	Underground Lateral Valves	\$	20,000		
4930	Valves	\$	16,000		
a	Heavy Equipment	\$	2,200		
5920	Operations Vehicle-Fule, Lub, Maintenance	\$	-		
	Fuel	\$	7,680		
5940	Maintenance Agreement	\$	-		
5945	Operations Outside Serv., Sub-Cont., Consl.	\$	5,000		
5950	Maintenance Outside Serv., Sub-Cont., Consl.	\$	25,000		
5970	Elevated Tanks	\$	-		
5975	Operations Transportation/GSA	\$	13,000		
5985	Maintenance Transportation/GSA	\$	26,000		
5990	Traveling Water Screens	\$	6,000		
8905	City of Farmington (Electricity)	\$	6,000		
8910	Distribution Power	\$	6,000		
8915	NTUA	\$	15,800		
8920	NM Gas Company	\$	45,400		
8925	WAPA Electric Service	\$	320,000		
		\$	901,513		

Navajo Agricultural Products Industry Operations and Maintenance

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION	BUDGET	
5133	Drains & Roads System		
2952	Maintenance Labor	\$	95,000
2954	Management Labor	\$	-
2956	Training Labor	\$	-
2962	Maintenance Burden & Benefits	\$	14,250
2964	Management Burden & Benefits	\$	-
2966	Training Burden & Benefits	\$	-
4915	Maintenance Tools, Materials & Supplies	\$	20,000
5915	Heavy Equipment	\$	40,000
5925	Maintenance Vehicle-Fuel, Lub, Maintenance	\$	23,000
5950	Maintenance Outside Serv., Sub-Cont., Consl.	\$	20,000
5985	Maintenance Transportation/GSA	\$	48,000
		\$	260,250
5134	Facilities/Buildings		
3975	Network & Material	\$	-
4915	Maintenance Tools, Materials & Supplies	\$	8,000
2950	Operations & Labor		
2952	Maintenance Labor		
		\$	8,000
5151	System Administration/Management		
2950	Operations Labor (Engineer, Program Analyst & Warehouse)	\$	167,000
2952	Maintenance Labor (Engineer, Program Analyst & Warehouse)	\$	46,000
2954	Management Labor	\$	112,000
2956	Training Labor	\$	• •
2960	Operations Burden & Benefits	\$	25,050
2962	Maintenance Burden & Benefits	\$	6,900
2964	Management Burden & Benefits	\$	16,800
2966	Training Burden & Benefits	\$	-
3935	GSA Catalogue Supplies	\$	5,000
3960	Safety Personnel Protection	\$	7,800
4910	Operations Tools, Materials & Supplies	\$	7,000
4915	Maintenance Tools, Materials & Supplies	\$	1,000
4917	Office Supplies	\$	6,000
5823	Interest Income	\$	-
5930	Contract Support Cost	\$	400,000
5935	Legal Fees	\$	5,000
5955	Management Outside Serv., Sub-Cont., Consl.	\$	-
5960	Travel & Per Diem	\$	19,000
5965	Tuition & Fees	\$	37,500

•

Navajo Agricultural Products Industry Operations and Maintenance

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION	E	BUDGET
5980	Management Transportation/GSA	\$	30,600
6900	Reserve Funds	\$	-
9998	Paid Capital & Retained Earnings	\$	-
9999	Appropriations	\$	-
		\$	892,650
5900	General & Administrative		
5820	Contract Support Cost	\$	8,600
5825	Bank Fees/Interest Expense	\$	-
		\$	8,600.00
	TOTAL	\$	6,886,089

Navajo Agricultural Products Industry Operations and Maintenance Gallegos Pumping Plant Proposed Budget for Fiscal Year 2016

.

COST CENTER	DESCRIPTION		BUDGET
5122	Distribution - Region 1		
2950	Operations Labor	\$	298,990
2952	Maintenance Labor	\$	213,564
2954	Management Labor	\$	87,729
2956	Training Labor		
2960	Operations Burden & Benefits		
2962	Maintenance Burden & Benefits		
2964	Management Burden & Benefits		
2966	Training Burden & Benefits		
3905	Check Valve		
3910	Electric Motors		
3920	Gas Engines		
3925	Gear Heads		
3960	Safety Personnel Protection		
3965	Meter-Water Flow		
3970	Motor Control Switches		
3985	Pressure Reducing Valves		4
3995	Programmable Logic Controls		
4900	Pumps		
4905	Maintenance Pumps		
4910	Operations Tools, Materials & Supplies		
4915	Maintenance Tools, Materials & Supplies	\$	200,000
4920	Transformers		
4925	Underground Lateral Valves		
4930	Valves		
5915	Heavy Equipment	\$	3,407
5920	Operations Vehicle-Fule, Lub, Maintenance		
5925	Fuel		
5940	Maintenance Agreement		
5945	Operations Outside Serv., Sub-Cont., Consl.	1	
5950	Maintenance Outside Serv., Sub-Cont., Consl.		
5970	Elevated Tanks		
5975	Operations Transportation/GSA	\$	39,750
5985	Maintenance Transportation/GSA		· · ·
5990	Traveling Water Screens	\$	2,385
8910	Distribution Power		
8925	WAPA Electric Service	\$	547,319
	TOTAL	\$	1,393,144



United States Department of the Interior

BUREAU OF RECLAMATION Upper Colorado Region Four Corners Construction Office 2200 Bloomfield Highway Farmington, NM 87401-8110 NOV 0 8 2013

IN REPLY REFER TO:

FCCF-120 ADM-13.00

VIA ELECTRONIC MAIL ONLY

MEMORANDUM

To: Branch of Irrigation and Power, Bureau of Indian Affairs, Division of Water and Power Attention: Mr. David Fisher, P.E.

arry Longwell From Construction Engineer

Subject: Request for Fiscal Year (FY) 2016 Operations and Maintenance (O&M) Budget Estimate for Gallegos Pumping Plant (Telephone Conversation Request of September 2013)

As discussed with you and Mr. Doug Dockter during the subject telephone call, we have agreed to transfer of the Gallegos Pumping Plant and appurtenant facilities from Construction Status to the Bureau of Indian Affairs (BIA) O&M Status beginning FY 2016. The Bureau of Reclamation currently performs the O&M for the above mentioned facility as well as the Block 8, B3.1 Pumping Plant and the Block 9, Stage 1 and 2 facilities. The B3.1 Pumping Plant and Block 9 facilities are currently in various stages of the transfer process with planned execution in FY 2014 and FY 2015. O&M cost estimates for these facilities will be provided with their respective transfer documentation.

In order to accomplish the O&M functions for the above mentioned facilities, the minimum forces necessary consist of two journeyman electricians, two journeyman mechanics, a maintenance technician, a crew foreman and managerial, supervisory and engineering support. Of this staff, one electrician and one mechanic are employed by the Navajo Agricultural Products Industry (NAPI) and are receiving on-the-job training in the O&M of these facilities. The trades employees are divided into two crews, each consisting of one electrician and one mechanic, working four 10/hour days per week. This has proved to be the most economical schedule for work safety and seven days per week operations coverage. We estimate the Gallegos Pumping Plant requires approximately 75 percent of our O&M staff time.

Enclosed for your use is a spreadsheet summarizing our present cost estimate for the Gallegos Pumping Plant O&M as well as funds to cover miscellaneous parts, equipment, supplies, and emergency repairs. We recommend the budgeted amount of \$1.4 million be included in your FY 2016 funding request to assume the O&M functions at the Gallegos Pumping Plant. The estimate also includes seasonal start-up cleaning of sediment and debris at the Gallegos Trash Rack. This work is Subject: Request for Fiscal Year (FY) 2016 Operations and Maintenance (O&M) Budget Estimate

performed by NAPI with costs reimbursed back to NAPI through a P.L.93-638 agreement. The pumping plant power costs are highly variable depending upon acreage, crop mixes, and the local weather. These costs are paid by NAPI and reimbursed back to them through the same agreement. The estimate encompasses direct costs and does not include costs for equipment replacements or managerial, supervisory and engineering support that would be provided through existing NAPI resources.

If you have any questions, please contact Barry Longwell at 505-324-5001 or Doug Dockter at 505-324-5006.

Enclosure

cc: Ms. Yulin Jin Bureau of Indian Affair Main Interior Building 1849 C Street, NW Washington, DC 20240

> Mr. Frank Holiday Bureau of Indian Affair Main Interior Building 1849 C Street, NW Washington, DC 20240

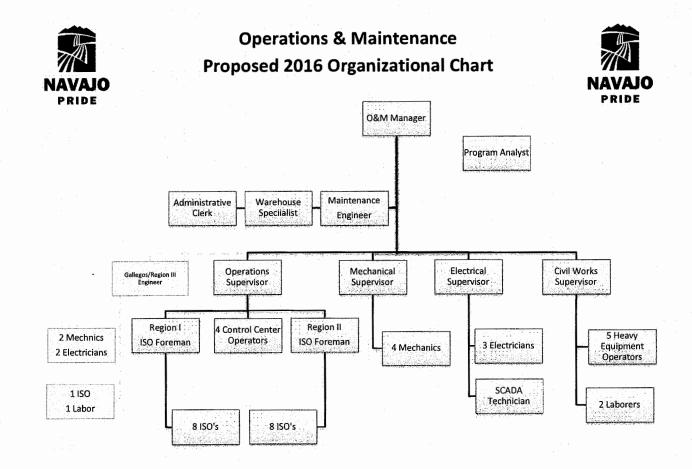
Mr. Michael Howe Project Manager Bureau of Indian Affairs Navajo Indian Irrigation Project 304 N Auburn, Suite B Farmington, NM 87401

FCCD-100, FCCF-300, FCCF-351 (w/encl to ea)

Exhibit E

2016 Operations & Maintenance Organizational Chart

O&M Manager Job Description



*Subject to change based on BIA Funding

06/16/2015



Job Title: Operations & Maintenance ManagerLocWork Schedule: VariedDeExemption Status: ExemptGrain

Location: **Main Office** Department: **851 - O&M** Grade: **25**

Reporting Relationship: This position reports to the NAPI Chief Operating Officer

Summaries of Duties and Responsibilities

This position was created to manage the water delivery system to include but not limited to planning, organizing, coordinating, and execution plans and objectives within the Operation & Maintenance Department, pursuant to employment agreement.

Shared Responsibilities:

- Support the mission, vision, and goal of Navajo Agricultural Products Industry.
- Support excellence in our customer service philosophy.
- Adheres to all company polices and procedures.
- Follow safety guidelines and participate in trainings.
- Practice good stewardship of NAPI property and follow policy.
- Act in a professional manner at all times.
- Function from INTEGRITY, HONESTY, and LOYALTY in all activities concerning NAPI.
- Follow the current NAPI Strategic Plan initiatives.
- Maintain a team environment with other departments.
- Champion NAPI in the community.

Primary Duties and Responsibilities:

Essential Functions

- 1. Provide professional leadership to the department in pursuit of excellence by teamwork and a competitive spirit to an agricultural industry.
- 2. Ensures reliable water delivery to NAPI farm operations.
- 3. Plans, supervises, and organizes areas of preventative and corrective maintenance, nonroutine rehabilitation and emergency repair of canals, laterals, elevated tanks, hydrotans, pipelines, pumping plants and drainage collectors.
- 4. Develops training and safety programs in water and power delivery operations and maintenance.
- 5. Determines cost effectiveness of work performed by personnel and outside contacts and recommends appropriate action to provide and maintain service in the most cost effective manner.
- 6. Recommends and participates in the development of department goals, objectives,



priorities and policies.

- Oversee construction and renovation projects to improve efficiency and to ensure that facilities meet environmental, health, and security standards, and comply with government regulations.
- Plan, organize, coordinate, implement, direct, evaluate, and adjust the Operation, Maintenance, and Replacement (OM&R) functions of the Navajo Indian Irrigation Project (NIIP) facilities and equipment contracted by NAPI under the provisions of Public Law 93-638 from the Bureau of Indian Affairs (BIA).
- Serve as NAPI's principal agent in proposing, negotiating, implementing, and administering the PL 93-638 contract. Assuring compliance with applicable Navajo Nation and Federal Laws. These requirements include but not limited to: procurement, preference in employment and business practices, safety, environmental considerations, OMB circulars, GSA contracts, etc.
- 10. Prepare annual funding request with justification for the (OM&R) functions of the NIIP facilities. Prepare the annual budget for the department and coordinates the budget execution by O&M forces or by subcontracts insuring that funds are expanded for programmed activities and that budget limits are not exceeded.
- 11. Interpret and administer operating guideline for the PL 93-638 contracts Cooperative Agreements to guide staff in preparing and carrying out the long and short-range plans for the O&M Department.
- 12. Coordinates with NAPI farm operations, Reclamation, Western Area Power administration (WAPA), City of Farmington, New Mexico Gas Company and other entities in scheduling outages and maintenance projects.
- 13. Supervises appropriate personnel in the review of designs prepared by Reclamation to recommend changes or modifications to improve the overall system design and its performance when constructed.
- 14. Develop, implement, and maintain an automated water control and accounting system and an asset management system to provide an accurate and reliable maintenance database of the NIIP facilities and equipment.
- 15. Establish and maintain effective working relationships with BIA, WAPA, Navajo Nation and various related communities.
- 16. Strives to achieve NAPI's Mission through an environmentally sound approach in all activities related to the OM&R of the NIIP facilities and features by considering the environment in all decisions, implementing the best management practices, advocating the protection of the NIIP water allocation, the Navajo Nation's unqualified water rights to the San Juan River and the best interests of NAPI operations.
- 17. Serves as department liaison or representative on committees, commissions, task force, and at meetings.

Performs other related duties and assignments as required.



Education, prior work experience, and specialized skills and knowledge:

- Must be able to meet the requirements of NAPI's Motor Vehicle Operation Policy.
- This job requires a High School Diploma (or GED or High School Equivalence).
- This job requires Bachelor's of Science Degree in Civil or Mechanical Engineering with a relative field of study in the following: earthwork, construction extraction, hydrology, electrical theory, structural theory, permit entitlements, hydraulics, economics and basic principles in surveying.
- This job requires a minimum of 5 years' previous work related skill, knowledge, or experience in managing a workforce performing construction and maintenance work of water distribution facilities, including underground pipelines and/or pumping plants or at a project management capacity in engineering.
- Management and Budgetary principles and practice skills are required.
- Education/Training can be substituted for work experience.
- Ability to use a computer, Microsoft software, AutoCAD Civil 3D, Arc GIS 2010 and familiarity with Allen Bradley Compact Logix Application is required.
- Ability to use search engines, data queries, and research information.
- Must be able to speak and present in public forums.
- Must have the ability to communicate effectively both orally and in writing in English. Navajo language is helpful.
- Must have great active listening skills as this position communicates with all levels of company employees, board of directors, customers, Standing Committees of the Navajo Nation, and U.S. Government offices.
- This job requires the incumbent to possess customer and personal service knowledge; this includes NAPI O&M needs assessments, meeting quality standards for services, and evaluation of water customer satisfaction.
- This job requires the incumbent to be able to analyze information and use logic to address work-related issues and problems.
- This job requires developing a self-motivating and self-sufficient work performance in an independent working environment.
- This job requires the incumbent to have knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
- This job requires the incumbent to have knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, personnel information systems, and be familiar with the Navajo Preference in Employment Act.
- This job requires the incumbent to be able to manage personnel resources by motivating, developing, and supervising subordinate supervisors as they work and identifying the best personnel for the job.



- This job requires attention to detail and being thorough in completing tasks.
- This job requires being persistence in the face of obstacles and being able to accept criticism and dealing calmly and effectively in high stress environments.
- This job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.
- This job requires being open to change (positive or negative) and to considerable variety in the workplace.
- This job requires being available 24 hours a day 7 days a week to respond to emergency situations and coordinates the systematic repair/shutdown of the system.
- Performs duties in all weather conditions.
- Ability to complete task as directed by supervisor.
- Job requires being honest, ethical and professional.
- Job requires a willingness to take on additional responsibilities and challenges.
- Job requires keeping up-to-date technically and applying new knowledge to your job.
- Job requires adhering to dress code standards; and personal protective equipment.

Physical environment and working conditions:

This job requires you to work in and out of the office with exposure to heat and cold temperatures

Physical Demands

Strength	Hearing	Kneeling
Stamina	Visual Acuity	Crouching
Physical Flexibility	Visual Color Perception	Squatting
Reaction Time	Sitting	Crawling
Whole Body Steadiness	Standing	Twisting
Manual Dexterity	Walking	Climbing
Lifting 50# minimum		

Business machines and computer software used:

Government Services Administration (GSA), a Personal Computer or Laptop, Windows 7, Microsoft Office Suite 2007/2010 (Word, Excel, Power Point, Project, & Outlook), Famous Accounting Software, and a Two-Way Radio

Other factors, such as access to confidential information or contact with the public:



Must read and acknowledge NAPI's Non-disclosure agreement.

I have reviewed the above job description and have an understanding of my job duties. I understand I will be evaluated on each of the duties described above.

		Employee	Date
		Supervisor	Date
	and the second		

ATTACHMENT 2

Scope of Work for On-Farm Development



SCOPE OF WORK For On-Farm Development

Calendar Year 2016

Navajo Indian Irrigation Project

Public Law 93-638 Contract Number

Nathaniel Begay Assistant Technical Service Manager

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SECTIONS	NUMBER	TITLE/FOREWARD	PAGE
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2		STATEMENT OF WORK	2
	2.1	WORK SCHEDULES	2
3		BUDGET	
	3.1	CONTRACT COST REVIEW	3

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SCOPE OF WORK

SECTION ONE

1 INTRODUCTION

The Scope of Work (SOW) for FY 2015 is to plan the sub-surface drainage development in Block 2 Stage 1 and to perform mapping and design for Block 2 Stage 2, field investigations, topo survey and construction staking survey for Block 2 Stage 3, and perform construction on six (6) fields for Block 2 Stage 4. The Block 2 Sub-Surface Drainage Development Project was budgeted for \$730,000. This SOW will be completed in early FY 2016. The On-Farm Development funds total for received in FY 2015 is \$883,735. The amount required to complete the project is \$736,735.

The objective of this Scope of Work (SOW) (FY 2016) is to complete the surface drainage in Block 9 Stage 1. This project was budgeted for \$1,271,189 to complete. For FY 2014, On-Farm Development was funded \$883,735 to complete this project.

Planning of before construction would be researching and getting any necessary permitting or surveying such as Water Table Assessment, Entitlements (Right of Way, encroachments, etc), crop and grower information and retro-fit equipment. Mapping and Designing is reviewing the 2005 Drainage Re-Development drawings and prepare new designs. Field investigations, topo surveys and construction staking survey would follow after.

1.1 MANAGEMENT CONTROLS

Cost Centers

The Cost Center is an accounting function and visual aid to be used in conjunction with the Scope of Work. NAPI Accounting has pre-assigned the unique set of account codes used in the Scope of Work and the Work Schedule. These codes allow a standardized cost budgeting and collection system. The codes are used on all purchase orders, time cards, and other accounting structure codes will be assigned on a project specific bases and change from year to year.

1

Planning Engineering & Technical Support Survey and Topo Construction



SECTION TWO

2 STATEMENT OF WORK

The tasks shown above will be used to reference all activities to perform work or reports on accomplishments resulting from this contract. The activities will be further defined by the use of Blocks and Field numbers on maps and other documents.

Block 9 Stage 1 Drainage Project

Task 1 - Engineering & Technical Support

- 1. Use LIDAR survey data to determine problematic area and location for interception drains
- 2. Complete site assessment for existing infrastructures
- 3. Design interception drains to collect access runoff and collect groundwater
- 4. Design the proposed fields to reduce future drainage issues
- 5. Design will be reviewed and approved by professional engineer before construction

Task 2 - General & Administrative

1. Purchase materials, pipes, culverts, gravel and other material required

Task 3 - Land Prep, Trenching & Smoothing

1. Final design data will in input into the Trimble guidance system to have precise construction

2.1 WORK SCHEDULES

The Statement of Work (SOW) activities are scheduled to occur in accordance with the dates and time lines shown below.

Table 1 - Work Schedule for Block 9 Stage 1 Drainage				
Task	Start	End		
Design	1/1/2016	3/31/2016		
Design Review	4/1/2016	4/30/2016		
Construction of Interception Drains	5/1/2016	12/31/2016		

2016 Scope of Work

SECTION THREE

3 BUDGET

As shown on the budget, the total estimated cost \$1,271,189 to complete the scope of work. The scope of work for FY 2016 includes the completion of Drainage.

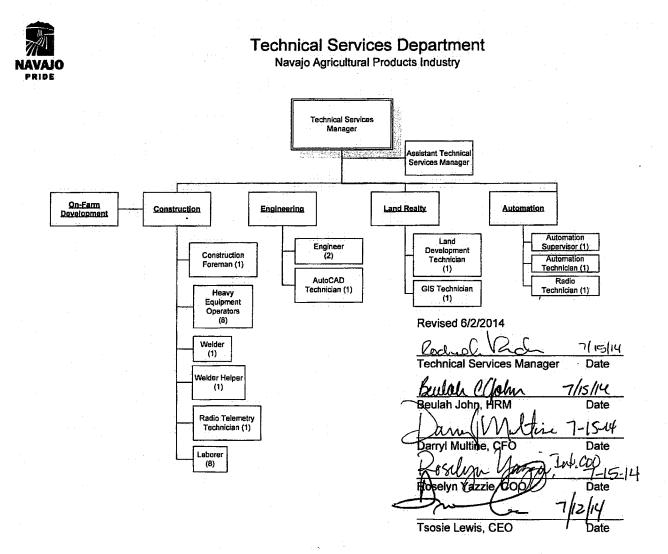
3.1 CONTRACT COST REVIEW

Navajo Agricultural Products Industry On-Farm Development

A10AV00796

Proposed Budget for Fiscal Year 2016

COST CENTER	DESCRIPTION		BUDGET	
5220	Land Prep, Trenching & Smoothing			
2850	Labor	\$	-	
2960	Benefits & Burden	\$	-	
5800	Outside Services, Sub-Contract, Consultant	\$	1,040,000	
5805	Heavy Equipment	\$	-	
		\$	1,040,000	
5260	Engineering & Technical Support			
2850	Labor	\$	_	
2960	Burden & Benefits	\$	-	
5800	Outside Services, Sub-contract, Consultant	\$	172,614	
		\$	172,614	
5290	General & Administrative On-Farm			
2850	Labor	\$	45,058	
2960	Burden & Benefits	\$	13,517	
3810	Raw Materials-Concrete/Hardware	\$	-	
3835	Supplies	\$	<u> </u>	
5800	Outside Services, Sub-contract, Consultant	\$		
-		\$	58,575	
	TOTAL	\$	1,271,189	



ATTACHMENT 3

Scope of Work for Agricultural Testing & Research Laboratory



SCOPE OF WORK FOR

AGRICULTURAL TESTING AND RESEARCH LABORATORY

Navajo Indian Irrigation Project Farmington, NM

Public Law 93-638

FISCAL YEAR 2016

Dineh John Agricultural Testing and Research Interim Laboratory Manager

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	STATEMENT OF WORK (SOW) WORK SCHEDULE FIVE YEAR PLAN AUTHORIZED REPRESENTATIVES POSITION DESCRIPTION

SECTION ONE

1.0 INTRODUCTION

Our primary goal at Agricultural Testing and Research Laboratory (ATRL) is to provide efficient, precise, and accurate analytical and technical support to NAPI personnel within a timely manner. The Laboratory performs various analyses such as chemical constituents, immuno-assays, and soon microbiological. Services provided also include plant damage analysis, crop fertility recommendations, and fertilizer program management.

The ATRL is capable of analyzing selected chemical constituents of soil, plant tissue, water, fertilizer, and feed using the state-of-the-art analytical equipment. Immunoassays are performed on corn for vomitoxin; aflatoxin on wheat and flour. Potato sugar and chipping quality testing are performed in support of potato quality monitoring. Microbiological analyses such as Aerobic Plate Counts, E.coli, Coliform, Yeast, Mold, Salmonella, and Listeria will also be available for all crops.

Our operating budget is funded through a federal fund supporting P.L. 93-638. On average 67% of the lab budget is dedicated to personnel. The remaining is apportioned for operating expenditures such as testing supplies and reagents, equipment purchases, maintenance and repairs, proficiency testing and accreditation costs.

High quality work is a prerequisite in serving the needs of ATRL clients. ATRL clients are: Navajo Agricultural Products Industry (NAPI) Crop Managers, NAPI Contractors, Navajo Nation organizations, New Mexico State University, Agricultural Science Center near Farmington, and local private sectors. The lab performs tests on over 4,000 samples annually. Lab results are reported to Crop Managers and Supervisors for their decision making processes.

This Scope of Work includes those activities the Laboratory will perform and complete during the 2016 Fiscal Year.

1.1 STATEMENT OF WORK (SOW)

The ATRL offers multiple services for clients. To provide further detail regarding budget framework and work criterion, individual narrative statements have been included.

Environmental Studies

The Laboratory will continue to select, develop, document, and verify the recommended analytical processes for NAPI by determining trace organic and inorganic chemicals in water and in soil extracts from samples drawn from the NIIP. Said procedures will be developed to high standards resulting in documents that could provide evidence and support in possible cases of litigation. The technical aspects of the procedure may include, but is not limited to, near infrared spectrometry, solid phase extraction, inductively coupled plasma spectrometry (ICP), combustion analysis, and digestion.

In response to anticipated needs, the NIIP/BIA Office and NAPI have initiated a group of tests under the environmental classification. There are three of these currently, however new tests will be added as requirements are known. The

three are: pesticide residue, drainage water quality, and irrigation water quality. Water samples are collected routinely from canal, irrigation systems, run-off sites, and processing facilities.

Soils Lab Operation

There are seven sub-groups of technical activities assigned to the ATRL. These are (1) Soil Analysis, (2) Plant Tissue Analysis, (3) Water Analysis, (4) Fertilizer Analysis, (5) Quality Testing including potatoes, grains, and forage protein and fiber content, (6) Livestock Feed Analysis, and (7) Microbiological Analysis.

Our participation in Laboratory Proficiency Programs is vital due to the assessment of our testing accuracy and precision. For the past few years, we have participated in the National Forge Testing Association where results are submitted quarterly. As of January 2015, the ATRL started participating in the Agricultural Laboratory Proficiency Program for soil, plant, and water testing. These are submitted three times a year.

The Laboratory analyzes soils before farming operations to locate soil problems or unique characteristics. On a recurring basis, before each cropping season begins, each field is tested to determine levels for each of the primary nutrients. The individual histories give NAPI a base point to determine fertilizer needs for any given crop on any given field.

During the growing season on a routine basis, NAPI submits plant tissue samples of each crop to be analyzed by the ATRL for various nutrient levels. Since 1997, the volume of tissue testing has remained around 4,000 samples per year, with as many as twelve analyses being performed per sample. These tests are essential to NAPI's agronomy advisers and crop managers in making appropriate and economically feasible decisions in crop production.

A measure of ATRL value to NAPI can be calculated by the total amount of premium NAPI receives for crops that exceed certain minimal values. For example, alfalfa crop price is based on quality and marketing; NAPI needs to determine the protein and fiber percentages of the hay produced. Hay guaranteed to have a protein level of 20% or more (or a Relative Feed Value above 170) warrants a premium price. With NAPI alfalfa production approaching 100,000 tons annually, any premium can add substantially to NAPI's bottom line. The proximity of the ATRL and the excellent level of service means that NAPI can keep statistical records to justify higher market prices for its products.

As a quality assurance measure, crops at NAPI are monitored and tested throughout the year. Before trucks are loaded, samples are extracted from storage representing every truck load prior to shipment. Analytical tests such as vomitoxins, aflatoxins, moisture, protein percentages and microbial counts are conducted to determine quality of the crop prior to customer shipments.

It has become necessary in recent years to support the marketing of corn, wheat, and flour by providing mycotoxin testing (vomitoxin and aflatoxin). Corn buyers will reject shipments that exceed one part per million in vomitoxin. Wheat and flour buyers will reject shipments that exceed three parts per million in aflatoxin. The test kits for these analytical procedures are expensive because of the technique used and the accuracy with which the test must be performed. Currently, we are using Third Party Laboratories for all microbial testing. Having the capability to test all crops daily at the ATRL will be significant due to the decreased wait time for product results and lower costs. Our goal is to decrease the turnaround time for results so in the event of quality issues, we can notify the crop or plant manager quicker.

We are also implementing a Qualitative GMO testing program which analyzes samples for CP4 EPSPS protein in Roundup Ready. For alfalfa to maintain export regulations, their crop must contain less than 0.01%. For wheat, verification is needed for the No GMO statements issued.

As for the ATRL organization structure, the laboratory manager, assistant laboratory manager, and lab technician are included. A Soil Scientist is needed to perform research in this category to support NAPI operations. All direct costs, including payroll and fringe, are included in the subordinate task budgets. The primary areas of technical support: conduct research on fertilizers available for crops such as but not limited to soil amendments and chicken manure and testing products for quality standards.

Agronomic Services

Currently, NAPI has one employee assigned to the Agronomy function to gather and analyze data relative to projects/programs that fit within the long-range objectives of NAPI and to prepare reports and recommendations regarding cost effective crop programs for the project.

The function of an Agronomist is to provide the technical expertise, training, and educational materials to NAPI crop personnel to enhance the overall levels of farm performance. There are two primary areas of technical support: (A) Network and train with crop mangers to determine field crops and soil management needs (B) Analysis and evaluation of short and long-term research and developmental aspects of NAPI Projects related to crop selection including sustainable cropping systems.

The use of incorporating scientific methods of analyzing various crops enables NAPI to know in advance the performance and quality of the crop. Various crops will be evaluated under field conditions. Over the course of the evaluations, soil and plant tissue nutrients, and pests will be identified and recommendations will be made accordingly. Soil and crop management will be evaluated too. This information will allow NAPI to decide whether it is feasible to plant a particular crop. Knowing the agronomics of the various crops will aid in predicting economic returns and investments.

Laboratory Facilities

NAPI has constructed a new soils laboratory, Da'ak'eh Nitsaa Laboratory. It was completed on February 20, 2015. The 638 program - Soils lab operation occupies 6,971 square-feet of the 13,942 square-feet. This square footage was used to calculate the indirect cost proposal for NAPI.

Laboratory Management & Administration

The Laboratory is under the direction of the Laboratory Manager, who supervises and manages the NAPI personnel assigned to the facility. Under the Public Law

93-638 concept, the laboratory manager will be a NAPI employee. For independence in laboratory operation, the reporting relationship should be directly to the NAPI Chief Operations Officer.

In terms of health, fire and safety requirements, management mandates that all tests and Laboratory Procedures be in accordance with following:

OSHA, Section 1910 BIA Safety Standard 25BIAM Department of the Interior 485 DM NFPA Standards, Fire Safety Manual National Association of Analytical Chemists Navajo Nation Department of Labor Requirements U.S. Food and Drug Administration

Government Property/Carryover

Various items such as laboratory equipment, furniture and fixtures have been provided by the Bureau of Indian Affairs. The items are no longer listed as government property until such time as the Self-Determination Act is completely implemented. In the interim, new items will be acquired, under authority of the contract and by the NIIP/BIA office.

1.2 WORK SCHEDULE

The Statement of Work (SOW) activities are scheduled to occur in accordance with the operational requirements of NAPI. From a historical perspective, the various functions must occur in close proximity to the times shown in Table 1.

	Туре:	Analyses	Schedule
SOIL	Standard	pH, Plant available nutrients: NO₃-N, P, K, Mg, Na, Ca, Zn, Fe, Mn, Cu	Year round (July to April)
	Special	Texture, Saturated Paste, Salinity, Organic Matter, Nitrate	
PLANT	Routine	Elements: TN, P, K, Mg, Na, Ca, Zn, Fe, Mn, Cu, S, B	May to August
	Chipper QT1	Glucose, Sucrose	August to June
	Potato Petiole	NO ₃	June to August
	Potato – whole leaf	Elements: TN, P, K, Mg, Na, Ca, Zn, Fe, Mn, Cu, S, B	June to August
FORAGE	Alfalfa	Protein, Moisture, ADF, NDF, RFV, GMO	Year round
	Alfalfa Grass	Protein, Moisture, ADF, NDF, RFQ, GMO	Year round
	Feed Quality	Protein, Moisture, NDF, NO₃, Ca, P	Year round
GRAINS	Corn Quality	Moisture, Vomitoxin, Aflatoxin	Year round
	Wheat	Moisture, Crude Protein, Vomitoxin, Aflatoxin, GMO	Year round
	Beans	Moisture	Year round

Table 1. Analyses performed by Agricultural Testing and Research Laboratory	Table 1. Anal	lyses performed b	v Agricultural Testin	o and Research Laboratory
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ATRL SOW

	Barley	Moisture, Crude Protein	Year round
WATER	Basic	Elements: P, K, Mg, Ca, Zn, Fe, Mn, Cu, B, Cl; pH; Nitrate; and Salinity	Year round
FERTILIZERS	Basic	Moisture, Elements: P, K, Mg, Ca, Zn, Fe, Mn, Cu, B	Year round
MICROBIOLOGICAL	Basic	APC, E.coli, Coliform, Yeast, Mold, Salmonella, Listeria	Year round

1.3 FIVE YEAR PLAN

The workload at the Laboratory continues to increase as the major client, NAPI, continues to expand acreages and utilize zone sampling for variable rate applications with the commensurate increase in demands for services. Expansion of NAPI acreages and diversification in products directly increase the demands and workload placed on laboratory personnel, equipment, and facilities. At the same time, funding for the ATRL has been flat (at or near \$380,000 per year) for over ten years. Increases in laboratory productivity have managed to keep pace with demands for services while staying within the same budget constraints. Increased productivity has been attained by upgrading capital equipment when the budget has allowed. Continued increases in productivity will be directly impacted or facilitated by funding levels. Fiscal Year 2016 goals are to:

- 1) Efficiently increase laboratory productivity to keep pace with NAPI acreage expansion
- 2) Efficiently increase services provided through expansion of laboratory personnel and/or the skill of existing personnel
- Safely and efficiently increase/improve laboratory analytical capabilities to keep pace with diversification of NAPI products and needs through capital expenditures.

Any increases in future fiscal year funding would be used to: 1) add two (2) additional FTE professionals (Chemist and Soil Scientist) 2) provide training programs for existing personnel; 3) offset inflationary pressures from increases in utility bills, rising material and supply prices, maintenance and repair costs 4) replace aging capital equipment with new generation equipment with higher sample out-puts 5) obtain an additional GSA unit for sample collections. Increased productivity has been attained by upgrading capital equipment when the budget has allowed. Several major improvements need upgrade, such as but not limited to: upgrade equipment such as ICP, filter press, grinding equipment, and Hot Block digestion instruments. Continued increases in productivity will be directly impacted or facilitated by funding levels.

SECTION TWO

2.0 AUTHORIZED REPRESENTATIVES

The Management Board of NAPI, by submission of this proposal delegates the contract signature authority to the NAPI Chief Executive Officer. Mr. Tsosie Lewis, CEO, with the Management Board's concurrence, will subsequently appoint or affirm the Contractor's Representative, responsibility for the day-to-day administration of the FY 2014 Contract.

2.1 POSITION DESCRIPTIONS

The Positions in the ATRL operation include: Lab Manager, Assistant Lab Manager/Analyst, Lab Tech III, Lab Tech II, and Lab Tech I. See attached



Job Title: Laboratory ManagerLocation: Ag Testing & Research LabWork Schedule: VariedDepartment: 853 ATRLExemption Status: ExemptGrade: 25Salary: \$45,000 - \$85,000 DOEReporting Relationship: This position reports to the Chief Operating Officer.

Summaries of Duties and Responsibilities

This position was created to provide leadership and over-all management of the Agricultural Testing and Research Lab pursuant to Employment Agreement. This position requires providing technical direction of the lab, including method development, field and lab research, training lab technicians and interpreting lab results for Crop Managers.

Shared Responsibilities:

- Supports the mission, vision, and goal of Navajo Agricultural Products Industry.
- Supports excellence in our customer service philosophy.
- Adheres to all company policies and procedures.
- Follows safety guidelines and participates in trainings.
- Practices good stewardship of NAPI property and follows policy.
- · Acts in a professional manner at all times.
- Functions from INTEGRITY, HONESTY, and LOYALTY in all activities concerning NAPI.
- Follows the current NAPI Strategic Plan initiatives.

Primary Duties and Responsibilities:

Essential Functions

- 1. Coordinates all phases of laboratory operations and hires, trains and evaluates Laboratory Technicians.
- 2. Supervises chemical and physical analysis of soil samples, plant tissues, forage and animal feed, fertilizer, and water samples, and summarize and interprets data from such analysis.
- 3. Allocates time by spending 60% of the time to conduct relevant laboratory and field research and 40% of the time on administrative duties.
- 4. Manages the laboratory Quality Control by participating in external certification and proficiency programs, and establishing internal quality control standards.
- 5. Coordinates with NAPI Agronomist and/or Crop Managers to formulate fertilizer recommendations based on soil and plant tissue analysis and research.
- 6. Develop or adapt new methods that promote accurate and efficient analysis.
- 7. Interacts with NAPI crop managers to determine research needs, design and conducts such research needed.

- 8. Develop and maintain Standard Operation Procedure (SOP) for all lab methods used by staff.
- 9. Develop and maintain efficient data and reporting system.
- 10. Manages laboratory safety programs.
- 11. Procures equipment as needed. Maintains instruments and physical facility.
- 12. Presents training seminars to NAPI staff as requested or needed.
- 13. Prepares, justify, and manages departmental budget.

Performs other related duties and assignments as specified in the contract (638).

Education, prior work experience, and specialized skills and knowledge:

- This job requires a Masters Degree in Soil Science or other closely related disciplines; a PhD is preferred.
- Requires a minimum of 1 year laboratory related experience with a strong background in analytical chemistry and production agriculture.
- Requires the incumbent to have a valid driver's license with an acceptable driving record.
- This job requires the incumbent to have ability to communicate information and ideas so others will understand both verbally and in written form; ability to speak in Navajo is highly preferred.
- Must possess knowledge of a good safety program. This includes uses of chemicals and their interactions, danger signs, and disposal methods.
- This job requires analyzing information and using logic to address work-related issues and problems.
- This job requires being careful about detail and thorough in completing work tasks.
- Requires a willingness to take on responsibilities and challenges.
- Requires being reliable, responsible, and dependable, and fulfilling obligations.
- · Requires being persistent in the face of obstacles.
- Requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks
- Requires accepting criticism and dealing calmly and effectively with high stress situations

Physical environment and working conditions:

This job requires you to work in the laboratory environment with the presence of compressed gas and chemicals, as well as outside elements when conducting field research.

Physical Demands

Strength	Hearing	Kneeling
Stamina	Visual Acuity	Squatting
Physical Flexibility	Visual Color Perception	Twisting

Reaction TimeSittingWhole Body SteadinessManual DexterityLifting 50# minimumSitting

Business machines and computer software used:

Ability to operate basic and advanced laboratory tools such as, but not limited to, scales, meters, ICP, LECO Carbon and Nitrogen Analyzer, NIR Spectrometer, Flow Injection Auto Analyzer (FIA) a Company Vehicle, a Company Computer or Laptop, and all common computer software, such as Microsoft Office Suite and Famous software.

Other factors, such as access to confidential information or contact with the public:

Must read and acknowledge NAPI's Non-disclosure agreement.

I have reviewed the above job description and have an understanding of my job duties. I understand I will be evaluated on each of the duties described above.

· · · · · · · · · · · · · · · · · · ·	Employee	Date
	Supervisor	Date

Created July 23, 2009 by Human Resources Revised May 23, 2013

Standing

Walking



Job Title: Laboratory Technician IIILocation: ATRLWork Schedule: VariedDepartment: 853 NAPI ATRLExemption Status: ExemptGrade: 24Salary Range: \$41,600 - \$50,336

Reporting Relationship: This position reports to the Laboratory Manager

Summaries of Duties and Responsibilities

This position was created to perform technical laboratory procedures for the preparation and analysis of samples, data reporting and archiving, maintenance of laboratory equipment and facilities.

Shared Responsibilities:

- Support the mission, vision, and goal of Navajo Agricultural Products Industry.
- Support excellence in our customer service philosophy.
- Adheres to all company polices and procedures.
- Follow safety guidelines and participate in trainings.
- Practice good stewardship of NAPI property and follow policy.
- Act in a professional manner at all times.
- Function from INTEGRITY, HONESTY, and LOYALTY in all activities concerning NAPI.
- Follow the current NAPI Strategic Plan initiatives.

Primary Duties and Responsibilities:

Essential Functions

- 1. Coordinates all phases of laboratory analyses and supervises Lab Technicians.
- 2. Coordinates processing laboratory samples for all analyses, following proper protocols to ensure that they will be stored, prepared, and disposed of safely, efficiently and effectively.
- 3. Analyze samples according to all standard operating procedures and QA/QC protocols.
- 4. Prepare data summaries, reports, and analyses that include results, charts, and graphs to document results and archive information.
- 5. Interpret lab data and make recommendations to Lab Manager.
- 6. Ensures proper disposal of samples, solutions, and chemicals when testing is completed.
- 7. Perform routine maintenance on instruments and properly trouble-shoot and/or repair laboratory instruments, as needed.
- 8. Maintains consumable supplies for all lab instruments.
- 9. Dresses appropriately for the position and wears lab coat and personal protective equipment as directed.
- 10. Able to function effectively in the absence of Lab Manager.

Performs other related duties and assignments as required.

Education, prior work experience, and specialized skills and knowledge:

- Requires a BS degree in agricultural science, chemistry and/or environmental science.
- Requires Three year in progressive laboratory experience. Education/Training can be substituted for previous work experience.
- Requires the incumbent to have a valid driver's license with an acceptable driving record.
- Requires the incumbent to have ability to communicate information and ideas so other will understand, both verbally and in written form.
- Ability to speak in Navajo is highly preferred.
- Ability to demonstrate knowledge on operating ICP, NIRS, and/or LECO.
- Ability to demonstrate knowledge of laboratory instruments such as balance, pH meters, EC meters, and drying ovens.
- Ability to train Laboratory Technicians to prepare samples, conduct analyses and report data.
- Requires knowledge of chemistry and laboratory procedures.
- Requires being careful about detail and thorough in completing work tasks.
- Requires being reliable, responsible, and dependable, and fulfilling obligations.
- Requires being honest and ethical.
- Requires a willingness to take on responsibilities and challenges.
- Requires keeping up-to-date technically and applying new knowledge to your job.
- Requires adhering to dress code standards, lab coat and personal protective equipment.

Physical environment and working conditions:

This job requires you to work in and out of the office with exposure to heat and cold temperatures, gases, fumes, and chemicals.

Physical Demands

Strength	Hearing	Kneeling
Stamina	Visual Acuity	Squatting
Physical Flexibility	Visual Color Perception	Twisting
Reaction Time	Sitting	
Whole Body	Steadiness	Standing
Manual Dexterity	Walking	
Lifting 40# minimum		

Business machines and computer software used:

Ability to operate a Company Vehicle, a Personal Computer or Laptop, Windows XP, Microsoft Office Suite 2003 or newer version (Word, Excel, Power Point, Project, & Outlook) Other factors, such as access to confidential information or contact with the public:

Must read and acknowledge NAPI's Non-disclosure agreement.

I have reviewed the above job description and have an understanding of my job duties. I understand I will be evaluated on each of the duties described above.

 Employee	Date
Supervisor	Date

Created April 9, 2009 by Human Resources



Job Title: Laboratory Technician IILocation: ATRLWork Schedule: VariedDepartment: 853 NAPI ATRLExemption Status: Non-ExemptGrade: 15 Salary Range: \$24,564.80 - \$29,723.20Reporting Relationship: This position reports to the Laboratory Manager

Summaries of Duties and Responsibilities

This position was created to perform technical laboratory procedures for the preparation and analysis of samples, data reporting and archiving, maintenance of laboratory equipment and facilities.

Shared Responsibilities:

- Support the mission, vision, and goal of Navajo Agricultural Products Industry.
- Support excellence in our customer service philosophy.
- Adheres to all company polices and procedures.
- Follow safety guidelines and participate in trainings.
- Practice good stewardship of NAPI property and follow policy.
- Act in a professional manner at all times.
- Function from INTEGRITY, HONESTY, and LOYALTY in all activities concerning NAPI.
- Follow the current NAPI Strategic Plan initiatives.

Primary Duties and Responsibilities:

Essential Functions

- 1. Receive and prepare laboratory samples for analysis, following proper protocols to ensure that they will be stored, prepared, and disposed of safely, efficiently and effectively.
- 2. Adjust laboratory instruments and prepare chemical solutions and standards, following standard procedures.
- 3. Interpret lab data and make recommendations to Lab Manager.
- 4. Analyze samples according to standard operating procedures and QA/QC protocols.
- 5. Properly dispose of samples, solutions, and chemicals when testing is completed.
- 6. Properly clean and store instrument equipment.
- 7. Perform routine maintenance on equipment and determine when and what kind of maintenance is needed.
- 8. Prepare data summaries, reports, and analyses that include results, charts, and graphs

to document results and archive information.

- 9. Maintain equipment consumable supplies.
- 10. Dresses appropriately for the position and wears lab coat and personal protective equipment as directed.
- 11. Able to function effectively in the absence of Lab Manager.

Performs other related duties and assignments as required.

Education, prior work experience, and specialized skills and knowledge:

- Requires a High School Diploma (or GED or High School Equivalence).
- Requires a degree in agricultural science, chemistry and environmental science.
- Requires One year in progressive laboratory experience. Education/Training can be substituted for previous work experience.
- Requires the incumbent to have a valid driver's license with an acceptable driving record.
- Requires the incumbent to have ability to communicate information and ideas so other will understand, both verbally and in written form.
- Ability to speak in Navajo is highly preferred.
- Ability to train on operating ICP, NIRS, and LECO.
- Ability to demonstrate knowledge of laboratory instruments such as balance, pH meters, EC meters, and drying ovens.
- Ability to train Laboratory Technician I to prepare samples, conduct analyses and report data.
- Requires knowledge of chemistry and laboratory procedures.
- Requires being careful about detail and thorough in completing work tasks.
- Requires being reliable, responsible, and dependable, and fulfilling obligations.
- Requires being honest and ethical.
- Requires a willingness to take on responsibilities and challenges.
- Requires keeping up-to-date technically and applying new knowledge to your job.
- Requires adhering to dress code standards, lab coat and personal protective equipment.

Physical environment and working conditions:

This job requires you to work in and out of the office with exposure to heat and cold temperatures, gases, fumes, and chemicals.

Physical Demands

Strength	Hearing	Kneeling
Stamina	Visual Acuity	Squatting
Physical Flexibility	Visual Color Perception	Twisting
Reaction Time	Sitting	
Whole Body	Steadiness	Standing
Manual Dexterity	Walking	
Lifting 40# minimum		

Business machines and computer software used:

Ability to operate a Company Vehicle, a Personal Computer or Laptop, Windows XP, Microsoft Office Suite 2003 or newer version (Word, Excel, Power Point, Project, & Outlook)

Other factors, such as access to confidential information or contact with the public:

Must read and acknowledge NAPI's Non-disclosure agreement.

I have reviewed the above job description and have an understanding of my job duties. I understand I will be evaluated on each of the duties described above.

 Employee	[Date
 _Supervisor		Date

Created April 9, 2009 by Human Resources



Job Title: Laboratory Technician I

Location: ATRL

Work Schedule: Varied

Department: 853 NAPI ATRL

Exemption Status: Non-Exempt

Grade: 15 Salary Range: \$11.81 to \$14.29

Reporting Relationship: This position reports to the Laboratory Manager

Summaries of Duties and Responsibilities

This position was created to perform technical laboratory procedures for the preparation and analysis of samples, data reporting and archiving, maintenance of laboratory equipment and facilities.

Shared Responsibilities:

- Support the mission, vision, and goal of Navajo Agricultural Products Industry.
- Support excellence in our customer service philosophy.
- Adheres to all company polices and procedures.
- Follow safety guidelines and participate in trainings.
- Practice good stewardship of NAPI property and follow policy.
- Act in a professional manner at all times.
- Function from INTEGRITY, HONESTY, and LOYALTY in all activities concerning NAPI.
- Follow the current NAPI Strategic Plan initiatives.

Primary Duties and Responsibilities:

Essential Functions

- 1. Receive and prepare laboratory samples for analysis, following proper protocols to ensure that they will be stored, prepared, and disposed of efficiently and effectively.
- 2. Train to adjust laboratory instruments and prepare chemical solutions and standards, following standard procedures.
- 3. Train to analyze samples according to standard operating procedures and QA/QC protocols.
- 4. Properly dispose of samples, solutions, and chemicals when testing is completed.
- 5. Properly clean and store instrument equipment. Train to perform routine maintenance on equipment.
- 6. Prepare data summaries, reports, and analyses that include results, charts, and graphs to document research findings and results.

Performs other related duties and assignments as required.

Education, prior work experience, and specialized skills and knowledge:

FY 2016

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